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the International Trade Organization.

Exposition of competitive theory and practice is amplified and clarified in relation to international trade problems in a world of mixed economies.

Topics are presented in a more orderly and teachable sequence.

ECONOMICS OF INTERNATIONAL TRADE

Economics of International Trade

by **HUGH B. KILLOUGH**
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SECOND EDITION

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ECONOMICS OF INTERNATIONAL TRADE

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PREFACE

The United States has outgrown a stage of pioneering in the industrialization of a new continent and is beginning to realize the responsibilities of a mature nation in a community of great powers. From the Atlantic to the Pacific and from Maine to Texas, student and general reader interest in international affairs has surged forward during recent decades. The First World War aroused the American public to an awareness of the impact of world affairs upon domestic problems. The Second World War contributed to popular realization of the fact that participation of the United States in world affairs is essential to this country's national self-interest.

The present volume, which is called *Economics of International Trade,* replaces Killough's *International Trade,* 1938 edition. As compared with the old one, it places more emphasis upon economic principles and devotes less space to descriptive analysis of industries and natural resources. The new volume is intended primarily for use as a text in liberal arts colleges. If it finds a place in the libraries of statesmen and is perused by some of the many general readers who are interested in the economics of world peace, it will have served a doubly useful purpose.

Part I of the present volume illustrates the production advantages of territorial division of labor, analyzes the prevailing industrial foundations of international trade, and gives a preview of some of the basic international economic problems of the postwar period.

Part II directs attention to the influence of historical, geographical, and technological factors upon the course of commercial policy developments prior to the nineteenth century. The philosophy of international economic cooperation and world peace which English-speaking countries are advocating and supporting rests upon a foundation of many centuries of experience in Western and Eastern civilizations. Awareness of the historical unfolding of the present-day philosophy of extensive world trade and conformance with legal codes of international conduct gains for this philosophy more serious consideration than might be accorded some new and untried experiment in political economy.

In Part III the dominant elements of European and American theory of international trade as expounded and practiced during the last century and a half are analyzed in their functional settings. The purpose is to convey a comprehensive conception of the present-day status of international-trade theory in democratic countries. In this connection more recognition is given to the interdependence of domestic economic theory and international-trade theory than is ordinarily found in international-trade textbooks. The classical economists more or less ignored problems of the business cycle in their development of international-trade theory in a context of long-run equilibrium assumptions. More recent developments have indicated that problems of domestic economic instability cannot be ignored if international economic policy is to be interpreted correctly.

In Part IV there is an examination of recent commercial policy tendencies. Here the purposes and functions of such institutions as the International Monetary Fund and the International Bank for Reconstruction and Development are examined. Critical international economic problems of the postwar period are cited, and recognition is given to an apparent divergence of Russian and American attitudes toward international economic policies.

The authors wish to express their indebtedness to the many theorists, statisticians, and historians whose painstaking work has made possible a progressively more accurate and comprehensive interpretation of the workings of international economics.

The manuscript of the present volume was typed by Miss Ann Killough, student at Swarthmore College. Her penetrating observations and criticisms resulted in the clarification of many passages throughout the manuscript.

The authors gave courses in international trade at Brown University and at Wellesley College for many years while the present volume was in preparation. At intervals during this period they worked in the United States for private concerns and government agencies on problems related to the subject matter of the book, and in libraries abroad. The counsel of many persons has been gratefully considered, but in the last analysis the authors are entirely responsible for the publication with all its faults and errors, whatever they may be.

WELLESLEY, MASS.
August, 1948

HUGH B. KILLOUGH
LUCY W. KILLOUGH

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PART I

INTRODUCTION

CHAPTER I

SUBJECT MATTER

International trade deals with business transactions between citizens of different nations and with considerations of commercial diplomacy that spring from such transactions. This volume deals more with national policies in respect to international economic relations than with the procedures of exporting and importing goods and services.

A DIFFICULT PERIOD IN THE ECONOMIC DEVELOPMENT OF NATIONS

At no time in modern history do conflicts of interest concerning international economic problems appear to have been more acute than during the past three or four decades. While some groups of persons interested in international finance or in export industries pressed for removal of international trade barriers, other groups, interested in high-cost domestic industries, were demanding protection of home markets. A tug of war between business groups in particular nations, each group seeking advantages of political favor, is not a new phenomenon. However, the lengths to which national governments have gone in recent years in attempts to foster measures calculated to favor their nationals in the scramble for export trade and at the same time protect their domestic industries against the competition of imports are unusual. After the First World War nation after nation imposed import duties to protect their domestic industries and to minimize unemployment. Every restriction of imports by one country necessitated industrial rearrangement in other countries. For a time generous international lending kept the currents of trade moving in spite of artificial trade barriers, but in the late 1920's long-term international lending tended to dry up. In consequence, international payments were thrown out of balance. Excessive quantities of gold accumulated in some countries; bank reserves were depleted in others. Nations with meager metallic monetary reserves resorted to currency devaluation, government rationing of foreign exchange, and the laying of merchandise import quotas to protect their monetary systems. As the severity of trade restrictive measures increased during the early 1930's the volume of

international trade declined, depression spread, and the internal economies of all the great commercial nations were thrown into confusion. After 1933 the volume of world trade increased, but not to a level consistent with peacetime economic stability in all the more important commercial nations.

Wartime dislocation of industry is enough in itself to create economic difficulties, but this is not the only kind of unsettling influence that was present after the First World War and that is present after the Second World War. Other difficulties are associated with fundamental changes in the relative positions of a number of large nations in world economy. Let us take the United States as a first example. Since the year 1790, the population of this country has increased from approximately four million to approximately 140 million. During the first 75 years of the period, the country was predominantly agricultural; it is now predominantly manufacturing. Although manufacturing had taken precedence over agriculture when the First World War started, the United States was still a debtor nation which exported large quantities of raw materials and fabricated goods in payment of interest on accumulated borrowings from Europe. Today the United States is a creditor nation. The change from debtor to creditor position was in process before the First World War started. It was accelerated by the war. After the war reorganization of domestic industry and trade balance in the United States to conform with a creditor status was slow and painful; the necessary changes are far from complete even now, some three decades after the swing from debtor to creditor position occurred. The United States emerged from the Second World War relatively more powerful economically and politically than ever before. This fact imposes upon this country an increased weight of responsibility for taking a more active part in world leadership necessary to the development of a workable system of international economic cooperation and the maintenance of world peace. The United States cannot reasonably hope to discharge these responsibilities successfully unless she is able to solve the domestic economic problems that are associated with the change from international debtor to international creditor status.

The U.S.S.R., like the United States, emerged from the Second World War with more political and economic influence in world affairs than many other countries could hope to exercise. In the years immediately following the First World War Russia was a weak country, torn by revolution. The increase of her power and prestige during the past three decades may prove to be without a parallel in the economic annals of modern nations.

Great Britain in all probability will be relatively less influential in world affairs in decades immediately ahead than she was in times gone by. During the nineteenth century Great Britain was mistress of the Western world. The first country to emerge from the mercantile era with a strong centralized government and such full-fledged institutions of a national economy as national banking and national taxation, Great Britain forged ahead of other countries in the adaptation of power machinery to her manufacturing, mining, and transportation industries. In consequence Great Britain was relatively more prosperous than other countries during the second half of the nineteenth century. During this period she maintained a large and powerful navy, exported capital to all parts of the world, and exercised an influence in international and political affairs second to that of no other country. Prior to the First World War Great Britain had begun to lose position, relatively, as a result of industrialization in other countries and the intensification of international competition. The war accelerated these developments, and the Second World War has left Great Britain in a difficult situation. Her foreign investments are depleted; her mineral resources are less abundant and less accessible; parts of her industrial equipment need replacement; reestablishment and expansion of foreign markets are proving to be difficult; and internal political unrest is a contributory cause of economic experimentation.

Other countries also are experiencing difficulty in rebuilding war-damaged industry and trade and in bringing about structural changes in their domestic economies necessary to absorb the shocks of foreign competition. Visualize the nature of competitive forces in a world divided into national political units: some large, others small; some industrially progressive, others backward in the employment of modern techniques; some rich, others poor; some densely populated, others sparsely settled; none completely self-sufficient, and all subject to the international impact of economic change anywhere in the world.

For more than half a century prior to 1914 international trade was subject to fewer regulations than those imposed during the depression years of the 1930's and those which have persisted during the period since the Second World War. Russia's economic system precludes freely competitive movements of goods into and out of that country. The drift in Great Britain toward more government control of domestic industries implies more government control of her foreign trade. In countries that have not as yet substituted government management of foreign trade and investments for competitive activities conducted

under greater or less degrees of government regulation, there is no assurance that competitive exporting and importing will be permitted to continue indefinitely.

Even though tendencies favoring national trade restrictive policies appear to be strong, there are sound arguments against them. There are valid reasons to strive for policies, by international agreement or otherwise, that will maximize the production gains of territorial division of labor and distribute them to all participants. Such policies call for conditions favorable to stable currencies, capital loans to industrially backward countries, minimization of political obstacles to the movements of imports and exports, reasonable assurance that contracts made with agencies in foreign countries will be honored, and avoidance of extreme economic instability in each of the trading countries.

POLITICAL ASPECTS OF INTERNATIONAL TRADE

International trade, more than some of the other branches of economics, is inextricably involved with international political considerations. Trade restrictive measures are evidence of this fact. Imperialism is another example of the connection between trade and politics. With the coming of improved transportation facilities during the eighteenth and nineteenth centuries, countries that had improved modes of manufacturing increased their exports of manufactured consumers' goods, capital equipment, and technical ideas. In exchange, they obtained increasing amounts of foodstuffs and other crude materials that were scarce at home. In this manner it became possible for relatively small areas to support larger populations than could live well from the produce of their immediate environs. England,[1] in the interwar period, with more than seven hundred persons per square mile—most of them living well and some in luxury—was an extreme illustration. In the industrially backward countries, international trade unlocked great reservoirs of dormant wealth in the form of natural resources. Railroads were built, and agricultural produce was given access to the sea and to world markets; virgin timber became a rich source of revenue; and dormant mineral deposits acquired economic value. Parallel with these developments in the backward countries went foreign ownership of railroads, mining machinery, and other capital equipment. Property rights, held by foreigners in countries unstable politically, led at times to political imperialism supported by navies for duty in foreign waters

[1] Scotland and Wales not included.

and armies for service on foreign soil. Industrially progressive countries, particularly England, France, Germany, Belgium, Netherlands, and other countries of western Europe, vied with one another for patronage and property rights in North America, South America, Asia, Africa, and the East Indies. Later the United States of America and Japan entered the race for overseas wealth. Capital investments in Cuba and the dispatch of United States warships to that island to protect American property from the depredations of revolutionists are inextricably related. The John Hay doctrine of the *open door* in China, put before the American public as a move to save the weak and helpless Chinese nation from European aggrandizement, did not overlook the possibilities of commerce between China and America. Japan's prewar exploits in the Orient were not very different in some respects from similar exploits of Western nations at an earlier date.

Another example of the political implications of international trade is the influence of large corporations with representation in many countries. These organizations appear to be undermining, in some degree, the potency of national political barriers, much as the activities of international traders during the early modern period helped to break down the institution of town economy. In the electrical industry, the communications industry, the petroleum industry, automobile manufacturing, the chemical industry, retailing, the motion-picture industry, and others, the large corporation with business interests in many countries is a factor of increasing political and economic significance.

A vivid example of the political implications of international trade was evident in Germany during the 1930's. Here foreign trade, foreign exchange, and foreign investments were directed by a multiplicity of national government controls. Political objectives of foreign economic relations were as important as, or even more important than, economic objectives. Foreign trade was used as an instrument with which to weaken neighboring states for the purpose of forcing political and military alliance.

TYPES OF SERVICES THAT ECONOMICS CAN RENDER

The undercurrents of international economic relations as well as their surface evidences involve many considerations that are not economic. Nevertheless, the economist has contributions to make toward a clearer understanding of the whole complicated problem of international economic intercourse. It is his function to analyze tendencies in the light of an accumulation of teachings, practices, and cause-and-effect relationships that are buried away in a voluminous body of

economic literature—the receptacle of experience records handed down from the past. By no means all the economic problems with which the world has been beset during the past few decades are strange and new; demonstrated cause-and-effect relationships drawn from experience can contribute much to an understanding of them. Economic analysis can render at least two important types of service. In the first place, by contributing to a clearer understanding of causes for existing economic confusion and probable courses of future development, it can facilitate a statesmanlike procedure in the unraveling of tangled world affairs. Statesmen charged with the responsibility of formulating international economic policies—whether monetary policies, tariff policies, or mere gestures of good will—are most likely to be successful if they take fully into account the trends of world economic development and make full use of experience records. One does not have to be a profound student of economics to know, for example, that temporary gains in favorable trade balances achieved through a policy of currency inflation have, in most cases, been dearly bought, or that creditor nations may gain by importing more goods than they export. Records of economic experience hold for the patient student of international economic relations many other equally significant cause-and-effect relationships that are reasonably certain to interact in a predetermined fashion.

A large part of the theory of international trade that has been developed and expounded in the course of the past century and a half rests upon conceptual foundations of free enterprise, democracy, and a minimum of governmental controls. If the world moves rapidly in the direction of more governmental control of international trade, existing theory will have to be modified accordingly. This conclusion does not mean, however, that an understanding of existing theory and practice has no practical usefulness. Such understanding is indeed a basic necessity. For example, certain of the end results of international trade for which nations may well strive are the same whether the trade is regulated or not. One such end result is greater world production of goods, made possible through regional specialization in production. Furthermore, existing theory and practice are the starting points for departures, whatever their nature. The more effectively the departures are welded into present practice, the less costly they will be and the greater is the likelihood of their successful consummation. By way of analogy, a skillful surgeon does not operate on the human heart without precise knowledge of human anatomy and the relation of heart functions to the functioning of the entire body.

Otherwise the probabilities of the patient's surviving the operation are small.

Another type of service that an understanding of international economics can render is in the more successful conduct of business enterprises. Every business concern with goods to sell or money to invest must project its calculations ahead from day to day, year to year, and decade to decade, basing its decisions of today in no small part upon judgments of tomorrow's events. What business concern wants to be caught with large fixed investments in a tariff-protected industry whose tariff props are in imminent danger of being removed by congressional or executive action? What individual wants his savings invested in the securities of a foreign nation that is unable to transfer to him annual interest payments or dividends? No business enterprise can be free from risks and hazards of unpredictable change. However, twentieth-century businessmen who do not take careful account of the probable effects of currents of world economic change upon their ventures, assume unnecessary hazards. In fact, they are likely to court disaster.

REASONS FOR INTERNATIONAL TRADE

All trade is essentially the exchange of goods and services for other goods and services. In this fundamental respect international trade and interregional domestic trade do not differ. The ultimate gains from trade consist not of monetary profits but rather of economic utilities. Because desire on the part of an individual for any particular kind of good is limited, an exchange of goods may increase the total utility of the goods entering an exchange transaction. All parties to the transaction may, in fact, procure from an exchange transaction net additions to their possessions of goods. A Kansas farmer who grows more wheat than he and his family need for the making of bread and beer and other staples or delicacies for household or barnyard consumption may be induced by necessity to burn good wheat for heating his house unless he can trade wheat for some other fuel that can be secured in greater abundance and with less effort. A West Virginia coal miner, on the other hand, has comparatively easy access to an abundance of fuel but little or no wheat. Under the circumstances a ton of wheat may exchange for several tons of coal, the wheat being much more valuable for food in the mining district of West Virginia than coal and the coal being more suitable for fuel in Kansas than wheat. The Kansan cannot produce fuel economically because Kansas does not have rich and easily available coal deposits; the West

Virginian cannot produce wheat economically because West Virginia's climate and soil in the coal region are not well adapted to wheat. If one produces wheat and the other produces coal and they exchange their surpluses, each gains by the transaction even though the money transfers from Kansas to West Virginia and from West Virginia to Kansas are equal in amount. Such gains from exchange may be far more than sufficient to compensate for long hauls and other transfer costs. The simple truth that all parties to the transaction may gain from an exchange of goods is sometimes obscured by complexities of modern commercial transactions in which gains and losses of each individual trader are recorded in monetary units.

Because in the creation of the earth and its inhabitants nature's useful resources and man's innate abilities were not apportioned uniformly to all parts of the globe and to all persons, and because techniques of production do not advance at equal rates among all peoples, regional specialization in production and opportunity for profitable trade, both domestic and international, are legion.

No twentieth-century nation has within its own boundaries facilities for economical production of all the goods required by an industrial people. Even the United States and the Union of Soviet Socialist Republics, which are the most nearly self-sufficient of the highly industrialized nations at the present time, depend upon outside sources of supply for a variety of foodstuffs, for certain kinds of alloy metals and other minerals, for certain types of textile raw materials, fertilizers, drugs, and a variety of manufactured and semimanufactured goods that they do not produce at home in sufficient supply for industrial and domestic requirements. Of the larger countries in terms of land area and population, China is probably the most self-sufficient. This fact is not, however, a result of great and diversified production. China is poor. The variety and quantity of per capita production and consumption there are low. If Chinese living standards are to be substantially increased, it will be necessary to develop large mining and manufacturing industries in China. It will be necessary to draw a part of her agricultural population into manufacturing and to mechanize Chinese agriculture. It will be necessary to export from China a part of the output of industries where labor productivity is relatively high and to import some products that can be produced more efficiently in less thickly populated countries or in countries richly endowed with particular types of natural resources. In short, installation of more power machinery, development of larger export industries, and encouragement of more imports of certain types of

goods are lines of development that offer the greatest promise of increased per capita productivity and higher living standards for the Chinese.

China, Russia, and the United States are the three countries in the world with the greatest variety and abundance of industrial and agricultural resources. International trade is necessary to maximize production in these countries. It is even more necessary to increase per capita production in countries less favored by nature with a variety and an abundance of natural resources. Trade is necessary not only to increase per capita productivity during the early stages of industrialization of technically backward countries but also to maintain high productivity levels in the intensely industrialized countries. Trade among intensely industrialized countries is as necessary to high levels of world-wide prosperity as is trade between industrialized countries that export manufactured goods and industrially backward countries that export raw materials and foodstuffs.

Prior to the Second World War a drift in world economy toward self-sufficing nationalism was pronounced. If a persistent drift toward closed economies again develops, what may happen to countries that are now largely dependent upon world trade? The extent to which existing populations have grown up with international trade and have become dependent upon it is a consideration that no nation seriously desiring to promote world peace can afford to underestimate.

Prior to the Second World War there was a great clamor on the part of so-called "have-not" nations—particularly Germany, Italy, and Japan—for territorial expansion into raw-material-producing areas. Much of this clamor was propaganda preparatory to war. Nevertheless, it focused attention upon the much-repeated fact that no twentieth-century nation has within its own boundaries all the natural resources that it needs. The only possible way to gather the necessary natural resources within the political boundaries of any one nation would be to put within its boundaries practically the whole surface of the globe. This is not possible without war and more war. The practical alternative is to give each nation access to the raw materials and foodstuffs that it needs through a peaceful system of international trade and international economic cooperation.

To the foregoing economic reasons for international trade might be added a list of cultural and humanistic reasons. For example, human intercourse that accompanies trade furthers mutual understanding of political institutions, habits of thought, and philosophies of life. Such understanding contributes, in all probability, more to mutual respect,

friendliness, and international peace than to competitive antagonisms, animosities, and war. Certainly international intercourse through trade and otherwise enriches cultural appreciation and cultural development among all the peoples involved.

DIFFERENCES BETWEEN INTERNATIONAL TRADE AND DOMESTIC TRADE

Fundamentally, both international trade and domestic trade are means of achieving increased production through division of labor. Nevertheless, they are dissimilar in a number of important respects. These dissimilarities arise from such conditions as (1) varying degrees of labor mobility, (2) nature of market, (3) existence of customs tariffs, (4) monetary variations, and (5) legal peculiarities.

Varying Degrees of Labor Mobility. Occupational skills and associations, family ties, custom, language, and restrictive immigration legislation retard movements of workers from one country to another. Of these five impediments to free mobility of labor among countries only the first three—occupational skills and associations, family ties, and custom—are of pronounced importance in impeding intranational population movements. A result is differences in degrees of internal and external mobility of labor.

Populations do not flow freely from one region to another within the short space of time of a few weeks, months, or even years. Nevertheless, between regions that are not separated by political boundaries and divided by legislated immigration restrictions, large numbers of people do move to and fro in the course of time. People, especially young people, move from regions of least to those of greater opportunity. Thus from generation to generation the population of a nation tends to apportion itself regionally more or less in accordance with earning opportunities. Real wages of comparable grades of labor and living standards in various parts of a nation thus tend to seek a common level.

As among nations that prohibit free movements of populations over the boundary lines, real wages do not necessarily tend to seek a common level. Take, for example, the difference between real wages and living standards in Italy and the United States. Italy's population is more dense in relation to natural resources than is that of the United States, and real wages there are lower than those in this country. This difference is a reason for limiting, by congressional act, the numbers of Italians who are permitted to migrate annually to the United States. In consequence, production in the two countries is carried on

in more or less closed compartments in so far as the labor supply is concerned, whereas employers in different localities of either country compete for labor. This conclusion does not necessarily imply that money wages or even real wages are absolutely uniform in all localities encompassed by common national boundaries. In fact, wages in all parts of a national market seldom are exactly uniform. Averages of money wages per worker in manufacturing industries in six states of the United States for 1939 varied, for example, as follows: [2] Massachusetts, $1,087; Ohio, $1,358; North Carolina, $738; Texas, $1,009; Minnesota, $1,215; and California, $1,325. Occupational characteristics, living costs, custom (as affected by the Negro population of the South, for example), and other factors interacted to cause differences in wage levels among these localities. National boundaries need not in every case augment differences in wage levels among localities thus alienated. As a general rule, however, wages in different countries do not seek common levels so readily as do wages in competing localities within the boundaries of a single nation. Index numbers of relative levels of real income per breadwinner in different countries for the period 1935–1938 are shown in Table 1.

TABLE 1. INDEX NUMBERS OF THE RELATIVE LEVELS OF REAL INCOME PER BREADWINNER IN DIFFERENT COUNTRIES, 1935 TO 1938

(Base: United States, 100) *

Country	Real Incomes †
New Zealand	116
United States	100
Canada	97
Great Britain and Northern Ireland	87
Australia	86
Argentina and Uruguay	83
Switzerland	72
Sweden	58
France	58
Germany-Austria	56
Spain	43
Hungary	30
Italy	30
Japan	27

* SOURCE: Relatives computed from figures in Colin Clark, *The Economics of 1960*, Macmillan & Co., Ltd., London, 1942.

† Figures for real income in different countries have been estimated in terms of "international units," defined as "the amount of goods and services that $1 would purchase in the United States over the period 1925–1934." CLARK, COLIN, *The Conditions of Economic Progress*, pp. 39–41, Macmillan & Co., Ltd., London, 1940.

[2] U. S. Department of Commerce, *Statistical Abstract of the United States*, 1946, pp. 843–844, Washington, D. C.

The index numbers in the table indicate that real incomes per wage earner in New Zealand, the United States, and Canada during the period 1935–1938 were more than three times as high as real incomes in Hungary, Italy, and Japan. The compiler of the data recognized limitations on the accuracy of the figures—limitations arising from the fact that it was necessary to make various estimates and assumptions in obtaining figures for income, real income, and breadwinners, the components of the final calculations. When due allowance has been made for these and other limitations of accuracy, the data point to conclusions different perhaps in degree but not in direction from those reached by other students of the subject,[3] *viz.*, that in some countries labor is abundant and relatively cheap, whereas in others it is scarce and relatively dear. In some cases mass movements of workers from low-wage to high-wage countries would in all probability occur were it not for national boundaries and immigration restrictions. Artificial barriers to prevent population movements from Italy to France and from Japan to the United States are cases in evidence. Such efforts on the part of countries with relatively high living standards to restrict an influx of workers from countries with relatively low living standards tend to differentiate international trade from domestic trade. In international trade the wage factor is of relatively more importance in determining types of territorial specialization than is the case in domestic trade. Both the volume and the permanence of international trade rest more largely upon wage differentials than is the case in interregional, domestic trade.

Nature of Market. Essential characteristics of machine industry are standardization of product, mass production, and mass sale. A large domestic market is well suited to mass sale. The majority of a nation's people speak or at least understand a common language and can be reached through an integrated system of communication. A large proportion of a nation's population may be reached with standardized sales messages communicated through magazines with nation-wide circulation, through the associated press of the nation, or through nation-wide radio hookups. Frequent intercourse fostered by easy communication and familiar modes of travel in congenial surroundings tends to standardize habits of consumption and to maximize advantages of large-scale production. Standardization of goods for the domestic market applies not only to consumers' goods but also to indus-

[3] See, for example, "An International Inquiry into Costs of Living: A Comparative Study of Workers' Living Costs in Detroit (U.S.A.) and Fourteen European Cities," International Labour Office, Geneva, 1931.

trial goods. Systems of weights and measures are all too often national institutions; systems of training for engineers and designers tend to conform to national patterns; and styles in machinery and equipment tend to assume national characteristics. English railway engines and freight cars, for example, are characteristically different from those in France or in the United States. In certain contiguous countries of Europe railway gauges are so different as to necessitate reloading of freight at the national boundaries in place of through carriage of loaded freight cars. Lack of standardization of products of different nations, as illustrated with railway equipment, exists in many other types of industrial equipment. One need not delve deeply into the intricacies of specification habits, style causation, machine design, and consumption preferences to realize that in a great many cases goods to be sold in foreign countries must be especially designed to conform with the national characteristics of those countries.

Differences in demand more or less similar to those cited exist among the regional markets of a large nation. However, the individualities of various parts of a large domestic market are, as a rule, less extreme than those of different national markets.

A significant result of these market peculiarities is that a large concern supplying a particular class of goods (typewriters, railway engines, machine tools, flour, hats, or what not) for sale in a number of different countries cannot standardize the product and realize advantages of mass production and mass sale to so great an extent as can the firm that is producing an equally large volume of one class of merchandise for sale in a large national market.

Existence of Customs Tariffs and Other Types of Trade Restrictions. Tariff walls constitute a third difference between foreign trade and domestic trade. A customs tariff is a duty or schedule of duties levied upon goods that pass the boundaries of a political state. In ancient and medieval times tariffs were levied primarily for the purpose of raising revenue. In recent times they have been used more largely for the purpose of regulating the flow of commerce. Duties are imposed upon imports, upon exports, and upon goods in transit. Import duties are by far the most important category of modern tariff charges. Practically no self-governing nation is entirely free of import duties. Rates of duty are levied, ordinarily, either in terms of a fixed charge per unit of weight, measure, or count of the merchandise imported, *i.e.*, specific duties, or in terms of a specified percentage of the value of the goods imported, *i.e.*, ad valorem duties.

Export duties are less common now than they were during the mer-

cantile period, although not so uncommon as to be classed in a category of purely historic practices. Great Britain, for example, employed export duties in her attempt to regulate production of raw rubber under the Stevenson plan in the 1920's. Other examples are Chile's export duty on nitrates and Canada's export duty on pulpwood.

Customs tariffs obstruct the sale of particular goods in particular markets. Thus they may limit imports of foreign merchandise, curtail production of certain goods in particular areas by penalizing exports (as in the British rubber-restriction plan), or facilitate the practice of dumping. Dumping is the sale of goods in foreign markets at prices less than those for which similar goods are sold in the domestic market. If it were not for tariffs, goods sold abroad at figures below the domestic price level for such goods would tend to return to the country of origin.

Customs tariffs were supplemented by import quotas, export quotas, and governmental prohibitions to all imports or exports of certain types of goods during the depression years of the 1930's. These supplemental restrictions were even more effective impediments to trade than customs tariffs had been in earlier years. With a system of overall governmental management of foreign trade prevailing in Russia and with a drift toward greater degrees of governmental regulation of foreign trade in other countries, trade barriers are likely to continue to be a more important factor in differentiating foreign trade from domestic trade than these barriers were before the First World War.

Monetary Variations. Purchases and sales of goods in a domestic market are, as a rule, negotiated with money or currency that is uniform in all parts of the market. As among countries, mediums of exchange are not uniform, and were not uniform even when all the countries in question had gold standards. When both the United States and Great Britain were on gold standards in the 1920's, for example, the gold equivalent of a United States dollar was 23.22 grains of fine gold, and that of the British pound sterling was approximately 113 grains of fine gold. Expressed in another way, the British pound at par was equivalent to 4.8665 United States dollars.[4] When these countries were on gold standards, exchange rates varied as much as 1 per cent; *i.e.*, a British pound might exchange for as much as $4.89 or as little as $4.84, depending upon the condition of trade balances and the

[4] Par of exchange in this sense is the so-called "mint par of exchange."

cost of transferring gold from one country to another. When the monetary units of these countries are not subject to gold conversion, exchange rates may vary by much greater amounts than those indicated. Calculation and execution of monetary exchange transactions incident to international trading constitute costs and risks of a kind that are not ordinarily involved in domestic trade. A United States merchant who sells a bill of goods in New York, San Francisco, or some other domestic city for $4.86 will collect approximately $4.86 if the purchaser pays his bill. Costs of transferring this sum from one city to another are of minor importance. If a similar bill of goods is sold in Great Britain for a specified number of pounds sterling, the American merchant may realize $4.86 or some other amount per pound sterling depending upon the rate of exchange between dollars and pounds when collection of the bill is consummated. Devaluation of monetary units in some countries and divorcement of paper currencies from gold standards in other countries during the 1930's and the imposition of complicated systems of exchange rationing were accompanied by extreme variations in international exchange rates. During this period the hazards of foreign exchange dealings increased. Since the Second World War an attempt has been made and is being made to ensure a modicum of international exchange stability through international agreement. An International Monetary Fund has been established for use in facilitating payment balance adjustments in weak-currency countries without resort to measures destructive of world-wide exchange stability. Regardless of whether or not the Fund works successfully, monetary variations and greater or lesser degrees of international exchange instability will continue to be factors that differentiate international trade from domestic trade.

Legal Peculiarities. A fifth difference between international trade and domestic trade is to be found in a dissimilarity of legal systems and modes of settling commercial disputes in various countries. A domestic trader may be subject to a great variety of local laws, tax rates, and other regulations in different parts of his own country. As a rule, however, legislative regulations and procedures in any particular nation rest upon a common foundation of legal codes and philosophies, which may be quite different from those in some other country where the historic background is not the same. Consequently the international trader is burdened with a heavier weight of legal responsibilities and is faced with a greater variety of legal complexities than is the domestic trader.

INTERDEPENDENCE OF INTERNATIONAL TRADE AND DOMESTIC TRADE

No country has within its own national boundaries facilities for economical production of all the goods required by a modern industrial people. Even the United States, which is among the most self-sufficient of the highly industrialized nations of the world, depends upon other countries for the greater part of its silk, sugar, natural rubber, and potassium, for a number of important alloy metals such as vanadium, tungsten, manganese, and antimony, and for a great many other commodities: jute, tin, nickel, dyestuffs, drugs, corundum, sponges, and asbestos, to mention only a few. Great Britain imports large amounts of sugar, wheat, meat, cotton, wool, timber, and copper, in addition to scores of less bulky commodities: tobacco, silk, sisal, dyestuffs, drugs, metal alloys, precious metals, resin, spices, tea, and others. France imports large quantities of coal because of the inferiority of her own reserves. Germany is dependent upon other countries for iron ore; Japan is dependent upon foreign countries for adequate supplies of both coal and iron as well as for many other raw materials.

Internal and external trade have contributed jointly for many centuries to the needs of industry and the satisfaction of ultimate consumer wants and have become functionally connected. For hundreds of years, international trade has been a vehicle for the extension of improved production techniques to an ever-widening circle of users; it has been a medium for the cross-fertilization of cultures and a connecting link between the activities of peoples in all parts of the world. As a result, imposition of trade restrictions by some one country is likely to throw people out of work in other countries. Buying power of the unemployed and their purchases of domestic goods shrink; the displaced workers must seek new occupations, and in so doing domestic sales and purchases are modified. Thus the effects of the imposition of trade restrictions by some one country spread to other countries and from industry to industry in these other countries. Economic disturbances in any one country, whatever their causes, are transmitted to other countries. Reduction of foreign investments caused by political upheaval in a debtor nation, for example, disrupts foreign exchanges, modifies credit structures, and affects prices and interest rates in all creditor countries. Extreme overproduction of some one important raw material—wheat, sugar, rubber, cotton, or what not—causes price disturbances that are transmitted to other commodities and to other nations. A severe decline in wheat prices, for example, reduces the buying power of farmers in Australia, Canada, Argentina, United States,

and other wheat-producing countries. The wheatgrowers in turn purchase fewer manufactured goods. Manufacturing profits shrink, manufacturing workers are thrown out of employment, and less cotton and rubber are purchased in the form of automobiles, clothing, and industrial equipment. Consumers tend to eat more wheat and fewer potatoes, and fertilizer markets that draw supplies from Chile, France, Germany, United States, and elsewhere tend to become less active. Few persons escape entirely from the shocks that may originate with extensive overproduction of wheat. Every national industrial system as now constituted is synchronized with every other national industrial system in greater or less degree through an interdependence that has evolved slowly, as the countries themselves have developed.

National industrial systems depend upon one another for markets, for financing, and for raw materials. Some nations could, no doubt, continue to exist without foreign trade, but the domestic trade of no nation would continue to flow in its accustomed channels if its foreign trade should cease to exist. The question of interdependence between domestic and international trade from a purely economic point of view resolves itself largely into two considerations: (1) that of the gains in production efficiency to be had from international division of labor and (2) that of the extent to which existing populations and industrial systems have grown up with international trade and have become dependent upon it.

The extent of dependence of different nations upon international trade varies. England and Japan, at the present time, are probably more dependent upon foreign trade than other large countries; the United States, Russia, and China are among the countries least dependent upon it. With the drift toward intense self-sufficing nationalism that was in evidence in the interwar period, serious thought was being given in some quarters to the problem of weighing possible losses from reduced international division of labor and international trade on the one hand against possible gains from greater national self-sufficiency on the other. If a persistent trend toward closed economies were to develop, what might happen to countries that are largely dependent upon world trade? Some students of world economy believe that the welfare and perhaps the very existence of a number of large nations as now constituted depend upon access to foreign supplies of raw materials and to foreign markets for goods manufactured at home. These students of the subject believe that little progress could be made toward achieving generally conditions of national self-sufficiency without a long series of wars, geographical redistribution of the world's population, and relocation of national boundary lines.

CHAPTER II

INDUSTRIAL FOUNDATIONS OF INTERNATIONAL TRADE

Concentrations of particular industries in particular countries in such degree as to give rise to merchandise exports and imports are largely a result of some combination of the five following causal factors:

1. The man-land ratio, the relation between numbers of people living in a particular area and the quantity and quality of land available for their use.
2. Differences in soil and climate as they affect agricultural production.
3. Geographical occurrence of nonreproducible minerals.
4. Differences in rates of development and adaptation of production techniques in various parts of the world.
5. Differences in rates of accumulation or acquisition of capital equipment.

All these factors are conditioned by political organization, skill in production management, and the working effectiveness of labor.

POPULATION DENSITY

One of the most characteristic differences among nations of the world as now constituted is to be found in numbers of persons supported per square mile of land area. Statistics of population densities for a group of representative countries are given in Table 2. At the top are densely populated countries such as Belgium, with more than seven hundred persons per square mile, and the Netherlands, with more than six hundred. At the bottom are sparsely populated countries such as Australia, with only 2 persons per square mile, and Canada, with only 3. Countries vary in fertility, in other natural resources, and in their capacities to support dense populations. With existing methods of production, however, no country's agricultural resources are adequate for the support of an unlimited number of persons per square mile because land is subject to diminishing returns.

The Principle of Diminishing Returns. The principle of diminishing returns as initially stated was concerned with the numbers of people

who could be supported upon a given amount of land in countries where agriculture was the chief industry. This consideration must have occupied the attention of thoughtful men at one time or another

TABLE 2. POPULATION DENSITIES IN SELECTED COUNTRIES *

Country	Year	Population	Area, sq. miles	Persons, sq. mile
Belgium	1937	8,361,000	11,754	711
Netherlands	1938	8,635,000	13,515	639
United Kingdom	1935	47,029,000	94,281	499
Japan Proper	1937	71,253,000	147,701	482
Germany	1936	67,587,000	181,743	372
Italy	1938	43,786,000	119,764	366
Czechoslovakia	1937	15,263,000	54,244	281
Korea	1935	22,899,000	85,239	269
Switzerland	1937	4,174,000	15,944	262
British India and Burma	1931	271,527,000	1,096,291	248
China Proper	1930	462,387,000	1,900,000	243
Poland	1938	34,500,000	149,957	230
Denmark	1937	3,764,000	16,575	227
France	1936	41,906,000	212,722	197
United States	1938	130,215,000	2,973,776	44
Sweden	1937	6,285,000	158,394	40
Mexico	1937	19,154,000	760,290	25
Norway	1937	2,907,000	119,148	24
U.S.S.R. (Russia)	1934	170,500,000	8,176,054	21
Iran (Persia)	1936	12,000,000	628,000	19
New Zealand	1937	1,602,000	103,934	15
Brazil	1937	43,247,000	3,286,170	13
Argentina	1937	12,762,000	1,076,966	12
Canada	1937	11,120,000	3,466,793	3
Australia	1937	6,867,000	2,974,581	2

* SOURCE: U. S. Department of Commerce, *Foreign Commerce Yearbook*, 1938, pp. 386–388, Washington, D. C.; *Ibid.*, 1933 (for China only), p. 313.

in every densely populated country. The principle was clearly stated by John Stuart Mill in 1848 as follows:

After a certain, and not very advanced stage, in the progress of agriculture it is the law of production from land, that in any given state of agricultural skill and knowledge, by increasing the labour the produce is not increased in equal degree.[1]

[1] MILL, JOHN STUART, *Principles of Political Economy*, Bk. I, Chap. XII. Quoted by permission of Longmans, Green & Co., Inc., New York.

The idea of diminishing returns, as applied to agricultural land, may be illustrated with assumed figures for the production of wheat. Suppose, for example, that 15 million acres of land are planted to wheat in Italy and that no improvements such as the discovery of higher yielding varieties, more effective methods of culture, or better ways of fertilizing are made. Suppose also that the Italian population continues to grow, that Italy's demand for wheat increases, but that no more land is planted to wheat. More and more labor may be applied to their wheatland, and a time may come when additional labor produces less and less wheat per worker (Table 3). According to this

TABLE 3. ILLUSTRATION OF THE PRINCIPLE OF DIMINISHING RETURNS

(Given: 15 million acres of land for wheat growing)

Number of wheat-growers equally supplied with capital, thousands	Total amount of wheat produced, million bu.	Average amount wheat produced per grower, bu.	Production per additional grower, bu.
250	175	700	
300 *	225	750 *	1,000
350	255	729	600
400	280	700	500
450	297	660	340
500	300	600	60

* Point of diminishing returns.

illustration the amount of product per grower decreases after 300,000 growers are employed. Since the Industrial Revolution the principle of diminishing returns has been generalized to apply to any factor of production, the supply of which is more limited than supplies of other productive factors associated with it. With a fixed supply of natural resources of all kinds and a fixed technique of production, a time will come in the growth of populations when per capita product must diminish if the number of people continues to increase.

Population Pressure. In the time of Thomas Robert Malthus (1766–1834), Europeans were gravely disturbed over the possibility of overpopulation, scarcity of food, and the inability of the low-income masses of the people to improve their conditions of life. Malthus [2]

[2] Malthus first published his *Essay on the Principle of Population as It Affects the Future Improvement of Society* in 1798.

called attention to what he believed to be a great impediment to mankind's continued progress toward greater happiness and well-being. This obstacle was a constant tendency in all animate life to increase beyond the nourishment available for it. Evidence at hand indicated that the human race was increasing in numbers at a surprising rate. The increase has continued since Malthus's time, and the population problem is still with us though in a somewhat different form from that conceived by him. Since Malthus's time vast improvements in techniques of production have been brought into use. Steam engines, gas engines, and electricity have enabled industrialists to tap reservoirs of nonhuman energy little used before 1800. Improved transportation facilities have permitted economical movement of foodstuffs and fabricating materials from sparsely settled regions of the world to centers of dense population and the conversion of greatly increased amounts of crude materials per worker into forms suited to human consumption. These and other improvements in methods of production permitted widespread improvement in standards of living during the nineteenth century in spite of the fact that the world's population increased within the century about 100 per cent.[3] Whether improvements in the twentieth and succeeding centuries will continue to permit enlargement of supplies of material goods at a more rapid rate than populations grow no one can foretell. Even if supplies of goods do become increasingly abundant, their apportionment among national population groups with unequal access to natural resources will be a problem of the gravest economic and political importance.

The two principal means of alleviating congestion of population in a particular country are (1) emigration and (2) foreign trade. European countries sent large numbers of emigrants to America, Africa, and Oceania during the nineteenth century. In the decades before the Second World War the Japanese emigrated to the continent of Asia and elsewhere. If, in the future, migration is to relieve overpopulation in particular countries, there must be thinly settled regions available for habitation. A century ago the Americas and Oceania were open to great numbers of immigrants, and much of Africa could be had for the taking. When sparsely populated regions are parts of a great empire, they are not easily appropriated. Even if owned by weak na-

[3] The world's population was approximately 850 million in 1800 and 1,700 million in 1900. It took mankind half a million years to produce the first 850 million people and then but a century to double the number. See DUBLIN, LOUIS I., ed., *Population Problems in the United States and Canada*, p. 77, Houghton Mifflin Company, Boston, 1926.

tions such areas are not ordinarily accessible to all comers because international jealousies form barriers against the covetous. Peaceful penetration may continue in some areas, but in most countries the time appears to be approaching when no kind of immigration will be regarded as an unmixed blessing. In recent decades country after country has raised legal barriers against unrestricted inflow of foreigners.

International commerce is the second mode of relief for overpopulated nations. International trade enables a densely populated country to import raw materials and foodstuffs in exchange for labor embodied in fabricated goods. Since manufacturing is a more intensive industry than agriculture, a nation can support a larger population by manufacturing for export than it can if all its foodstuffs are produced at home. However, international trade is not unrestricted. Nearly every important nation of the world maintains tariff barriers against free importation of fabricated goods from low-wage countries. If foreign commerce is to relieve population pressure in overcrowded parts of the world, there must be a willingness on the part of the people of sparsely settled areas to accept fabricated goods requiring relatively large quantities of labor in their production in exchange for foodstuffs, fuels, metals, textile fibers, and other fabricating materials. At present, none of the densely populated nations is able to find satisfactory outlets for all the goods that it might produce for export because such goods are a constant menace to industrial stability elsewhere. If provision for the absorption of merchandise exports from low-wage countries is made gradually, international trade need not reduce wage levels and living standards in the high-wage importing nations. For this reason commerce is probably a more permanent form of relief for congested areas than is emigration. However, without some means for restricting population growth many nations as now constituted can scarcely hope, by commerce alone, to circumvent the dangers and misery of extreme poverty on the part of large numbers of their underprivileged inhabitants.

Possibly freer commerce must go hand in hand with population restriction policies in the more densely populated countries, if living standards[4] of all nationalities of underprivileged peoples are to be improved. The process of raising low living standards of great masses of people is slow; so slow, that emigration from overpopulated coun-

[4] Standard of living is not a concept that lends itself to accurate and precise definition. One definition or measure of standard of living is the aggregate of decencies and comforts that a class of people deem more essential to their happiness and self-respect than uncurbed increase in offspring.

tries or rapid increase in their wealth may have no other appreciable effect than to increase the birth rate. India is a case in point. In this country of ancient tradition, early marriage, and high birth rate there is an endless debate as to whether the lot of the masses was improved under British rule. Railways, irrigation works, tea gardens, silk culture, cotton, jute, and steel mills supplied with British capital have created new wealth during the past half century. But, it is claimed, the Indian masses are provided with economic goods no more plentifully than they were before British rule. The claim seems not unreasonable because India's population during the first three decades of this century increased 50 million, or about 20 per cent. This increase in numbers has required more food, shelter, and other necessities of existence, and here may be India's missing dividend from the economic development the British instigated.[5] There are numerous other illustrations of populations that do not curb their rates of growth sufficiently to raise their living conditions far above the margin of subsistence. Japan may be taken for an example. At the end of the first quarter of the eighteenth century the population of Japan was between 26 and 27 million. A century later another census showed the population to be approximately 27 million. For 100 years or more the population of Japan had been almost stationary because want drove the people to extreme practices of infanticide.[6] In the latter part of the nineteenth century, however, when Japan was opened to Western ideas and world trade, economic progress increased her food supply and the population doubled in a half a century.

Population Danger Zones. India, eastern China, Japan, western Europe, and eastern United States are the areas of the world of greatest population density. In some of these areas rising living standards are tending to check population growth; in others the populations tend to increase in response to every increase in productivity, with the result that extreme poverty continues to exist among the masses. Population growth in France, Germany, Great Britain, and the United States appears to have been under control during the half century before the Second World War in the sense that increase in numbers did not prevent substantial improvement in living standards in these countries. In the United States, the country where population in-

[5] Ross, E. A., *Standing Room Only?*, pp. 94–95, D. Appleton-Century Company, Inc., New York, 1927.

[6] *Ibid.*, p. 100, and J. E. Orchard, "The Pressure of Population in Japan," *Geographical Review*, Vol. XVIII, No. 3, July, 1928, American Geographical Society of New York, New York.

crease has been most rapid, immigration laws have been made more stringent and birth rates have declined as the country approached a condition of industrial maturity. Between 1870 and 1880 population in the United States increased about 26 per cent. Between 1930 and 1940 the increase was about 7 per cent. Likewise in France, Germany, and Great Britain population growth rates have been regressing during recent decades. In general, nations may be divided into three groups from the point of view of population status:

1. Nations with a pent-up population resulting either in birth control as in France or in overcrowding and a high death rate as in China and India.

2. Sparsely settled regions with populations expanding to make fuller use of available resources as in Russia, Canada, and Australia.

3. Thickly settled regions in which population expansion is a cause for internal tension requiring either territorial expansion or trade expansion for its alleviation. In the interwar period Italy was an example.

If a workable system of collective peace could be established and trade restrictions relaxed throughout the world, economic conditions in Italy might be materially improved. In the industrially backward countries with pent-up populations—China, for example—the misery of poverty-stricken masses may, in time, be reduced by the introduction of improved production techniques and parallel reduction in birth rates.

Technical improvements in methods of production during the nineteenth century contributed to industrial growth and improved living conditions in Great Britain, France, and Germany. Introduction of improved methods lagged in Russia and China. Russia is now in the process of adopting power-machine techniques. The possible effect of increasing productivity upon living standards in Russia and the character of her international trade are questions that the whole civilized world may well take into account. Japan, also, has been undergoing an industrial revolution. Unlike Russia, Japan was already overpopulated before the Second World War. She was attempting, by a process of external territorial and commercial expansion, to improve the conditions of life of some 70 million people congregated upon an area of about 147,000 square miles of land that is relatively unproductive from an agricultural point of view and relatively poor in mineral resources. Italy supports some 43 million people on approximately 120,000 square miles of land—366 persons per square mile. Neither Japan nor Italy has an abundance of mineral resources;

neither nation can reasonably hope to provide a rapidly increasing population with improved conditions of life unless recourse is had to external expansion in some form. Even in the case of Great Britain, where birth rates have been reduced and living standards, before the Second World War, were relatively high, the population problem is a vital factor in world economy. Great Britain, with approximately five hundred persons per square mile, depends upon foreign trade for a large part of the income upon which her people live. International competition that deprived Great Britain of a substantial portion of her foreign markets would put a serious strain upon her internal economic and political system.

Relation between Population Problems and Commercial Policy. International commercial policies and population problems are inextricably related. Great Britain in the nineteenth century demonstrated the possibility of supporting a dense and growing population by improving her production methods and expanding her foreign trade; Japan and, to a less extent, Italy have been endeavoring to do likewise. Since the latter nations are inadequately supplied with practically all kinds of natural resources, their foreign trading policies are likely to encourage imports of fuels and fabricating materials and exports of manufactures requiring large amounts of low-wage labor in the production processes. Russia's situation is more like that of nineteenth-century United States. She has unused supplies of coal, iron, and petroleum and a large amount of fertile agricultural land. Her foreign trading policy in decades immediately ahead is likely to encourage imports of capital equipment in exchange for wheat, timber, and other products of the soil. Industrially mature nations like Great Britain, France, and the United States, with power resources, an abundance of capital, and relatively high living standards, will probably find that their most profitable lines of foreign trade are in exporting products of heavy industries and mechanical specialties, in exchange for fabricating materials,[7] foodstuffs not produced at home, and manufactures that require relatively large amounts of labor per unit of value. Obviously, future international trading policies of the various nations of the world will be conditioned by opportunities for economic growth. These in turn will be influenced by such factors as population densities of the different countries, abundance and location of agricultural and mineral resources, and the skill and rapidity with which countries succeed in adjusting their national economies to a changing world environ-

[7] Wood pulp, leather, textile fibers, metal alloys, rubber, etc.

ment. A cross section of existing world industry and dominant tendencies, which appear to be in process of modifying the industrial *status quo,* are presented in sections to follow.

FOOD RESOURCES

During the past century and a half improvements in methods of production and transportation have relieved somewhat the dark shadow of dread associated with the dangers of food shortage and famine. In general, prices of food staples have declined during the past century in relation to prices of other goods. However, in densely populated parts of the Orient and in some parts of Europe, where per capita buying power is low and little surplus of any kind of goods over current subsistence needs is produced, serious food shortages continue to occur from time to time. Sufficient food can be produced to supply the needs of everybody. Production is not so crucial a problem as distribution—distribution not in the physical sense so much as in the economic sense. Even though populations in sparsely settled regions are capable of producing wheat, meat, and other foodstuffs in ample abundance for the unsupplied needs of people in densely populated regions, the incentive to feed the world is not present unless the food-importing countries have goods to offer in exchange—goods acceptable to the people in the food-exporting countries. So long as the world's population is as unequally apportioned among the several continents as it is at the present time and so long as immigration is restricted and national objectives conflict, the problem of finding ways and means of providing sufficient food for all will continue to be a challenge to the greatest political and economic leaders of every age and generation.

Food Habits. For the maintenance of health, physical vigor, and mental alertness, proteins, fats, carbohydrates, and foods that supply various minerals and vitamins are consumed, when available, by people wherever they may reside. Such foods as meat, fish, eggs, and soybeans are relatively high in protein and fat content. Rice, wheat flour, potatoes, and granulated sugar are examples of foods relatively high in carbohydrate content. These types of staple foodstuffs, or substitutes for them that are produced and consumed in lesser amounts, plus miscellaneous vegetables and fruits, supply not only proteins, fats, and carbohydrates but also vitamins and various minerals required by the body in small amounts. Fortunately it is possible for people to get properly balanced diets from a great number of different combinations of foodstuffs. Orientals eat more rice and soybeans than Western

people; the Westerners eat more wheat, potatoes, and meat than the Orientals. Europeans eat more potatoes than Americans; Americans eat more wheat and meat per capita than Europeans. Before the Industrial Revolution food habits in different countries appear to have been greatly influenced by population density and local climatic and soil characteristics. The climate of China, for example, is better suited to rice production than to wheat production; the reverse is true in Europe. Meat was relatively cheap in colonial America because there was an abundance of fertile land in relation to the human population. Before the coming of modern means of transportation and refrigeration, meat was dear in densely populated regions because its production required a relatively large amount of land. An area of fertile, well-watered land, planted to grain and soybeans for human consumption, will support a population several times as large as the same area will support if used for producing meat for human consumption.[8]

At the present time foodstuffs of all kinds—perishables and nonperishables—are transported long distances at costs that are low in relation to initial production costs. As a result dietary habits are being modified; fuller use is made of agricultural land in sparsely settled regions and the volume of international trade in foodstuffs tends to increase.

Cereals. The word "cereal" originally meant something pertaining to Ceres, the goddess of agriculture, worshipped in Italy some 2,500 years ago.[9] It is now defined as any grass-yielding grain used for food or the grain so produced.[10] The two food cereals of first importance are wheat and rice. Other cereals of less importance, in terms of the amounts produced and consumed directly as human food, are rye, barley, oats, and maize (Indian corn). With the exception of rye these secondary cereals are produced primarily for domesticated animals.

Argentina, Canada, Australia, Russia, and to a less extent the United States are the leading surplus wheat-producing countries; *i.e.*, the countries that export the largest amounts of wheat. These are the less

[8] Five or six pounds of corn, or its equivalent in food value, are required to make a pound of pork, and about ten pounds of corn supplemented with some kind of fodder are required to make a pound of beef. (See *U. S. Department of Agriculture Yearbook*, 1922, p. 182.) Five pounds of corn may constitute the greater part of a man's consumption for a period of three or four days, whereas he may eat a pound of meat at one or two sittings.

[9] BULLER, A. H. R., *Essays on Wheat*, The Macmillan Company, New York, 1920.

[10] *Webster's New International Dictionary.*

thickly populated countries in which climate and soil conditions are favorable to wheat culture. Western Europe produces large quantities of wheat, but growing populations and diminishing returns in agriculture tend to restrict production to levels below the requirements of domestic consumption.

China ranks first among the countries of the world in production and consumption of rice. The rice-growing industry, as carried on there, is much more intensive than most of the agricultural industries with which Westerners are familiar. This condition is partly a result of the fact that technological developments have been slow in China and few alternative opportunities have been open to increasing numbers of Chinese rice growers. The rice-growing industry affords a sharp contrast between modern Western and ancient Eastern methods of doing things. In China, rice is set out by hand in small flooded plots of ground by men and women who wade in mire that is sometimes knee-deep. The fields have been carefully prepared with a crude plow, resembling the shovel of an American corn planter, which is drawn by an ox, or the soil may have been dug by hand with a large four-pronged mattock. Water is pumped into the rice field from a canal or river by the usual Chinese pump. This is an endless chain of square wooden paddles working in a box trough through which the water is drawn. Power is supplied by an ox hitched to a horizontal wheel that turns as the animal tramps round and round, or by men and women who lean on a stout rail and turn the pump with their feet, keeping time to lively music or a noisy gong. When ready for harvest, the rice is cut with a sickle or billhook, threshed with a flail, or beaten out of the sheaves by a buffalo which drags a stone roller over them. The rice is winnowed by tossing the grain and chaff into the air against the wind, and hulled in stone mortars by heavy hammers worked with the foot or swung with the arm. Such of the grain as finds its way to market is carried thence on the human back or drawn in antiquated carts over almost impassable roads, unless the rice farm is near a river or canal that can be used as a means of transportation.

In contrast with the Chinese method of production, rice is grown in the United States in large fields that have been plowed with a tractor or a modern horse-drawn plow. Instead of setting rice shoots out by hand, American farmers plant the seed with a tractor- or horse-drawn seeder. Water is pumped into the field by a gasoline engine or is run by gravity from some great reservoir. Before harvesttime the water is drained from the fields; the land dries out, and the

crop is cut with a mechanical self-binding reaper. The sheaves are threshed in a mechanical thresher operated by a gasoline engine, and the grain is cleaned and polished with mechanical equipment. It may even be sacked with the aid of mechanical devices. It is drawn to the railway station or shipping dock in rubber-tired, gasoline-motivated trucks. In spite of China's cheap labor, American farmers export rice to China, Japan, and Europe to sell in competition with the Oriental product.

Rye and barley are produced in greatest abundance in northern Europe, maize in North and South America, and oats in Europe and North America. In general the directions of international movement of wheat, and to a lesser extent rye, barley, oats, and maize, are from the Americas, Australia, and Russia to western Europe and the Orient, with smaller flows from predominantly agricultural countries of Europe to the more highly industrialized nations of Europe. Some rice moves from the Orient west, but in general cereal movements are from sparsely populated areas of the world to densely populated areas.[11]

Potatoes. Potatoes may be divided into two large families: sweet and white or Irish. The sweet potato belongs to the morning-glory family and occupies much the same position in humid, warm, middle latitudes that the Irish potato occupies in humid, cool, middle latitudes. The Irish potato at the present time is the more important of the two because it thrives in the more densely populated parts of the world and is produced and consumed in much greater quantities than the sweet potato.

Potatoes, like cereals, are rich in starch; they serve a purpose similar to that of rice or wheat in balancing rations. About 90 per cent of the world's potatoes are produced in Europe. The potato crop of Europe exceeds in volume and approaches in value the wheat crop of the world. A reason for Europe's large potato output is the fact that potatoes produce more food value per acre than any other staple crop except maize. Because of this fact wheat culture tends to give way to potato culture in thickly populated regions.

Sugar. Sugar has two principal sources of supply: (1) the beet-sugar industry, centered in temperate Western countries, and (2) the cane-sugar industry of the tropics and semitropics. Large quantities of beet sugar are produced for domestic consumption in western Europe, Russia, and the United States. The bulk of the sugar that enters the channels of international trade is cane sugar, which moves from

[11] *U. S. Department of Agriculture Yearbooks.*

Cuba, Java, India, and other semitropical and tropical countries to industrialized, wealthy countries in the Temperate Zone.

Costs of Carbohydrate Foodstuffs. With the increase in population density in Europe during the past century effects of diminishing returns in agriculture appear to have been more than offset by improvements in agricultural production techniques and improvements in transportation. The latter development has permitted mass movement of foodstuffs from sparsely settled regions to the more thickly populated parts of the world. Prices of wheat and sugar, for example, in relation to average prices of other goods have tended to become lower since the middle of the past century. As the extensive margin of cultivation of wheat and other cereals has moved westward and as great sugar-producing areas have developed in the tropics and semitropics, opposition to lower cost competition on the part of producing groups in the older producing areas has given rise to bitter political controversy. Such a controversy was at the heart of the "corn-law" issue in Great Britain at the middle of the nineteenth century and the "agrarian vs. manufacturing state" issue in Germany about the end of the nineteenth century. Also the present-day farm problem of the United States centers about a conflict somewhat similar in character. Nevertheless the gains from regional specialization and international trade have been so great as gradually to wear down the opposition of vested interests in the older producing regions.

Meat. Meat is consumed in greatest abundance in sparsely settled regions where economic development is in its early stages and in countries of great industrial wealth. In a few old and densely populated countries like China, India, and Japan, tradition and habit deeply rooted in years of poverty and an ever-increasing pressure of population upon limited supplies of land have created a strict economy that almost excludes meat from the human diet. Soybeans and other vegetables high in protein content, fish, and poultry products are consumed in place of meat in these areas.

In sparsely settled regions men hunt, fish, and collect whatever in the way of food nature offers for the taking. In America, and to a less extent in Europe also, hunting is still a pastime, the relic of an earlier epoch when people were more or less dependent upon wild creatures for a livelihood. The advance of Western civilization has not caused carnivorous habits to be discarded; instead, it has encouraged a resort to domesticated animals for meat supplies. At the present time, cattle, sheep, and hogs are the principal sources of the world's meat.

Cattle are most numerous in western Europe, North America, South

America (Uruguay and Argentina), and India. India has twice as many cattle as the United States, three or four times as many as Argentina, and more than all the European countries combined, but most of India's devout and superstitious inhabitants would rather starve than kill a sacred ox for its meat. Indian cattle are beasts of burden and to some extent suppliers of milk. In other parts of the world cattle are raised primarily for meat and milk. In Europe and America, dairy cows are more numerous in proportion to beef animals than in South America. Increasing numbers of people per square mile and intensified methods of agriculture have tended to crowd beef animals toward the extensive margins of cultivation. From these regions meat moves in refrigerator cars and ships to densely populated consumption centers.

Sheep, like cattle, are not all raised for the same purpose. Merino sheep are raised primarily for their wool. They are grazed on semi-arid lands that are poorly suited to intensive cropping. Dual-purpose sheep, such as the Shropshire and Southdown, are better suited to farming areas. They feed, in part, upon weeds and grasses that grow upon untillable hillsides and ditch banks and in fence corners, and yield income in the form of both mutton and wool. Sheep abound in Great Britain, in the Mediterranean countries of southern Europe, in eastern Australia, New Zealand, southern Africa, Uruguay, and Argentina. The United States, central and northern Europe, Asia, and northern Africa also have goodly numbers of sheep, although the numbers per square mile in these areas are not so great as in the regions first cited.

The swine is not a range animal. Originating in the forest and later domesticated, its habits are adapted to a rich and concentrated diet of grains, nuts, and garbage. Swine for pork production are most numerous in the thickly populated regions of western Europe and the United States. China has a great many hogs, but they are scrawny creatures which serve chiefly as scavengers of a densely populated region without modern facilities for the disposal of waste rather than as a primary source of food supply.

Cattle, sheep, and swine are raw materials of meat packing. At the present time great meat-packing centers for export are to be found in the United States, Argentina, South Africa, and Australia. One of the conditions essential to growth of great meat-packing industries is cheap land for producing livestock. In the United States, land values have increased; the days of free range have gone forever. In South America and Africa, new regions for the grazing of cattle, sheep,

and goats and for the production of hogs are being opened. Because of the increasing costs of its principal raw material, the United States meat-packing industry, in all probability, will not, after the artificial stimulation of the Second World War, grow very rapidly during the next quarter century. In fact, increasing competition in European markets from packer products originating in South America, British South Africa, and elsewhere may force the meat-packing industry of the United States to contract. Prior to the war this country's packers had lost most of their export market for beef. Unlike raw rubber, silk, cotton, or wool, fat livestock cannot economically be shipped great distances to processing centers. For this reason the meat-packing industry tends to develop near the source of supply of butcher stock and to export its finished products rather than to import its principal raw material. Consequently, development of meat-packing industries during the next half century is most likely to occur in the Southern Hemisphere, where land is relatively cheap.

The opening of new producing areas has not reduced meat prices as was the case with sugar. However, until the Second World War meat supplies increased fast enough to prevent a great increase in price relative to the prices of other goods.

Fish. Fish serves about the same purpose as meat in the human diet. The proteins and fats in fish are easily digested and compare favorably in nutritive value with beef. Fish fat, and especially fish livers, also contain valuable vitamins which are essential in the prevention of rickets and other diseases. In many countries where dairy products are high priced and vegetables scarce, as in Alaska, Labrador, and Iceland, all the common foods, with the exception of fatty fish, are deficient in vitamin A.[12]

Most of the world's fishing is carried on within a few hundred miles from shore, where marine life is more abundant than in mid-ocean. The Atlantic coast of North America, more especially the region from New England north, and the Atlantic shores of Europe are bases for the fishing fleets of many nations, which bring in annually several hundred million dollars' worth of cod, haddock, halibut, herring, mackerel, and other fish. In the Pacific Ocean the two fishing regions of first significance are the shores of the United States and Canada, from northern California to Alaska, and the coasts of Japan in the Far East. The greatest salmon fisheries of the world are on the Pacific

[12] TRESSLER, DONALD K., *Marine Products of Commerce*, Chap. XIV, Reinhold Publishing Corporation, New York, 1923.

coasts of Alaska, Canada, Washington, and Oregon. The Japanese fisheries are more like those of the Atlantic coast of North America. They are of profound significance in the lives of Oriental peoples who have little or no meat to serve as an appetizer and to supplement the bean in supplying protein as balance for a rice diet.

Dairy Products. In Europe, North America, and Oceania are to be found the world's principal centers of milk production. The dairy industry is a product of modern improvements in agricultural methods. This fact accounts, at least in part, for the insignificant place that milch cows occupy in Oriental agriculture. In Oriental countries the change from an extensive to the intensive type of Far Eastern agriculture as we know it [13] came before scientific breeding and selection developed cows giving high annual yields of milk.[14] Another probable reason for retarded development of dairying in the Orient is the fact that the keeping of milk and milk products without ice, artificial refrigeration, or cool spring water is so difficult that people in hot climates were virtually unable to make good butter or cheese before the recent development of artificial cooling. In China and Japan, milk production is of little significance. In India, the large cattle population is almost as useless for supplying milk for human consumption as it is for supplying beef.

New Zealand, the Netherlands, Italy, and Switzerland are among the leading exporters of dairy products. The United Kingdom has for many years been the leading importer of dairy products. Dairying is an intensive industry which can be developed profitably in densely populated areas even though much of the feed for the dairy cows must be imported.

Poultry Products. Common domesticated fowls,[15] turkeys, ducks, geese, swans, ostriches, pheasants, and guinea fowls, all are classed as poultry. Such breed names as Peking and Muscovy ducks, Brahma, Leghorn, Hamburg, Minorca, and Plymouth Rock fowls (chickens), and Brabant geese are significant of the world-wide distribution of poultry. The common barnyard fowl occupies the most important

[13] See FIELD, FREDERICK V., *Economic Handbook of the Pacific Areas,* Doubleday & Company, Inc., New York, 1934; LEE, MABLE PENG-LUA, *The Economic History of China: A Study of Soil Exhaustion,* Columbia University Studies in History, Economics, and Public Law, New York, 1921.

[14] Intensive dairying of the kind found in some of the European countries followed seventeenth- and eighteenth-century improvements in agricultural methods.

[15] Fowls are sometimes referred to as chickens in agricultural regions of the United States.

place, from an economic point of view, among the various classes of poultry. Turkeys and ducks are also important. The United States has in the neighborhood of one-third of all the poultry in the world. China ranks second. These two countries together have about one-half of the world's poultry. Large numbers are also to be found in Russia, Japan, Greece, Turkey, Italy, Germany, Austria, Denmark, Poland, United Kingdom, Spain, and various other countries of western Europe, Canada, and South Africa.

The ordinary barnyard fowl is one of the most efficient creatures on earth from the point of view of converting grains and other animal foodstuffs into edible human food with a minimum of waste. For this reason, poultry raising and egg production are suited to intensive systems of agriculture in densely populated regions. The poultry industry is equally well suited to extensive forms of agriculture prevailing on isolated farms and ranches, where the fowls live upon grains unrecovered in the process of harvesting, grass seeds, grasshoppers, bugs, and other wastes, and practically take care of themselves.

Before the development of cold storage the market, both for eggs and for poultry, was limited by their perishability. Now, however, eggs and poultry are widely distributed. More than half a billion dozen eggs in the shell and a hundred million pounds of eggs in other forms enter the channels of international trade each year. Among the leading exporting nations Netherlands, Russia, Poland, Denmark, China, the Irish Free State, and Belgium rank high. The United Kingdom and prewar Germany ranked at the top of the list of importing countries.[16]

Other Foodstuffs. Fruits and vegetables, spices, nuts, coffee, tea, and other miscellaneous foodstuffs all contribute to swell the streams of international trade. Some kinds of vegetables and fruits are adapted to every climate and every type of soil where human habitation is large. Nevertheless, international trade in fruits and vegetables is not insignificant. .

Coffee comes largely from one side of the world—Brazil; tea from the other side of the world—India, Ceylon, Netherlands East Indies, China, and Japan. Great Britain is the great tea-drinking nation of the West; the United States is the great coffee-consuming nation. Regional specialization in agriculture and international trade in foodstuffs facilitate the economical production of sufficient quantities of

[16] For statistics see *U. S. Department of Agriculture Yearbooks* and *International Yearbooks of Agricultural Statistics.*

food to supply the world's growing population and make possible greater variety of selection for prosperous gourmands.

TEXTILES

Food and clothing are among the most elemental human necessities; in spite of this fact few nations are self-sufficient in either. For hundreds of years linen, wool, cotton, and silk were the world's principal textile fibers. Within recent decades rayon, nylon, and other synthetic fibers have become important competitors.

Sources of Supply of Textile Raw Materials. The United States, India, Egypt, and, of less importance, China and Brazil, are the principal countries exporting raw cotton. Far removed from surplus cotton-growing areas are the sources of supply of export wool. Leading countries exporting raw wool are Australia, Argentina, Union of South Africa, and New Zealand. Raw-silk exports come from yet another part of the world: China and Japan. Flax for making linen is of much less importance than in times gone by; raw materials for rayon manufacture, on the other hand, are of increasing importance. Wood pulp, exported from Canada, Russia, and the Scandinavian countries, is one of the more important raw materials from which rayon fiber is produced. Coal, an important raw material used in nylon manufacture, is found in the United States, the United Kingdom, Germany, and other parts of the world. The round-the-globe locations of the countries that produce surpluses of textile raw materials is a striking illustration of the significance of geographical specialization in production and the futility of attempting to make any one nation self-sufficient in the most economical production of industrial raw materials. As in the case of cereals, international trade has made possible a large increase in world production of cotton and wool without increase in the trends of their prices in relation to prices of other goods. International trade has also made possible greater utilization of silk, jute, ramie, sisal, henequen, and related fibers and thus has created added sources of income for the producers in China, Japan, India, Mexico, and other parts of the world where incomes are low.

Textile Manufacturing Centers. Large amounts of cotton and wool move from countries of origin in one part of the world to centers of manufacture in other parts of the world, and the cloth in turn moves in large volume from the manufacturing centers back to the raw-material-supplying countries and to yet other parts of the world. Nearly every country has some textile manufacturing, but many countries do not supply all their domestic needs for textile goods.

Prior to the Second World War Great Britain, Japan, France, Germany, and Italy were the principal exporters of cloth. Textile manufacture makes use of large numbers of relatively low-wage workers, especially women. It is not surprising, therefore, to find that mill consumption of raw cotton in Japan more than quadrupled between 1910 and the beginning of the Second World War, while it was declining in Great Britain, nor to find that the great cotton-manufacturing industry in the United States is sheltered from lower cost foreign competition by highly protective customs tariffs.

What may be the geographical migration tendencies in cotton-manufacturing centers during the decades following the Second World War cannot be predicted with certainty, but there are good reasons to anticipate that the low-wage countries of the Orient will tend to become the leading exporters of cotton goods. Another postwar uncertainty is the future of the raw-silk industry. With the rapid development of rayon, nylon, and other synthetic fibers after the First World War raw-silk prices in relation to prices of other goods suffered a severe decline. Whether low-wage Oriental labor will continue to produce increasing quantities of raw silk for export, more or less regardless of its price, is a question that only time and the unfolding developments of national and international political policies can answer. It is possible that freer access to foreign markets for manufactures and larger movements of loans to facilitate more rapid industrialization in the Orient may tend to raise real wages in China, India, and Japan, and that the part of the population that devoted its energies to raw-silk production prior to the Second World War may shift to more remunerative occupations.

FOREST PRODUCTS

Numerous industrial raw materials come from forests: camphor, chicle, rattan, rosins, gums, shellac, bark used in making tanning materials, and many other things in addition to wood and rubber, which are the most important forest products in terms of money value. All contribute to the ever-increasing volume of international trade, to the diversity of consumption goods, and to higher levels of human well-being.

Wood. Hardwoods abound in the tropics as well as in the Temperate Zones. World demand for them has not as yet initiated exploitation of the tropics on a gigantic scale except in the Middle East where teakwood is obtained. The amount of softwoods consumed annually is much greater than that of hardwoods. Softwood is used ex-

tensively as construction material and in the manufacture of paper and rayon. Only two great reserves of virgin softwood timber remain for exploitation: one in Canada, the other in Russia. During the course of the past century demand for softwood has been so great in relation to supply as to cause a substantial increase in prices of timber products (such as lumber) in relation to prices of other goods. These same conditions have given rise also to a large volume of international trade in timber products.

Rubber. Prior to the Second World War most of the rubber used in the manufacture of automobile tires and other familiar rubber goods came from the Middle East.[17] World production and consumption of crude rubber increased from about fifty thousand tons in 1905 to around a million tons in the 1930's. When the Middle Eastern plantations were overrun by the Japanese during the Second World War, the Western Allies became largely dependent for supplies of rubber upon stock piles and the output of a newly developed synthetic-rubber industry. Whether British Malaya, the Netherlands East Indies, Ceylon, and the surrounding rubber-producing territory in the Middle East will be able to rebuild a profitable world market for hundreds of thousands of tons of natural rubber annually, in spite of competition from the synthetic-rubber industry which may be subsidized for national defense reasons, is a dubious question. If not, the Middle East will be faced with the very serious problem of finding a substitute source of income and livelihood for its dense population.

SUMMARY

Although no attempt has been made to exhaust the list of raw materials that come from farm and forest, enough has been said to indicate something of the extent of regional specialization in production and trade in agricultural and forest products. Even a country as diversified in its production and as self-sufficient as the United States reaches out to Canada, Mexico, Central and South America, Africa, Europe, and Asia for a long and important list of foodstuffs and industrial raw materials produced on foreign farms and in foreign forests. Among these imports are such basic commodities as sugar, coffee, wool, silk, wood pulp, and crude rubber. The United States is the world's leading exporter of cotton. Nevertheless, this country imports long-staple cotton from Egypt because the climate and soil in America are not well suited to its production. The United States produces a surplus of wheat

[17] Malaya and vicinity.

for export. Nevertheless, this country imports from Canada wheat with high gluten content to produce flour blends that consumers here prefer. The United States exports some kinds of tobacco leaf and imports others that the climate and soil in this country do not favor. The abundance of rich farm land in this country in relation to the size of the population is a factor that promotes the export of a variety of farm products. Yet, in spite of the great diversity of climate and soil within the boundaries of the half continent that this country embraces, many farm and forest products are imported because soil and climatic combinations necessary to their economical production do not exist in the United States. In countries like Great Britain, Belgium, Germany, and Japan where the land area is less extensive, the climate and soil less diversified, and the population more dense, the need for international trade is even more essential to high living standards than in the United States.

CHAPTER III

INDUSTRIAL FOUNDATIONS OF INTERNATIONAL TRADE
(Continued)

Development of power machinery in the nineteenth century contributed to an enormous increase in world demand for metallic minerals, coal, petroleum, sulphur, and other raw materials that are taken from natural deposits in the earth. During the interval between the Napoleonic Wars and the Second World War world production of pig iron increased from about 1 million to more than 100 million tons annually. Between 1800 and 1940 world production of copper increased from about 15,000 to more than 2 million metric tons. During the period between the Civil War in the United States and the beginning of the Second World War world production of crude petroleum increased from practically nothing to nearly 300 million metric tons annually. Aluminum was first produced in laboratories early in the nineteenth century; it became a commercial product in the 1880's and 1890's. World production of aluminum had reached three-quarters of a million metric tons in 1940. Likewise production of many other metals and fuels increases very much faster than world population, or agricultural production paralleling the introduction of power-machinery technology in the nineteenth century.

In general, nations with great metal-manufacturing industries are the most wealthy nations and the most powerful from a military point of view. The drive for greater wealth and power on the part of industrially forward nations has resulted in a search the world over for new sources of mineral and fuel supplies and a huge increase in international trade.

IRON, COAL, AND STEEL

Producing Centers. The world's greatest iron and steel centers are highly concentrated in relatively few countries. Statistics of pig-iron production in leading countries from 1850 to 1947 are indicated in Table 4. At the beginning of the Second World War more than four-fifths of the world's annual output of pig iron and steel ingots was concentrated in five nations: United States, Germany, Russia, France, and the United Kingdom. Iron and steel production is an excellent

index of the location of centers of heavy industry. Iron and steel industries have been built where coal is plentiful. Where there is coal, there is power for the driving of motors and the generation of electricity. Where there is steel, there are machines and tools, rails, structural shapes, and other basic supplies required in the building and operation of transportation systems, communications systems, and factories. The world's most intensive industrial centers at the present time are located in the United States, Russia, Great Britain, France,

TABLE 4. WORLD PRODUCTION OF PIG IRON BY PRINCIPAL PRODUCING COUNTRIES *

(Thousands of metric tons)

Country	1850	1890	1913	1925	1937	1940	1947
United States.	573	9,351	31,145	36,954	37,750	43,026	53,712
United Kingdom...	2,337	8,031	10,425	6,336	8,497	8,337	7,764
France.....	413	1,962	5,208	8,492	7,916	4,600	4,484
Germany.....	356	4,659	19,305	10,175	15,957 †	21,000 ‡	§
U.S.S.R.	.....	. . .	4,248	2,120	14,520	15,200	§
All others.....	793	3,426	8,630	12,468	18,360	15,532	§
World totals . .	4,472	27,429	78,961	76,545	103,000	107,695	§

* SOURCES: 1850 to 1913, from an article by Ohlin R. Kuhn, in *The Iron Age*, Feb. 18, 1926, p. 484. Data for 1925 and 1937 from *Foreign Commerce Yearbooks;* data for 1940 from *Minerals Yearbook*, U. S. Department of Interior, Washington, D. C., 1945, p. 580; for 1947 from United Nations, *Monthly Bulletin of Statistics*, Feb. 1948, p. 46.

† 1937 figure includes Saar.

‡ 1940 figure includes Saar and Austria.

§ Data not available.

and Belgium.[1] Prior to the Second World War Germany was in this group. It is unlikely that the coal and iron resources that make the Ruhr Valley a steel center will not again be fully utilized, regardless of the nature of the political control over that region. Great steel centers, like those in the Pittsburgh, Cleveland, Detroit, and Chicago areas and the Birmingham, Liverpool, Sheffield areas, for example, are thickly populated. They have blast furnaces, rolling mills, and factories that turn out a great diversity of iron and steel goods. Metalworking machinery, tools, engines, bolts, nuts, nails, wire, locomotives, rails, and structural shapes are but a few of the many familiar prod-

[1] Belgium has a very intensive manufacturing system but is a small nation. Belgium has an area of less than 12,000 square miles as compared with an area of approximately 94,000 square miles in the United Kingdom. The population of Belgium was only about eight million prior to the Second World War as compared with approximately forty-seven million in the United Kingdom at that time.

ucts made of steel. Other manufacturing industries have been attracted to steel centers—some to provide mining and manufacturing accessories and building materials, others to take advantage of large labor markets, and still others to provide dense populations with consumers' goods. To date great steel centers have developed in areas where both coal and iron ore could be assembled without long ocean transport or great overland hauls. Some day coke smelting of iron ore may give way to hydroelectric smelting, or some entirely new source of heat and power may replace both coal generated and hydroelectric energy—atomic energy, for example. At best, however, revolutionary changes of this character come about slowly.

In addition to countries in which great steel centers have already been developed, large coal reserves exist in China, and rich iron-ore reserves, as yet little exploited, are to be found in Brazil, Cuba, India, and Newfoundland. Canada has coal reserves, but they are located more than halfway across the continent from Newfoundland. Development of the iron-ore reserves in Brazil, Cuba, India, and Newfoundland and the coal reserves in Canada and elsewhere, under present technological conditions, would probably mean movement of ore to coal on one haul and coal to ore on the back haul. Inasmuch as about 2 tons of coal are associated with 1 ton of iron ore in the smelting process, the tendency would be for the smaller steel center to develop at the iron-ore end of the haul.

Some day China is likely to develop large steel centers because she has coal reserves and some iron. South Africa has potentialities for steel making, small in relation to those of the United States, Russia, or Germany but nevertheless important and as yet little developed. Comparatively small quantities of iron ore are smelted at present in India, Japan, Australia, Sweden, and Spain. The steel output in these countries no doubt will increase, but the known resources for ultimate expansion of steel production in these countries are less than those in the United States, Russia, or Germany.

World Trade. Manufactures of iron are of so many different kinds that over-all measurement of their movement in international trade is not practical. Nevertheless, the data are sufficiently illuminating to serve as a guide in segregating the leading nations that produce surpluses of iron goods for net export from nations that produce insufficient quantities of such goods to satisfy their own needs. The terms "net exports" and "net imports" (surpluses of exports over imports, and vice versa) are used in this connection because all highly industralized nations import some kinds of iron or steel goods and export

other kinds. Prior to the Second World War the United States, Germany, Belgium and Luxembourg, France, and the United Kingdom were the leading net exporters of pig iron, steel ingots, shapes, bars, and other heavy steel goods. The United States, Germany, and the United Kingdom were the leading net exporters of machinery. As already stated, Germany's postwar future in heavy industry is yet to be determined. There is little reason to assume that the United States, the United Kingdom, France, and the Belgium-Luxembourg area will not continue to export heavy steel goods. In general the world trade in iron and steel goods is among great centers of iron and steel production, and between them and the lesser industrialized parts of the world. Whether a large part of the trade in iron and steel manufactures among the highly industrialized countries is based upon cost differentials that will tend to disappear with industrial maturity is a question that cannot be answered with certainty. Up to the present time, differences in stages of industrial development and an ever-changing pattern of improvements in production technique have been sufficient to cause specialization and a large volume of trade in different types of iron and steel manufactures among the principal producing countries. Cost-reducing improvements in the industry have been continuous and substantial, with the result that pig-iron prices, for example, have been lower in relation to prices of other commodities during the last quarter century than they were during the period 1850 to 1875.

POWER RESOURCES OTHER THAN COAL

The three principal power resources, at present, are coal, petroleum, and falling water. Coal was referred to in relation to iron and steel.

Water Power. Water-power resources are most fully utilized in countries that are in advanced stages of industrial development. Great Britain, France, Italy, and the United States use in the neighborhood of one-third of their potential water-power supply which is reasonably available under existing conditions. The general idea to be conveyed in the term "reasonably available" is that increased demand for hydroelectric energy can call into use large increases in supply even in the most highly industrialized nations, not to mention Asia, Africa, Oceania, and South America. Less than 2 per cent of the potential water power in Asia, Africa, Oceania, and South America is now in use. Unless a cheaper source of industrial energy—atomic energy, for example—replaces coal, petroleum, and the forces of nature impounded in rivers, water power may become a center of heavy industry in some of the less industrialized parts of the world where coal is

not available. The impact of such developments upon patterns of regional specialization and trade would be great.

Petroleum. Within the past half century, petroleum has made a unique place for itself in commerce and industry. It supplies the motive power for automobiles, airplanes, and increasing numbers of the world's ships and is the principal source of lubricating oil necessary to efficient operation of high-speed machinery. The product has been known for thousands of years, but organized extraction and widespread industrial utilization of it had their beginnings less than a century ago.

World trade in petroleum and its products is far flung and fraught with particular political significance because of the struggle on the part of strong nations to secure petroleum concessions in industrially backward regions in South America, Mexico, Iran, and elsewhere. The United States is the leading petroleum-producing nation. This country imports some crude petroleum and exports refined products such as gasoline, kerosene, and lubricating oils. Other important producing countries are Russia, Iran, Rumania, Venezuela, Mexico, and the Netherlands Indies. Venezuela, Iran, and Mexico are important sources of supply of crude petroleum for export. Both crude petroleum and the refined products from the Netherlands Indies and Rumania moved into foreign markets prior to the Second World War. Producing, refining, and handling facilities in these areas were more or less disrupted during the war, but the basic resources are still available for exploitation.

NONFERROUS METALS

Nonferrous metals are assembled by industrial nations from sources of supply in many parts of the world. Some of the more important of these metals are copper, bauxite (an aluminum ore), lead, zinc, tin, gold, silver, and various alloy metals such as nickel, cobalt, chromium, antimony, tungsten, and vanadium. The steel alloys are of particular significance because they are essential to the operation of machine industries. These alloys are used in the production of different qualities of steel: rust-resistant steel, tough break-resistant steel, antifriction steel for bearings, tool steel that will take and hold a cutting edge, and other types of steel with qualities adapted to particular uses.

The geographical area that must be covered to assemble a supply of this whole group of metals is surprising. Copper in large quantities is mined in the United States, Chile, Belgium Congo, Rhodesia, and

Canada. More than half the world's annual output of tin comes from Malaya, Netherlands Indies, and Siam. More than three-fourths of the world's annual output of nickel comes from one country, Canada. Canada and the Belgian Congo are the principal sources of the supply of cobalt. Chromium comes largely from South Africa, India, Russia, Yugoslavia, and Turkey. China is the principal source of antimony. Tungsten comes from China, Burma, Argentina, and the Federated Malay States. Vanadium comes mainly from South Africa and Peru. The sources of supply of the other metals in the foregoing list are more diversified, but not sufficiently so to prevent a large volume of international trade in each and every one. Seven countries produce most of the bauxite: France, Hungary, United States, Netherlands Guiana, Italy, British Guiana, and Yugoslavia. Lead is produced in large quantities in some thirty countries, zinc in twenty or more. Although South Africa is the leading gold-producing region, many other countries produce gold in commercial quantities. Mexico, United States, Canada, and Peru are among some thirty-five or forty silver-producing countries. The industrial nation that assembles supplies of this group of metals to serve its normal needs must reach into the storehouses of at least a dozen or fifteen different countries scattered about in Africa, South America, North America, and Asia.

OTHER MINERALS

Some of the important raw materials of food-processing industries, textile manufacturing, metal working, power generation, and construction have been cited. The odor of meat-packing plants, the hum of spinning and weaving mills, the roar and glare of blast furnaces, and the noise of construction are impressions that linger obstinately in one's memory. Another industry less homogeneous than those cited but no less odoriferous than meat packing is chemistry. It contributes to the production of alcohol, baking powder, steel, explosives, lubricants, ink, paint, soap, rubber products, rayon, insecticides, and other goods too numerous to list. Rubber is an essential part of any industrialized community. No one raw material or small group of raw materials represents the chemical industry. Sulphur comes as near to fulfilling that assignment as does any other material. About three-fourths of the world's annual output of sulphur originates in the United States. This regional concentration of the world's output of sulphur is due not to absence of "brimstone" deposits in other parts of the world but rather to a juxtaposition of sulphur deposits and cheap natural gas used in the superheating of water for sulphur mining. In short, sul-

phur is produced at relatively low cost in the United States. It is an illustration of how the cost factor affects regional specialization and trade.

Other important minerals that may be cited in relation to regional specialization of production and international trade are fertilizers: nitrate of soda, mined in Chile; rock phosphate, mined in the United States; and potash, mined in Germany and France.

INTERNATIONAL INTERDEPENDENCE

It is not necessary to exhaust the list of all raw materials in order to illustrate the fact that modern nations as now constituted are economically interdependent. Minor commodities as well as basic staples originate in different parts of the world. Diamonds come from South Africa; asbestos comes from Canada; ivory is obtained from tropical jungles that support wild elephants; furs originate in regions of severe cold. Not every product that enters the channels of international trade is necessary to the existence of its consumers, but revenue from its sale is very likely to be necessary to the present mode of life of its producers. Modern means of transportation have knit all parts of the world into one gigantic economic fabric. Modern industrial technology has created industries that are dependent upon materials that cannot be produced economically, some of them not at all, in any one nation as now constituted.

Nations, as now constituted, are faced with some combination of two alternatives if they are to make the most of present-day technology in maximizing production and raising living standards. One alternative is to live and trade harmoniously; the other is to fight until some one nation becomes the political and economic overlord of all the others. This is not a problem peculiar to the twentieth century. Throughout the entire history of civilization there is found a mixture of trade and conquest. To date no one country has ever ruled the whole world. The Romans conquered and ruled a large part of the Mediterranean and European world. The Manchus held sway for a time over a vast area in the Orient. Great Britain's nineteenth-century Empire extended round the world and encompassed a surprisingly large percentage of the world's land area and population. Germany has made two futile attempts at wholesale conquest within a half century. After extending her overlordship in the Orient bit by bit during a period of about a century, Japan made a bid in the 1930's and early 1940's for extensive conquest. This bid collapsed with the end of the Second World War. At the present time the United States

and Russia appear to be the two world powers most likely to be tempted by the glories and the dubious economic gains of world conquest.

Paralleling the history of conquest and attempted conquest during the thousands of years for which historical information is available is a record of expansion in the area and volume of trade—intranational and international. Contemporaneously with trade expansion a philosophy of pacific international economic intercourse has unfolded. This is the philosophy that democratically minded people are sponsoring at the present time; it is a philosophy of world peace in contrast with one of attempted world domination by a single power.

PART II

HISTORICAL BACKGROUND

INTRODUCTORY

The purpose of this section is to call attention to the influence of historical, geographical, and technological factors upon the course of commercial policy developments. Nations, like individuals, tend to move in directions of least resistance. The nation that is poor in agricultural resources may emphasize the development of external commerce, particularly if trade routes are invitingly convenient, if foreign foodstuffs are abundant, and if the population is ingenious in contriving manufactures. The people of some other nation may be more inclined to devote a larger proportion of their energies to localized industry, particularly if domestic natural resources are abundant and easy to get at. The first nation is likely to be an advocate of open ports and equality of trading opportunity. The second nation is more likely to be content with less trade and a policy of home-market protection. International commercial policies are seldom free from the influence of geographical factors. They are influenced also by historical precedent. Wide markets, division of labor, and extensive commerce existed in the East for thousands of years before Adam Smith published his *Wealth of Nations* (1776). His conceptions of economic gains that might be achieved in eighteenth-century England by division of labor and commerce were strikingly similar to experience records of ancient Phoenicians and Greeks and, no doubt, were influenced by them. In some respects commercial history of the ancient East has repeated itself in the West much as technical developments perfected in the West have, more recently, been transplanted to the East.

Industry and commerce are constantly changing. The historian is a student of change. He delves into the past for origins of existing institutions and practices and, not infrequently, he uncovers the cause of change. Students of national policies in international economic relations will find the perspective of a historical approach both stimulating and illuminating. Underlying historical and economic forces that act in the direction of increased international commerce may be as powerful today as formerly, in spite of a seeming trend toward greater degrees of economic nationalism.

CHAPTER IV

COMMERCE OF ANCIENT CIVILIZATIONS

Methods of production, transportation, and communication of ancient civilizations were so different from those of modern civilizations as to limit sharply the contributions that a study of ancient history can make toward the solution of present-day trading problems. Nevertheless, the history of ancient times holds a few gems of wisdom which the twentieth-century man of practical affairs may well pause to heed. Human nature has changed little if at all since the time when Babylon was a renowned commercial mart. The springs of human action that induced Phoenician merchants to sail the seas were not altogether different from the motives that today send British merchant vessels to the coasts of Africa and the ports of India. Nature's penury in some regions and her profusion of resources in others (taken in relation to populations and production techniques) are old reasons for diversity of commercial policies in different countries.

ADAPTATION OF COMMERCIAL ACTIVITIES TO THE GEOGRAPHICAL ENVIRONMENT

Geographical environment has long been recognized as a factor that conditions a country's commercial development. In paragraphs to follow, contrasts are drawn between economic developments in Phoenicia and Egypt about 1200 B.C. and between those in Greece and China about 400 B.C. Phoenicia and Greece were trading nations; Egypt and China were more largely self-sufficing agricultural nations.[1] Phoenicians and Greeks with their limited agricultural resources and advantageous port facilities appear to have taken to commerce on the high seas for much the same reasons that Great Britain, hundreds of years later, developed her overseas commerce. The Chinese and the Egyptians were more bountifully supplied with agricultural resources

[1] Compare this passage with the following quotation from Adam Smith's *Wealth of Nations*, Book IV, Introduction: "The different progress of opulence in different ages and nations has given occasion to two different systems of political economy with regard to enriching the people. The one may be called a system of commerce; the other that of agriculture."

and, having less access to the sea, did not develop an extensive trading system.

Egypt about 1200 B.C. Egypt, about 1200 B.C., is an example of a nation that did not develop an extensive external trading economy. The fertility of the Nile Valley was sufficient to support its 7 to 10 million people.[2] Furthermore, Egypt was bounded on three sides—south, east, and west—by deserts, which prohibited extensive overland trade, and access to the sea via the Nile River was not sufficient to encourage extensive sea trade. Partly, at least, because of the geographical surroundings the Egyptians were not drawn into seafaring pursuits. Egypt, however, was not without foreign trade. Scarce woods were imported from Phoenicia and Syria, silver from Asia Minor, spices and cosmetics from the Far East, and gold and ostrich feathers from the south. Some linen, flax, wheat, and glazed wares were exported. However, the Egyptians were not dependent upon trade for their existence or for their prosperity as were their neighbors, the Phoenicians. The Egyptians were not initiators of foreign commerce; they were not advocates of open ports and free commerce as were the Phoenicians.[3] The geography of a "great river of fertility in an arid desert"[4] was more conducive to agricultural pursuits in early Egypt than to extensive commerce. Consequently Egyptian economy was a largely, although not completely, self-contained economy. At about the same period, a neighboring country, Phoenicia, developed a trading economy.

Phoenicia about 1200 B.C. The Phoenician nation flourished from about the fifteenth to about the fourth century B.C. The word "Phoenice" is Greek for "the Palm Land," which bordered the eastern end of the Mediterranean Sea. A race that occupied the narrow strip of land between the Mediterranean Sea on the west and the Lebanon Mountains on the east, prior to about 2000 B.C., is believed to have been closely connected with the Egyptians. Sometime after 2000 B.C. the region in question was overrun by Semites. The resulting racial mixture became Phoenicians. The homeland of the Phoenicians was not more than 200 miles long and nowhere exceeded 35 miles in width. It was protected from invasions from the north and east by the Casius,

[2] PETRIE, W. M., *Social Life of Ancient Egypt,* pp. 29–30, Constable and Company, Ltd., London, 1923.

[3] The Egyptians maintained customhouses at their harbors and other principal places of entry. Duties were levied on all goods except those assigned to the Crown. Customs revenue was one of the most important sources of royal income.

[4] PETRIE, *op. cit.,* p. 199.

Bargylus, and Lebanon mountains. To the south were promontories jutting into the sea that served as obstacles to land attack by way of Arabia or Egypt. The geographical features of Phoenicia and the characteristics of its inhabitants gave rise to an economic system quite different from that of Egypt. The Egyptians were primarily farmers; the Phoenicians were more largely traders. Easily accessible timbers for building ships, suitable harbors, islands within sight of the shore, wealthy civilizations located to the southwest and to the east, greatly desired minerals to be had from the west, and a scarcity of fertile agricultural land at home, all contributed to the development of a trading civilization in Phoenicia.

Beginning, presumably, with short fishing trips, the Phoenicians had reached the islands of Cyprus and Rhodes and had established regular commerce with Greece sometime before 1000 B.C. There followed more extended voyages as far west as Spain and the British Isles. Excelling in the art of navigation, the Phoenicians practically monopolized for many years the sea trade of the Mediterranean. With control of the most economical means of transportation, they made large profits by exchanging goods found cheap in some districts and begging a market, for other goods more abundant elsewhere. Supplementing the sea trade was that fostered by caravan routes connecting Tyre (and Sidon about 20 miles farther north) with the Tigris-Euphrates Valley, India, and China.

From raw materials, some secured at home and some imported, the Phoenicians manufactured goods that found ready markets in the Orient, Mesopotamia, Egypt, Greece, Italy, Spain, and elsewhere. Skill in the use of purple dye, extracted from a species of shellfish abounding off the Phoenician coast, contributed to success in textile manufacture. Among other Phoenician manufactures were glassware, furniture, and metal works of utility and art. Grain, to supplement home-produced food, and trading stocks of ivory, ostrich feathers, and other novelties were secured from Egypt in exchange for furniture, glass, timber, dyestuffs, and precious metals. Copper was secured from Cyprus, tin probably from England, gold, silver, and iron from Spain, the North African coast and other western localities, and foodstuffs and slaves from Greece. Precious metals (common to barter in practically all regions) and novelties were exchanged for silk, spices, and other luxury articles originating in the Orient. Thus an endless series of barter transactions connected Phoenicia with every corner of the then known world and provided a remunerative occupation for a people inadequately endowed with fertile agricultural land.

The Phoenicians established trading posts and colonies to facilitate their trading operations [5] much as did the English 2,500 to 3,000 years later. Like the English after the removal of the corn laws in the 1840's, the Phoenicians were advocates of free trade. In the case of nineteenth-century England free access to the markets of the world and extensive world trade offered greater promise of wealth than a system of trade restrictions requiring the production of necessary foodstuffs on an inadequate area of fertile land. The same generalization may be applied to the Phoenicians of the pre-Christian era. Scarcity of land, easy access to the sea, inventions,[6] resources adapted to manufacture and trade, and an ingenious people who had to struggle for a livelihood in a region where food was not plentiful, gave rise to a pattern of economic civilization and a world outlook in Phoenicia different from that of the self-satisfied people living contemporaneously and prosperously in the fertile valley of the Nile.

Greece about 400 B.C. Following the decline of Phoenicia, Greece became the second Mediterranean country to prosper from a far-flung network of trading activities. Greek trade expansion started in a small way, as early, possibly, as 1100 or 1000 B.C.; it reached its maximum of success about the time Phoenicia as a great nation passed from the historical picture, between 400 and 300 B.C. The rise of Greek trade resulted in conflict between Phoenicia and Greece. As Greece expanded in the Aegean and Ionian seas, the activities of Carthaginians, Tyrians, and Sidonians contracted in these areas. The old position of the Phoenicians as principal middlemen between the great empires of the East and the peoples of the Mediterranean came to an end. A second commercial nation, Greece, rose to dominate Mediterranean trade. Greek colonization paralleled Greek trade expansion. The new territories acquired by colonization were among the most fertile in the Mediterranean area—Sicily, southern Italy, low-lying valleys of Asia Minor, the north Aegean seaboard, and the shores of the Hellespont and Bosphorus. By the sixth century B.C. the economic life of Greece in the Mediterranean world had assumed the general character that it maintained until the expedition of Alexander the Great.[7]

[5] Reasons for the founding of Carthage (in the ninth century B.C. probably), the most renowned of the Phoenician colonies, is lost in obscure myths purporting to recount a story of how civil strife caused a split in the ruling families of Phoenicia and migration of the weaker parties to Africa.

[6] Dyeing processes and the art of glassmaking, for example.

[7] Alexander the Great (a Macedonian) came into power about 336 B.C.; his conquests followed immediately thereafter. Tyre was conquered in 332. Alexander's exploits tended to extend the Greek system.

Commerce of Greek cities—Athens, Corinth, and others—with populations too large to be supported by their immediate environs, did not consist solely of imports of foodstuffs and other goods that they lacked. These imports were offset by exports of manufactured goods and shipping services. Ceramic, textile, and other export industries developed. The ceramic industry used native raw materials. The textile and metallurgical industries consumed raw materials in part produced at home and in part imported. Home-produced olives were converted into oil for export. Woodworking industries depended in part upon local raw materials and in part upon imported woods. Tanning and leather-goods industries were supplied with locally produced hides. Ivory for the manufacture of ornamental works was obtained from Africa. By 400 B.C. Greek manufacturing had become specialized, and trades were numerous. There were highly skilled carpenters, sculptors and modelers, bronze workers, stonecutters, goldbeaters, cartwrights, ropemakers, linen weavers, metal chasers, ivory turners, painters, embroiderers, cobblers, miners, and millers among others. Some workshops were operated by freemen who worked on their own account; elsewhere slave labor was employed. Greek manufacturers had no machinery comparable with that employed by nineteenth-century English manufacturers, but in many other respects the framework of the Greek manufacturing-trading economy—an economy that exported manufactures and imported raw materials and foodstuffs—was similar to the type of manufacturing-trading economy developed by the English more than 2,000 years later.

A stream of similar economic activity and business philosophy appears to run from Phoenicia through Greece to Netherlands and Great Britain. The Greeks approached more nearly to a money economy than the Phoenicians and thus were able to conduct trading operations more economically. The English went further in the development of money economy than the Greeks; the English were without slaves in the Greek sense and their industry was mechanized. These are radical differences; nevertheless, striking similarities existed. All three economic systems—the Phoenician, the Greek, and the more modern English—maintained far-flung shipping and trading organizations; they established trading posts and colonies; and they engaged in wholesale exportation of manufactures which was counterbalanced by wholesale importation of raw materials and foodstuffs. The Greeks maintained a system of export and import tariffs and international trade regulations. These, however, were for the purpose of raising revenue and of ensuring adequate supplies of foodstuffs from abroad, not for the pur-

pose of inducing the Greek farmers to attempt production of adequate food for the nation on a too meager area of fertile land.

China about 400 B.C. Ancient China was more like Egypt than like Phoenicia or Greece. The area of the China of 400 B.C. corresponded neither to that of China Proper as we know it today nor to the larger area referred to as the Chinese Empire. Prior to the second century B.C. Chinese sovereignty included roughly the region south from where the Great Wall now stands [8] to the Yangtze River basin, *i.e.*, roughly the northern half of the area we ordinarily designate today as China Proper.[9] The China of 400 B.C., like ancient Egypt, was a fertile region where lived a self-sufficing agricultural people. The Chinese from the very earliest times were averse to trade. A Chinese trader was "regarded as a small-minded person whose main object in life was not to increase the public wealth but to corner supplies." [10] Early Chinese records are interspersed with edicts and devices to prevent merchants from occupying official posts and to prevent traders and shopkeepers from making exorbitant profits at the expense of ignorant farmers. The abstract idea of exchange for the furtherance of mutual comfort and luxury does not appear to have been a part of Chinese philosophy. In none of the legends, semiauthentic history, and authentic records as summarized by students of the subject is there evidence to indicate that foreign trade was of relatively great importance to the inhabitants of ancient China. Trade in tea, which one thinks of as a principal

[8] The Great Wall was erected about 228–210 B.C.

[9] Chinese history may be divided roughly into three epochs: (1) the Feudal Period, 2000 B.C. and earlier to about 221 B.C., (2) the Monarchial Period, 221 B.C. to A.D. 1912, and (3) the Republican Period, since A.D. 1912. Beginning in 223 B.C. conquest prepared the way for the building of a great inland empire. In the course of the next two centuries the Huns were driven westward; the Chinese Emperor drew tribute from the whole of Central Asia, and Chinese influence was extended west as far as the Caspian Sea. With alternate periods of civil wars, breakup of the empire, more civil war, and reunion under central authority, the Chinese ruled a vast empire until they were conquered by the Mongols in A.D. 1280. Within 100 years the Chinese had deposed the Mongol rulers and were again in power (A.D. 1368). Between 1368 and 1644 the Ming Dynasty (Chinese) sat on the imperial throne. During the fifteenth century the Mongols invaded China a second time with some success, and in the sixteenth century European penetration of China began. Also the Japanese raided and captured coastal cities from time to time. In general, however, China was ruled by the Chinese from 1368 to 1644. Early in the seventeenth century Manchu tribes began raiding from the north and subsequently captured Peking. From the fall of Peking in 1644 to the year 1912, when the Chinese Republic was established, the empire was ruled by the Manchus.

[10] PARKER, EDWARD HARPER, *China*, 2d ed., p. 42, John Murray, London, 1917.

article of Chinese commerce, appears to have been of little or no significance prior to about the sixth century A.D. Foreigners invaded China; civil wars occurred; dynasties were deposed; sovereignty was extended to include surrounding territories and neighboring peoples; but from first to last, the interests of the Chinese people centered more upon local enterprise than upon distant trade.

The direction of China's development was inland—similar in some respects to that of Russia and the United States in the nineteenth century. Geographic factors were not the only influences that contributed to China's development into a self-satisfied agricultural civilization. Nevertheless, a fertile soil and room for expansion in early times, had, no doubt, some influence in preventing the Chinese from being lured into dangerous sea voyages. An agricultural economy prevailed in China until philosophy and habit had become too firmly fixed to be radically changed without mass upheaval. Separated as the people were by mountains, segregated by groups into sheltered-valley communities, fortified against the outside world by deserts, impenetrable forests, and ocean barriers, and without facilities for easy intercommunity or international communication, the pattern of Chinese habits of existence, once established, flowed down through the centuries little modified by time and change.

ANCIENT TRADE AND POLITICAL IMPERIALISM

Territorial expansion, political expansion, and trade expansion, in varying degrees of combination, went hand in hand in the development of Phoenician and Greek trade. In the case of Rome, military and political imperialism was a dominant condition. No far-flung system of transportation and trade has ever been able to exist without some degree of military and political imperialism. However, imperialism appears to have been less pronounced in some of the modern commercial systems—nineteenth-century Great Britain, for example—than it was in ancient Rome. In this connection, one is inclined to wonder whether, in years to come, imperialism will be minimized in order that many small, free, and politically independent states may survive, or whether aggressive military and economic domination, on the part of a few powerful nations, will be resorted to in efforts to unify political control over large areas that are complementary in an economic sense. These considerations are of growing importance because modern industry, dependent as it is upon great quantities of raw materials, widely dispersed, encourages territorial division of labor more pronounced in degree than anything that has gone before.

As one views in retrospect the rising tide of ancient trade, the widely taught conception of free trade and equal opportunity among sovereign nations, with unequal voice in the world's political affairs, tends to fade away in a mist of dreamy idealism. Nor does the commercial and political history of modern Western nations, as we shall see in later chapters, point toward a condition of political and economic stability in a world united by commercial ties, yet divided by innumerable national boundaries and national traditions. Free trade among the states of the United States of America from 1790 to date would, in all probability, have been impossible without a strong, unified Federal government. Possibly, free trade among the sovereign states of Europe can never be realized in advance of political union. It is not inconceivable that economic and political currents in the modern world are drifting in the same general direction as those of the ancient world, despite revolutionary differences in production techniques. Political imperialism on the part of commercial civilizations of the ancient world culminated in the Roman Empire.

With the westward movements of commerce and empire, Italy became a logical center of operations. Her position between the two great basins of the Mediterranean, her long coast line fronting on three seas, her early contact with Mediterranean trading civilizations, and her intermediate position between the barbaric West and the civilized East, all contributed to her becoming a center of empire.

By the middle of the third century B.C., victory in the almost incessant warfare with surrounding tribes had made the Romans masters of the whole peninsula of Italy. During the next 300 years Roman law and Roman rule fused into a single political organism a territory that included Arabia and Mesopotamia, Asia Minor, the Black Sea region, Greece, Egypt, north Africa including Carthage, and territories extending west to the valley of the Rhine and to the heart of Britain. Rome became a great commercial and financial center. Tribute from peoples conquered by the Roman legions poured into the coffers of the ruling city. Rome became a center toward which foodstuffs, manufactures, and luxuries of diverse kinds flowed from all corners of the Empire. In exchange for merchandise imports from subjugated peoples the Romans built roads and established law and order.

Roman conquest resulted in a coming together, an interpenetration, and a synthesis into one political organism of regions that had formerly been independent. It extended from the Persian Gulf and the Caspian Sea west into England, and from the Black Sea region south to

include the lower Nile Valley, Carthage, and other parts of northern Africa. Political union of the regions that became parts of the Roman Empire permitted freer interregional commerce and gave full play to the invigorating forces of regional specialization in production. The industrial and commercial activities of Egypt, Syria, and Asia Minor were not stifled under Roman rule. Tyre and Sidon continued to manufacture and export purple-dyed tissues, artistic bronzes, and glassware. Egypt continued to produce grain. Her output exceeded local requirements, and the surplus moved to regions deficient in foodstuffs. Mining in Spain, England, and other regions of the West increased. Improved agricultural methods took hold in Gaul with the cessation of intercommunity warfare and the introduction of new ideas and more abundant supplies of plows, harrows, and scythes. Textile, metalworking, and furniture-making industries and other occupations thrived and prospered in all parts of the Empire. Removal of barriers that obstructed the easy flow of interregional commerce appears to have been conducive to industrial progress. As to the Empire as a whole, production and consumption appear to have been stimulated by Roman rule.

However, advantage on the side of territorial division of labor under Roman rule was not to be preserved indefinitely. Rome had her period of prosperity—a period longer than that between the Industrial Revolution (middle eighteenth century) and the present time, though short in relation to the history of civilization. Advantages of territorial division of labor and world free trade made possible by the Roman Empire appear, in time, to have been counterbalanced by structural weaknesses in the economic system and organic weaknesses in the political system. The central government weakened; economic and political sinews that bound together the various parts of the empire softened; and the world from India westward was plunged into a long period of political disorganization and economic localism. One well may wonder whether the twentieth century is just a stage in a long upward trend toward an improved system of world political cooperation and free trade, or whether the drift is toward an era of economic localism more marked than that of the nineteenth century.

EVOLUTION OF TRADING METHODS

Expansion of trade in the ancient world was accompanied by a development of commercial techniques which, with refinements and improvements, are still in use. Manufacturing methods and modes of transportation have undergone basic and revolutionary changes dur-

ing the modern era. The volume of interregional trade has increased enormously since the time of Greece and Rome, but its mode of conduct is not so different as one might expect. The Phoenicians established trading posts or factories not altogether different, probably, from those of the French, Spanish, and British in America, Africa, and China 3,000 years later. The traders of Tyre, Sidon, and Carthage built warehouses in which were assembled stocks of goods from Egypt, Mesopotamia, Cyprus, Greece, Italy, and Spain for storage and reshipment. Although precious metals were common articles of barter conducted by the Phoenician traders, money and credit did not, apparently, come into widespread use until Greek and Roman times. However, the systematic, organized commerce of the Phoenicians, conducted with ships designed for the purpose and facilitated by branch houses serving as points of assembly and dispersion, was a very definite step in the direction of modern international commerce.

The Greeks established the beginnings of a money and credit economy. In order that goods might be exchanged in barter economy, a coincidence of wants was essential. Use of a medium of exchange universally desired, durable, and easily identified obviated, in part, the difficulties of disposing of shiploads of merchandise for goods that could be turned over at a profit; facilitated the striking of bargains, reduced risks of transfer from one locality to another, and facilitated the financing of costly ventures. The Lydians, in Asia Minor, are believed to have introduced the art of coinage.[11] The first coins were made of a mixture of gold and silver; later gold and silver coins were struck separately. The Greeks are believed to have adopted the idea of coinage from Lydia. The coin in commonest use in Athens about 400 B.C. was the tetradrachm, or "owl" as it was called in allusion to the image that it bore on its reverse side. Other coins used in Greece were drachmas and staters. Even though every city had its own peculiar coins and monetary systems differed between regions, calculations of monetary exchanges were much less difficult than the conduct of trade by barter. Money-changers came into existence, and later bankers, who made loans at interest, issued letters of credit and sold insurance. An Athenian going to Miletus might pay a sum to his banker in Athens, secure a letter of credit, and draw a specified sum of money from the Athenian bank's Miletus correspondent. The rate of interest in Greek times might vary anywhere from 10 to 40 or

[11] HERRICK, CHEESMAN A., *History of Commerce and Industry*, p. 53, The Macmillan Company, New York, 1917.

50 per cent. Shipping insurance took the form of bottomry, a transaction wherein the lender handed his capital to the borrower to be applied to objects exposed to sea risk, on condition that the borrower should repay the sum lent only if the objects on which the loan applied should arrive safely at their destination.

Movable wealth had a far-reaching influence upon economic life in Rome. The city of Rome became a center of capitalism built upon a foundation of money and other forms of movable wealth, taken from conquered peoples and maintained by tribute. The issue of coinage being in theory a privilege of sovereignty, the Roman emperors endeavored to introduce the Roman monetary system into all parts of the Empire. Exchange of foreign coins from faraway regions, like China and India, gave rise, however, to money-changing companies which also carried on banking operations as in Greek times. Another feature of Roman capitalism was the rise of joint-stock companies which dealt in paper values such as the shares of companies of publicans. From a very early date Rome had farmed out her taxes to middleman collectors. With the expansion of the Empire, tax revenues involved such large sums that no one person could finance the collection function. As a result, stock companies came into existence, which advanced loans to municipalities against future revenue. The shareholders of these companies were men of every class. Senators who were forbidden by law personally to take part in public bidding for tax contracts or in the conduct of commercial ventures purchased shares in the companies, as did also knights and even middle-class citizens. Banker-promoters did not confine their activities to government transactions; they lent financial aid to shipowners and merchants and to aspiring young noblemen like Caesar and Antony. Roman banking became so intricate that financial crises followed vicissitudes in foreign affairs and commercial misadventures. In addition to amplifying money and banking operations in the manner of the Greeks, the Romans introduced standardized weights and measures, another innovation that is a characteristic feature of modern commerce. If one thinks of the outlying parts of the Roman Empire as being comparable with British India in its relation to Great Britain, he will realize that even the foreign investment aspects of modern international trade are not exclusively modern in their origins, even though they are more highly developed in technique.

CHAPTER V

COMMERCE OF THE MIDDLE AGES

A striking characteristic of the Roman Empire was its transportation system. Natural waterways were supplemented by roads radiating from the capital. In western Europe, passable roads were maintained from the city of Rome to the mouth of the Rhine, to the Pillars of Hercules (Gibraltar), and to the western coast of Gaul (through France). From the main arteries many secondary roads branched off. Picture a modern concrete system of automobile highways radiating from a large Western city of the twentieth century; then recall the construction of Roman roads—some of them with pavement 14 feet wide supported by layers of stone or mortar 3 feet thick. The Roman roads terminated at or were joined with navigable waterways which were kept open for military transportation and for commerce. The Rhine, for example, then as now, was one of the principal inland traffic channels of Europe. Three features of the Roman system were in sharp contrast with the medieval period that followed: (1) Roman traffic arteries were maintained in a state of good repair, (2) military patrols minimized banditry, (3) local and regional tyrannies were not permitted to become so burdensome under Roman rule as to destroy commercial intercourse.

MEDIEVAL LOCALISM IN EUROPE

With the disintegration of the Empire, local administrators were gradually cut loose from centralized authority, and many of them ultimately became heads of small, sovereign states. France, for example, is estimated to have been cut up into 10,000 or more little, independent principalities. The European land side today is dotted with the remains of medieval castles that were once centers of tiny, sovereign realms. Highway and river tolls increased in number. It was not uncommon for toll stations on main arteries of traffic to be located not more than 5 or 10 miles apart. Contractors who leased these stations made a practice of keeping taverns where traders were detained until authorized to move on. During long intervals of delay caused by absence of officials or other pretext, the merchants were

charged exorbitant rates for lodging. Far from being standardized, charges appear to have been determined by the merchants' ability to pay. Furthermore, the merchants were subjected to highway robbery by outlaw bands which often were agents of petty barons. Thus after paying a lord for safe-conduct through his territory a merchant might be robbed by the very lord who had collected safe-conduct fees. Roads fell into decay. The toll-paying merchants got, at best, nothing more in return for their contributions than the right to look after themselves, to travel over unrepaired highways as best they could, or to make the necessary repairs at their own expense. Under these unfavorable conditions commerce diminished. By about the ninth century A.D. trade had reached such a low level of activity that the itinerant peddler was more common than the professional merchant.

It is not necessary to repeat the historical, political, and economic reasons for the rise of a system of feudalism in western Europe. The important fact to observe is that an economy of agriculture, manufacture, and widespread commerce under Roman rule gave way to a more localized and self-sufficing economy of group agriculture with a minimum of trade and manufacture. Miserable as may have been the economic conditions of Western people under the Roman system with its exorbitant taxes and abusive conduct on the part of local officials, the consensus is that conditions were even worse during the Middle Ages. They were certainly far more divergent between one region and another.

Most of the historical records passed down from generation to generation are concerned with the lives and teachings of religious leaders and the battles of secular princes; the common man has little place in early medieval literature. Only a few scattered glimpses of his mode and conditions of life remain. However, these glimpses gleaned from inventories and estate record books suggest a mode of life that involved a minimum both of commerce and of comfort. Few goods were imported for consumption by the common folk, except such necessities as salt and spices, for which the local communities had to depend upon the outside world.

The medieval women spun and wove linen and wool fabrics, tended the cattle and sheep, cultivated the vineyards and vegetable gardens, looked after the poultry, helped with the harvest, and performed all household duties. The men plowed, sowed, and cultivated the fields, constructed and repaired buildings, made plows, mattocks, hoes, scythes, axes, carts, barrels, baskets, and other farm implements and utensils. There was some specialization in work. Shoemakers, car-

penters, blacksmiths, and brewers of wine were trained for these particular tasks. In some localities weaving was a specialized occupation. There was, however, no concentrated manufacturing of surplus goods for export.

The common people of manorial estates were tied to the soil. Before the towns reappeared, there was no escape from a monotonous mode of existence. Common people retired to bed at dark. Candles were too valuable for general use and, besides, the common people could neither read nor write. Their principal diversions were dancing, sports, such as archery, singing, and buffoonery on Sunday, and a visit once a year to the annual fair. Here they wandered about among the little booths, meeting their own kind from neighboring estates, bartering for salt and, if the fair was large, gathering stories from foreign merchants and seeing strange goods from beyond the boundaries of their own narrow world. Silks, jewelry, and other luxuries brought in meager amounts for sale to wealthy nobles were on display at the large fairs.

The self-contained, monastic abodes produced some surplus of goods for support of armies and nobles. The abbeys paid taxes to war lords in return for military protection or maintained their own military establishments. They collected revenue from their tenants in the form of sheep, poultry, eggs, grain, woolen and linen fabrics, leather, cheese, wine, handiwork of artisans, and the like. Some of these goods could be transported to a royal court or army base; others were consumed on the spot by the retinues of nobles who traveled about from place to place, living upon the land.

In contrast with the quicker tempo of contemporary life in cities of the eastern Mediterranean and in contrast with town economy of western Europe in later centuries, manorial self-sufficiency was a backward and archaic mode of life, geared to the needs of mere existence. The West, even after some semblance of political unity had been achieved, was essentially an inland empire, a closed state, without important foreign markets, where people lived in a condition of almost complete isolation. In contrast with Eastern cities such as Constantinople and Alexandria, which carried on a thriving commerce, cities of the West, like Paris and London, were scarcely more than centers of religious and military administration, walled and fortified against invasion, and large enough to accommodate the surrounding populace in case of attack by marauding northmen or neighboring princes. In the Middle Ages, world commerce was an index of intellectual outlook on the part of middle class and common people and a sign of material

prosperity. Without books or newspapers to read, without telephones or radios, without public schools, railway trains, or automobiles, common people tied to the soil for a lifetime of work, with little opportunity to talk to merchants or other travelers, tended to stagnate intellectually. Furthermore, in the days before scientific exploitation of nature's forces had got well under way, division of labor and trade were the chief means of increasing per capita output of economic goods, and the small self-sufficing economic units were not conducive to the realization of large gains in this direction.

EASTERN TRADE PRIOR TO THE CRUSADES

During the late medieval period, Italian cities and parts of the old Roman Empire farther east were organized into separate states with intense rivalries. Among the foremost trading cities were Constantinople and Venice. Constantinople occupied then, as Istanbul does now, a commanding position on one of the approaches to the Mediterranean Sea. It had served from early times as a shipping port for fishery products, timber, and grain originating in the Black Sea region and the Danubian Valley and as a connecting link between the Mediterranean and the Orient. Because of her advantageous position, Constantinople was able to maintain a considerable volume of trade during the whole period of the Middle Ages—more before the Crusades than after. Passing merchants were taxed in Constantinople and arbitrary restrictions imposed upon them, but not to the point of destroying commerce. Even though trade in silks, spices, ornaments, drugs, and other Eastern goods sank to a low level in the West, a bottleneck position like that occupied by Constantinople might continue to conduct a large volume of east-west commerce because the West was immense. Furthermore, there was opportunity for trade with Italy, Greece, and Egypt, which did not become so isolated as the Germanic regions to the north.

Alexandria and Italian coast cities were, like Constantinople, strategically located to benefit from trade. Three main routes between Asia and Europe were followed during the Middle Ages. One route began at the head of the Persian Gulf. Baghdad (founded about A.D. 750 near the site of ancient Babylon) was the first important stopping point for goods moving from the East westward. From Baghdad a caravan route led through the desert to the Phoenician coast and thence by water to Mediterranean ports west. Another route moved from Constantinople east across the Black Sea to Tana on the Sea of

Azov, thence by land north of the Caspian Sea and on to China and India. The third route was by way of the Red Sea and Alexandria.

Probably more has been written about Venice than any of the other Mediterranean ports. Medieval Venice has been described as the "Ocean's Queen" and "Pearl of the Sea." Lying at the head of the Adriatic, she was a Mediterranean seaport, yet situated so far north as to be almost in the heart of Europe. Venice is said to have gathered into her harbor merchandise moving over the three east-west routes—silk, spices, camphor, ivory, pearls, carpets, etc. In the early Middle Ages, trade in these commodities with western Europe was meager, because, as already explained, Europe's system of tolls and tyrannies tended to stifle it; furthermore, the manorial economy had little to offer in exchange for Eastern luxuries. It is well to remember, however, that in spite of tolls, restrictions, tyrannies, and wars between city-states, specialization and manufacture in Mediterranean cities and trade among them did not cease to exist even during the darkest period of the Dark Ages. Furthermore, the itinerant peddlers kept some trade alive in northern Europe.

The character of the people and their institutional background as well as geographical factors appear to have played a large part in determining the extent to which commerce survived in western Europe and eastern Mediterranean countries after the collapse of the Roman Empire. The middle easterners living in the Tigris-Euphrates Valley, the peoples of Asia Minor and of the Black Sea region, and the Greeks had been engaged in commerce for centuries. Where their influence was greatest, commerce survived. But the Germanic races from the northwest were descended from a people who for ages had hunted, tilled the soil, and tended flocks for a livelihood. Germanic tradition and influence tended, therefore, to restrict commerce in the West.

The influence of dissimilar streams of culture that flowed into western Europe from east and north have had a part in the molding of European economic history at every turn. The obsequious eastern Jew with his sharp trading habits and his international mindedness has waged an unending struggle with the more self-sufficing, combative nature of the Teutonic northerner. At some stages the spirit of the north appears to have had the upper hand. At all stages, north and east have fused to some extent and have exercised joint influence upon the European environment.

REVIVAL OF TRADE IN THE WEST

Rejuvenation of trade in western Europe accompanied a movement of the West against the East which goes under the general name of the Crusades. From the eleventh to the thirteenth century a religious fervor swept over Europe. Hoping to save their souls, in search of adventure to break the dull monotony of Western existence, and in search of more land, which to them was wealth, knights and soldiers of fortune joined with religious zealots in a series of expeditions to save a mystic Holy Land from desecration by infidels. The Crusades contributed in Europe to an increase in the power of central town authority, which already was in process of developing. Some communities purchased their independence from princes whose interests were diverted, by the Crusades, from local wars to Eastern adventure and who were in need, therefore, of goods for outfitting crusading expeditions. Communities, thus freed from the restraints of feudal rule, came under the control of merchants, who established municipal governments and achieved a measure of self-protection. Slaves and serfs ran away to the cities, where they became artisans and freemen if successful in remaining unclaimed for a period of a year. The self-sufficiency of feudal estates declined and manufacturing was transferred to the towns. Farmers brought their grain, wool, chickens, and pigs to market and exchanged them for shoes, clothing, and other fabricated goods.

Change from the old mode of life was quickened by the return of Crusaders, who had been thrown in contact with habits of thought and ways of life in the East. Even the returning nobles, in some instances, allied themselves with commercial enterprises in the West and thus encouraged an expansion of foreign trade. The old port of Marseille acquired new life. Commerce flowed more freely up and down the Rhone, the Rhine, the Danube, the Seine, and the Thames. London, Paris, Lyon, Cologne, and lesser cities increased their production of manufactured goods for export as well as for local consumption.

The degree to which towns gained self-government depended in most cases upon the relative strength of the town and of the noble from whom a charter had to be obtained. Some of the coast cities in regions where feudal control was weak allied themselves with the Pope in the great struggles between papacy and empire and thus gained wider privileges. Towns in Flanders and on the Baltic coast were especially fortunate in this respect. Instead of fighting each other, the Baltic coast towns gradually grew together for mutual protection, and finally

about the middle of the fourteenth century formed the Hanseatic League, which has been described as "a model of cooperation in an age of city rivalries." [1] Its membership fluctuated from 20 to 100 or more cities, located principally in North Germany. The league maintained a navy, had its own flag, and promulgated rules and regulations to govern its trading members who were active participants in ocean commerce.

In time the activities of foreign merchants penetrated the trade barriers of many inland towns. Cramping guild restrictions and self-sufficiency gradually gave way to intertown commerce. Thus were laid the foundations of economic nationalism. National economy represented a larger grouping of economic forces and common interests than existed in the earlier municipal order. It bound together peoples of the same blood, language, and religion and created for them conceptions of interdependent industry, standardized currency, and centralized authority. The transition from manorial economy through town economy to national economy was gradual. It covered a period of several centuries and was a result of many forces, both political and economic. Commerce contributed to the wealth and power of political and military leaders who were to become kings, and they in turn favored undertakings of their commercial supporters.

When one stops to realize what a long period after the breakup of the Roman Empire was required for the welding of many small political units in western Europe into political states—France, Great Britain, Germany, Spain, Italy, and the rest—he is not surprised at the delays, disappointments, and failures encountered in attempts to create a United States of Europe or a dynamic world League of Nations. Transitions from small economic and political units to larger economic and political units are conditioned by racial, sociological, religious, linguistic, and geographical as well as economic factors. Forces powerful enough to cause expansion of political and economic units appear at some stages in history to have been dominant, at others dormant. During the thirteenth and fourteenth centuries commercial expansion had a far-reaching influence upon political affairs. It is possible that powerful economic forces are at work in our own time to bring about some form of closer union between nations of the twentieth century. The geographical distribution of basic industrial resources is sufficient reason for territorial division of labor and an

[1] SELLERY, GEORGE C., and A. C. KREG, *The Founding of Western Civilization*, p. 233, Harper & Brothers, New York, 1929.

increased volume of world trade. Improvements in transportation and communication facilities are removing geographical barriers, contributing to greater uniformity of industrial methods, and minimizing language difficulties in the conduct of world commerce. However, today as in former epochs of the world's economic development, free and unfettered commerce does not benefit all participants alike. Removal of commercial barriers in western European communities of the Middle Ages strengthened the commercial and industrial elements of European society and weakened the status of both feudal aristocrats and religious despots. All classes of society cannot strengthen their relative positions at one and the same time.

Development of political centralization in Europe, which began during the latter part of the Middle Ages, was hastened in some localities and retarded in others by prevailing circumstances. It came early in England. In France the process was gradual; remnants of feudalism continued to exist in France until the French Revolution in 1789. The independent states of Germany were not strongly united under Prussian rule until 1871. The process of political unification was well under way in Spain before 1500. In Portugal it was well along at a somewhat earlier date. Netherlands had thrown off the impediments of Spanish rule by the middle of the sixteenth century. With the development of centralized political authority in Portugal, England, Spain, and Netherlands, came a period of geographical discoveries and organization of great trading companies, for the promotion of trade between Europe and Asia, the Levant, the Muscovite Dominions (Russia), Africa, and America. Hand in hand with discovery and trade expansion went imperialism, colonization, and a continuation of the age-old struggle for survival.

CHAPTER VI

TRANSITION FROM MEDIEVAL LOCALISM TO WORLD-WIDE COMMERCIALISM

International trade of modern times rests upon a foundation of highly centralized nationalism in the stronger countries, with varying degrees of faltering independence or colonial dependence on the part of weaker states. Characteristic features of commercial systems of modern times are the corporate form of business organization, a money-credit economy, and manufacture with power machinery. These institutions took shape after the medieval period.

The gains of division of labor and commerce contributed to the disintegration of medieval city-states. Exploration and discovery supplied new lands for colonization and provided a larger fund of precious metals for use in extending money economy. Tightly organized and broadly financed trading corporations consolidated commercial gains which the breakup of feudal economy and the discovery of new territories and new trade routes made possible. Need of exports to exchange for precious metals and foreign merchandise stimulated improvement in manufacturing techniques. Finally, during the period of transition from medieval localism to modern industrial nationalism (roughly 1400–1800) a political-economic philosophy called "mercantilism" was evolved. This philosophy helped to clarify the aspirations of states and to centralize political authority.

Nineteenth- and twentieth-century commerce is strikingly different from the commerce of earlier centuries. By no means all its important features, however, are basically new. At the end of the medieval period, peoples of the West had within their reach a rich fund of experience in political organization, ocean navigation, and commercial venture which for 3,000 years had been accumulating in the East. The value of this fund of knowledge was not overlooked. It accounts in part for the rapid strides of progress which Westerners made during the fifteenth, sixteenth, seventeenth, and eighteenth centuries. For example, the idea that the earth was round and that India might be reached by sailing west from Spain did not originate in the fifteenth

century when Europeans began seeking a western route to the Orient. This idea had been voiced by Eratosthenes as early as the third century B.C. The principle of the navigator's compass used by Portuguese explorers was a discovery of the ancient East. The art of shipbuilding had been in process of evolution and improvement since Phoenician times. The wealth of Eastern commercial cities was a fact that deeply impressed every Westerner who traveled in the East. Also Greece furnished examples of centralized governments for which no parallels existed in the West.

DISCOVERY OF NEW TERRITORIES AND NEW TRADE ROUTES

Possibly no character depicts the spirit that ushered in the age of discovery and Western expansion better than Henry the Navigator, of Portugal, 1394–1460. By the time Prince Henry had grown to manhood, Westerners were sailing by the compass; records of Marco Polo's travels had fired the imagination of adventurous youth; exploits of intrepid Viking navigators had dispelled somewhat a fear of dark seas and mythical monsters believed to inhabit the great unknown; and soon the invention of movable type was to make available books of travel and geographical description. Henry the Navigator encouraged the teaching of mathematics at Lisbon, brought Arab and Jewish authorities to Portugal to instruct his captains more fully in the arts of navigation, and organized voyages of discovery. His activities stand at the threshold of a striking period of European adventure in the unknown reaches of the Atlantic and beyond. In 1471 the equator was crossed; in 1484 Diaz rounded the southern tip of Africa; Columbus reached America in 1492; Vasco da Gama sailed to India via the Cape of Good Hope in 1498; etc. Trade expansion and colonization paralleled discovery. With commerce between Europe and the Orient over the old routes impeded by Mohammedans and Turks, east-west trade was quick to follow new routes as they were discovered. Spain and Portugal were the first countries to profit by discovery. After the new route to India around the Cape of Good Hope was discovered, Portugal's trade in spices and other Oriental luxuries underwent an amazing development. Spain profited less from Oriental trade because the Pope assigned Africa and the entire East (the Philippines excepted) to Portugal. Spain, however, profited enormously from her exploitation of the silver and gold mines of Mexico and Peru.

The daring and audacious exploits of the period from about 1450 to

1600 (with which every high-school and college student should be familiar) mark the beginning of the commercial supremacy of the West and the eclipse of medieval and ancient commercial centers in the Mediterranean area, particularly Venice, Alexandria, and Constantinople.

COLONIZATION

Portuguese settlements in the Madeiras and Azores and on the northwestern coast of Africa in the fifteenth century were the beginnings of a far-reaching European colonization movement that paralleled discovery and trade expansion and set the stage for economic imperialism on the part of Western nations. The conquests of Mexico (1519–1521) and of Peru (1531–1533) were in keeping with the spirit of the age. Operating from a base in recently occupied Cuba, Cortes, with a force of 600 or 700 men and a few horses and small cannon, overthrew and took possession of the Aztec empire in Mexico. Stores of gold and silver accumulated by the Aztecs were confiscated and sent to Spain, and the Mexican mines were worked with forced Indian labor for the glory and profit of the conquerors and their European king. Having tasted blood in Mexico and profited greatly by the venture, the Spaniards, this time represented by less than 200 men under the incredibly daring and audacious leadership of Pizarro, pushed from Panama into South America to conquer the Inca empire in Peru. Again hoards of precious metals were found and confiscated and more miners were put to work for the conquistadores and for the Spanish crown. The great wealth in precious metals secured from Mexico and Peru encouraged other Spanish ventures and settlements—in Central America, Chile, Argentina, California, Florida, and elsewhere.

While the Spanish were plundering and establishing settlements in Mexico and contiguous regions, the Portuguese were establishing themselves in Brazil, along the eastern and western coasts of Africa, and in the Far East, and England was laying the foundations for her North American colonies. John Cabot, an Italian by birth who had moved to London, sailed to Labrador in 1497. On a second voyage he sailed down the North American coast as far, possibly, as Virginia. Among the tangible results of Cabot's voyages were the establishment of a profitable British fishing industry in the North Atlantic and preparation of the way for British settlement in North America.

During the fifteenth and sixteenth centuries Spain and Portugal laid claim to territories along the African, South American, and North

American coasts, took possession of the West Indies, the East Indies, and other Atlantic and Pacific islands, and set their marks upon the Asiatic mainland. During the seventeenth and eighteenth centuries colonization was to continue with one European country after another —particularly England, France, and Netherlands—being drawn into the great game of colonial empire building.

ORGANIZATION OF OVERSEAS TRADING COMPANIES

English merchants took little part in overseas commerce before 1500. Tin, iron, copper, and lead were obtained in England by the ancients; metals, leather, and wool by Europeans during the Middle Ages. Not until the beginning of the modern period, however, did English traders cease to be *passive.* Organization of the great trading companies marks the beginning of England's rise to prominence in ocean commerce. The Dutch, too, became more active in world commerce when medieval impediments began to disappear. Royally chartered and joint-stock companies were among the expedients resorted to by British and Dutch in meeting overseas competition. This type of organization was employed, also, by the French and the Swedes.

The first of the English companies went under the name: Merchants of the Staple. The king designated certain towns in which wool might be collected and sealed by the royal customs officers. Merchants who assembled wool in the designated towns and exported it were called "Merchants of the Staple." In time, a company of Merchants of the Staple secured a charter from the king granting it a monopoly of the wool export trade. English membership in the company was not restricted; foreigners were excluded. Each member paid the association a fee and it in turn contributed to the royal income. Otherwise its activities were not restricted.

Organization of other British trading companies followed the success of the first. Reasons for the granting of royal charters to such companies are not far to seek: (1) the companies were sources of royal revenue; (2) monopolies could be granted to court favorites or persons to whom the king was obligated; (3) protected companies were instruments for controlling commerce in war materials; and (4) the fostering of British shipping was a means of encouraging shipbuilding and maintenance of a merchant marine that could be called into action for naval service in times of emergency.

In addition to the Merchants of the Staple, six royally favored com-

panies are conspicuously noted in the history of British industry during the sixteenth and seventeenth centuries:

Company	Date of charter
The Merchant Adventurers.....	1505
The Muscovy Company.....	1553
The Eastland Company.....	1568
The Levant Company.....	1581
The Guinea Company.....	1588
The East India Company.....	1600

The Merchant Adventurers exported wool and woolen cloth to the Continent and imported hops, wine, soap, linens, and other manufactures. The Continental wool and woolen cloth markets were highly competitive. Raw wool was in such demand by the Flemish cloth industry that it more or less sold itself; cloth had to be merchandised in a more vigorous, audacious fashion—hence the name Merchant Adventurers.

The Muscovy Company was founded for the discovery of regions, dominions, islands, and places unknown in northern Europe and points east. The main motive was discovery of a northern route via Russia to China and large new markets for British textiles. This objective was not achieved, but some increase in trade with the north was secured as an outcome of the venture.

The Eastland Company promoted the exchange of cloth, tin, lead, and Eastern reexports, for flax, hemp, fish, wax, timber, pitch, and honey obtained in Norway, Sweden, Poland, and Prussia.

The Levant Company was organized for trade with Turkey, Syria, and Asia Minor. England exported wool and woolen woven goods, tin, lead, and iron to these regions and imported cotton, mohair, drugs, and coffee from them.

The Guinea Company was authorized to promote trade between England and the northwestern coast of Africa. Among the imports were pepper, ivory, and palm oil. Textiles and metalwares were sent in exchange.

Of all the British trading combines, the East India Company is probably the best known. It had a monopoly of British trade with India, Arabia, and Persia. Spices, cotton, perfumes, rosewoods, silk, indigo, and precious stones were secured in exchange for England's standard export wares, *viz.*, wool and woolen cloth and metal goods. The officers and stockholders of this organization lobbied at court and in Parliament for charter renewals and other favors and took active part in creating public opinion in England from the time when the company

was first chartered in 1600 until its strength waned early in the nineteenth century.

The outstanding Dutch trading company of the seventeenth century operated under the name of Dutch East India Company. Dutch commerce was built around a fishing industry. Great quantities of herring, a staple food in Catholic Europe, were readily available in the North Sea off the Dutch coast and a new method of curing was developed in Amsterdam. During the first half of the seventeenth century Dutch merchants rose to a dominant position in the carrying trade of Europe and extended their activities to the Far East. Long a sea-loving people, the Dutch pushed their trading ventures east to Venice, Constantinople, and Alexandria soon after the defeat of the Spanish Armada by the British, and by 1601 had dispatched some threescore ships to the East Indies. The Dutch East India Company had its beginning in 1607, when self-interest and national welfare caused an amalgamation of the several Dutch companies that were competing for Eastern trade. For many decades thereafter the history of Dutch commerce and colonization was to be closely associated with this chartered company and its offspring, the West India Company.

EXTENSION OF MONEY ECONOMY

The extension of money economy in Europe during the late Middle Ages and the early modern period was an essential part of the transition from feudalism to nationalism and colonial empires. The chief characteristics of money economy are division of labor and exchange. Money's function is to facilitate the exchange process. The expansion of commerce in Europe created an increasing demand for money. Inasmuch as experience had demonstrated the superiority of gold and silver over other commodities for monetary uses and inasmuch as there was a dearth of these metals in western Europe, the discovery of gold and silver hoards and of gold and silver mines in the New World was an important contribution to European economic development. Between 1500 and 1600 the world's annual production of gold increased about 50 per cent; silver production increased about eightfold. The precious metals served as a hand-to-hand medium of exchange and as a basis of value in banking operations. With the establishment of frequently used trade routes, merchants of the West resorted to the use of bills of exchange and letters of credit. An important function of the Hanseatic League and of the later chartered companies was regularization of exchange practices. Within the framework of systematized trading activities money-changers quite naturally expanded

their activities to include deposit and loan functions. Bankers who succeeded in acquiring reputations for engineering successful investments attracted funds from business acquaintances and the friends of business acquaintances, first from their own towns and later from distant towns. Kings and nobles who were frequently in need of immediate sums of ready money turned to the bankers for loans and were encouraged by them to liberalize the easy flow of trade and to take part in speculative ventures. By the beginning of the modern period officials were paid with money; soldiers were hired for money; and supplies were purchased with money. The use of money thus extended royal power and government functions as well as trade.

With the development of joint-stock companies the power of capital and credit increased in scope. Small savings of individuals were drawn from their hiding places to augment the available supply of working capital. In time bourses were established and speculative dealing ceased to be confined to princes and wealthy merchants. Financial operations in Antwerp, an important commercial and financial center of the sixteenth century, will serve as an illustration. Here was the first bourse to be established in western Europe, a place where dealers met daily and effected exchanges by means of paper securities representing goods located elsewhere. Bankers bought and sold exchange for forward delivery; shares of stock changed hands; and news-gathering systems were organized to enhance profits from speculative transactions.

STATUS OF MANUFACTURING PRIOR TO THE NINETEENTH CENTURY

We of the twentieth century associate with the idea of manufacture and trade, large buildings, integrated machinery, steam plants, electric motors, and concentrated bodies of workers. This ultramodern pattern of economic activity is strikingly different from industrial conditions that prevailed prior to about 1800. Manufacturing methods, as late as the sixteenth, seventeenth, and eighteenth centuries, were not very different from those of ancient times.

In general, manufacturing in Europe and England during the sixteenth and seventeenth centuries and much of the eighteenth century was in the handicraft stage. The woolen industry in England is characteristic of the old system. The work was done in the homes of workers or in small shops. Hand or foot spinning wheels were used, and in weaving the shuttle was thrown back and forth by hand. Some families performed all the operations from wool to cloth: wife and

daughters worked at spinning wheels; small boys carded the wool; men did the weaving. Because one loom operated regularly could provide work for five or six spinners, the women of some families spun yarn and passed it along to weavers, while the men of the family were engaged in other occupations such as metalworking and carpentering.

In the early part of the period under consideration weavers produced or purchased wool, directed the dyeing, spinning, and weaving operations, and sold the cloth. As the cloth market expanded, a merchant class appeared who purchased wool, had it worked into cloth by many scattered families, assembled the finished product, and negotiated its sale. Commercial connections of some of the larger merchants extended as far as America, India, and China. Some merchants amassed great wealth, affected the airs of gentlemen, and carried swords. They became capitalists and aristocrats as compared with the lowly spinners and weavers.

The textile industry was one of the first to lend itself to the factory system of modern times. The spinning jenny was invented in the seventeen-sixties, and Arkwright's first spinning mill (worked by horses) was established shortly thereafter. One of the first power looms (power supplied by a dog) to work successfully was set up in Glasgow in the 1790's. At the end of the eighteenth century the development of power-loom weaving had hardly begun.

When Adam Smith published his *Wealth of Nations* (1776), charcoal was still the principal fuel employed in smelting iron. In 1750 the ironworks at Coalbrookdale were the only ones in all England that used coal for smelting; ironworks on the Continent were even slower than those in England to make the transition from charcoal smelting to coal smelting. Not until iron became more abundant and less expensive than it was when smelting depended upon charcoal and abundant supplies of wood did metal machines for industrial purposes come into widespread use.

Both the machines of modern factory systems and the motive power for their operation were lacking in European economy until late in the eighteenth century. Employment of motive power other than the muscular strength of man or beast is an essential feature of a mass-production economy. The power of falling water and that of wind pressing against the blades of great mills drove machines to a greater or less extent long before steam engines made their appearance. Nevertheless, it was not until widespread introduction of steam power in the

nineteenth century that wholesale replacement of handicraft methods by machine methods of manufacture occurred.

During the sixteenth, seventeenth, and eighteenth centuries European trade became world-wide. Colonies were established in America, Africa, and Asia; money economy developed rapidly; nationalism in European countries took shape; but not until the end of the period did manufacturing methods and modes of transportation undergo radical modification. During the seventeenth and eighteenth centuries sailboats continued in use; manufacturing was done largely by artisans working with simple tools in small shops or in their own homes; and overland transport of bulky goods was of little or no importance. These were the conditions that prevailed during the mercantile period and at the time when Adam Smith published his *Wealth of Nations.*

CHAPTER VII

MERCANTILE PHILOSOPHY AND NATIONAL SOLIDARITY

With the growth of international trade in western Europe during the long period from the fourteenth to about the end of the eighteenth century, expedients for the promotion of economic nationalism came into being. These expedients, loosely organized into a system of economic policy, came to be known as "mercantilism." Examination of mercantile arguments and practices against the background of economic and political circumstances from which they sprang will illustrate the manner in which economic conceptions tend to adapt themselves to currently prevailing needs. Examination of these ideas will also help to expose certain loose and erroneous arguments which from time to time appear in connection with reasoning about international trade balances and tariff policies in the light of twentieth-century conditions.

Mercantilism is a philosophy of trade that was etched upon the panels of history by practice and precept during the period between the end of the Middle Ages and the beginning of the age of power machinery. Ruins of European castles mark the passing of the medieval period. They call to mind an organization of economic activity commonly described as town economy. The town with its surrounding manors was the characteristic economic unit. Municipalities and manors were politically subordinated to the state with its king and underlings, but the state did not unify national economic affairs. Each town with its surrounding manors was largely self-sufficing and was separated from other towns by trade barriers.

In contrast with this type of economic localism is economic nationalism, which took shape during the mercantile period. The national economic unit embraced many towns. Its boundaries were determined by geographical barriers, by racial characteristics of large population groups, and by institutions such as language, religion, and custom. The national economic state was characterized by conceptions of national and international trade, national division of labor, and national banking. As ordinarily conceived, mercantilism included two stages marked

by somewhat different national policies: In the first stage it was a revenue-raising, king-making, gold-accumulating policy; in the second period it was a protection-of-established-industry policy.

THE FIRST PERIOD

Introductory. Among the many reasons for transition from town economy to national economy were the growth of intertown trade and the rivalries of far-flung trading organizations. Military leaders who desired portable wealth and traders who sought for freer access to markets were drawn together and propelled in similar directions by forces of self-interest. Desire for political supremacy on the part of dominant princes and desire for commercial supremacy on the part of aggressive merchant groups created joint need of unified armies and navies. Nationalism had its beginnings as a system of expediencies for promoting the interests of these small minorities. The expediencies in question became social forces of a rising order of magnitude, which swept into unified systems areas and population groups many times larger than the medieval city-states. The patterns of national development in Italy, France, Germany, Netherlands, and England were not identical, but the forces of unification and the strategy of leadership were sufficiently similar to justify the use of some such term as "mercantilism" to designate the general type of economic policy characteristic of the time. Similarity of mercantile doctrines, in the several countries where mercantilism held sway, rested mainly upon two basic conditions: (1) the aims were concentration of authority in the hands of royal princes and extension of frontiers, and (2) the means to these ends lay in the regulation of commerce on a national scale. In some degree mercantilism held sway in all parts of western Europe during the 400 or 500 years prior to the nineteenth century. The system was most complete in detail in Great Britain. There national solidarity was definitely achieved and national economic institutions, such as central banking, national taxation, and nation-wide trade, became functional realities prior to the nineteenth century.

British Mercantile Philosophy. Among the requisites of a strong national economy in the British Isles was a strong navy. Profitable foreign trade was an inducement for the building of ships and the training of seamen by private interests. Before the establishment of a national system of money and banking and a system of national taxation, the king could not provide and maintain a large national navy, because his resources were inadequate. A British king of, let us say, the fifteenth century was but one of a number of strong noblemen who

struggled among themselves for the seat of honor. A private-citizen merchant marine would be commandeered in time of national emergency for the defense of all. In order to make trade profitable and thus to encourage merchants to build ships, manufacturing was fostered—types of manufacturing that provided goods desired by foreigners. British mercantilism was, in part, a system of regulations established to foster such manufacturing.[1] But manufactures and ships were not the only economic sinews required for the weaving of a strong national fabric. Gold and silver were needed for the establishment of an adequate national banking system, a national system of taxation and war chests. In short, among the more important requisites of a revenue system adequate to provide support for a king and his court, and proceeds needed for a centralized political system, were manufactures, trade, and monetary metals. These things mercantilism was designed to provide.

England produced insufficient gold and silver to supply her needs.[2] As a result, various expediencies were resorted to for the purpose of securing gold and retaining it in the country. These expediencies, like those resorted to for the fostering of manufacturing, trade, and shipbuilding, were part of the mercantile doctrine. They included embargoes on gold exports and regulations to ensure a favorable balance of trade. Aggregate sales of English goods were expected to exceed aggregate purchases of foreign goods, the difference to be collected in gold or silver. In order to ensure a favorable trade balance, limitations were put upon merchandise imports, and exports of manufactures were encouraged. Import duties were placed upon domestic consumption goods that could be produced at home. Exports of manufactured goods (embodying larger values than raw materials) were encouraged by fixing prices of labor and industrial raw materials at low levels and in some cases by paying export bounties. Navigation acts were passed requiring English goods, both exports and imports, to be carried in English ships. In these and other ways the state attempted to regulate external commerce in a manner to ensure an excess of sales over

[1] Among the regulations in question were wage fixing, price fixing, embargoes upon gold exports, navigation acts requiring British exports and imports to be carried in British ships, trade monopolies, monopolies of colonial markets, import tariffs, export bounties, and bilateral commercial treaties favoring particular industries in particular countries.

[2] England needed gold and silver for the maintenance of a national monetary and banking system and a national system of taxation and reserves of wealth readily available for use of the ruling class, if the ruling class was to maintain and to strengthen its position.

purchases and an incoming stream of gold and silver in settlement of the difference.

The predominant passion of the English nation during the mercantile period was a stout patriotism fashioned to promote the interests of the ruling classes. Individual welfare was subordinated to national welfare. The function of the individual was conceived to be that of promoting the welfare of the state, not the other way around. Industries came to be considered in different order of importance, measured not so much in terms of individual productivity and standards of living and well-being as in terms of national supremacy. The mercantile conception of industrial hierarchy was as follows:

First in importance was international trade, so regulated as to encourage shipbuilding and an inflow of precious metals.

Second in importance was manufacturing, so regulated as to make foreign trade profitable.

Next in importance was such mining as was necessary to make manufacturing possible and profitable.

Fourth came agriculture to feed the people and to minimize the necessity of importing foodstuffs and agricultural raw materials.

Since labor was the largest element in production costs, a large population was thought by the mercantilists to be desirable in order that labor might be plentiful and wages low.

Industries that worked up raw materials were exalted over those which provided raw materials.

Foreign trade took precedence over domestic trade.

Colonies were considered as estates to be worked for the advantage of mother countries. They were prohibited from trading with European nations other than the mother country, which they supplied with precious metals and raw materials in return for manufactured goods.

The king worked to consolidate and strengthen his position in the nation. The nation worked to consolidate and strengthen its position in the community of nations.

Examples of the Literature of British Mercantilism. The writings of British mercantilists were not so concise, uncontradictory, and definitely focused as the foregoing interpretations may suggest. They were scattered, fragmentary, and uncoordinated. Nevertheless, students of the mercantile era have found sufficient similarity in points of view of leading writers to justify building the dominant and frequently repeated ideas into a more or less coordinated system. Among the typical mercantile treatises published in Great Britain were Child's

A New Discourse of Trade[3] and Mun's *England's Treasure by Forraign Trade.*[4] Concerning the balance of trade, Child had the following to say:

Among other things relating to Trade, there has been much discourse on the Balance of Trade; the right understanding whereof may be of singular use, and serve as a compass to steer by, in the contemplation and propagation of Trade for publick advantage. It is the most general received opinion and that not ill grounded, that this Balance is to be taken by a direct scrutiny of what proportion the value of the Commodities exported out of this Kingdom bear to those imported; and if the Exports exceed the Imports, it is concluded the Nation gets by the general course of its Trade, it being supposed that over-plus is imported Bullion, and so adds to the treasure of the Kingdom Gold and Silver being taken for the measure and standard of Riches.[5]

Thomas Mun, another mercantilist, was born in 1571. He accumulated wealth and acquired a reputation as a merchant engaged in the Levant trade. In 1615 Mun was elected a director of the East India Company. His treatise, *England's Treasure by Forraign Trade*, written probably about 1631, was printed for the first time by his son in 1664. The book opens many avenues of insight into economic philosophies and practices of the mercantile period.

The ordinary means . . . to enrich our wealth and treasure is by *Forraign Trade* [wrote Mun] wherein we must ever observe this rule; to sell more to strangers yearly than we consume of theirs in value. . . .

Although this Realm be already exceeding rich by nature yet might it be much increased by laying the waste grounds (which are infinite) into such employments as should no way hinder the present revenues of other manured lands, but hereby to supply our selves and prevent the importations of Hemp, Flax, Cordage, Tobacco, and divers others things which now we fetch from strangers to our great impoverishing.

We may likewise diminish our importations, if we would soberly refrain from excessive consumption of forraign wares in our diet and rayment. . . .

In our exportations we must not only regard our own superfluities, but also we must consider our neighbors necessities, that so . . . we may gain so much of manifacture as we can and also endeavor to sell them dear, so far forth as the high price cause not a less vent in the quantity. . . .

The value of our exportations likewise may be much advanced when we perform it ourselves in our own Ships for then we get not only the price of

[3] CHILD, SIR JOSIAH, *A New Discourse of Trade*, London, 1690.

[4] MUN, THOMAS, *England's Treasure by Forraign Trade*, London, 1664. Macmillan Company ed., 1910.

[5] CHILD, *op. cit.*, 4th ed., pp. 163–164. Child became Governor of the East India Company and member of Parliament.

our wares as they are worth here, but also the merchants' gains, the charges of ensurance, and freight to carry them beyond the seas.[6]

Conclusions. From a vantage point of twentieth century conditions and motives, mercantilism may appear to be a queer and illogical body of misconceptions. Merchant ships are not as serviceable for front-line action in modern warfare with its submarines, airplanes, and armored battleships as were merchant ships in the warfare of the sixteenth and seventeenth centuries. The Spanish Armada was defeated not by Britain's royal battle fleet—a puny thing in comparison with the Spanish battle fleet—but by a flock of small pirate trading vessels armed for merchant duty on the high seas. Such mercantile ideas as intense desire for stocks of precious metals and measurement of national wealth in terms of gold and silver hoards may seem even more absurd to the student of modern economics than the need of a merchant fleet for national defense. The twentieth-century nation that possesses the largest stocks of gold is not necessarily the wealthiest country in the world. National government, national taxation, national banking, and national trade can, if need be, function without gold or silver under our system of twentieth-century credit economy. However, this was not true during the mercantile period. Gold and silver played a more vital part in national economy then than now. A merchant group possessed of gold in abundance, some part of which could be passed along to the king's coffers, was a condition essential to national solidarity during a period when the aggregate of surplus goods over and above the minimum for subsistence was relatively small. These considerations throw light upon reasons for emphasizing both gold and favorable merchandise trade balance during the mercantile period. Gold was needed for the maintenance of an effective centralized government, and a favorable trade balance was needed to get the gold. Merchandise exports and imports together with shipping services constituted a much larger proportion of aggregate international transactions than is the case today. Capital exports, interest on foreign investments, tourist expenditures, etc., were then relatively less important parts of the aggregate of international payments than now. Mercantile theory held, therefore, that gold flows could best be directed by controlling merchandise balances.

The mercantile writers were not particularly concerned about standards of living among the underprivileged masses. Their concern was

[6] MUN, *op. cit.*, pp. 7–11. Quoted with the permission of The Macmillan Company, New York, and Basil, Blackwell and Mott, Ltd., Oxford.

to build and extend a far-flung system of world commerce and to make provision for its protection against the depredations of competing and antagonistic national groups. Mercantile philosophies were expounded by international traders and statesmen whose interests were allied with those of reigning royal families. It so happened, during the mercantile period, that the security of a king's position was more dependent upon the good will and support of powerful merchant groups than upon the support of the unorganized masses of common people. Furthermore, interests of the landlord class and those of traders were not in sharp conflict so long as a system of protection was retained thus to ensure intensive use of the land and maintenance of high rentals. From the point of view of the best joint interests of merchants, kings, and a landed aristocracy, mercantilism was sound policy. The evaluation of mercantilism from the point of view of the best interests of an inarticulate and impotent proletariat is quite another matter. In evaluating the early stages of mercantilism it is well clearly to define the point of view from which an evaluation is made. It is well also to remember that trade in many of the Western countries before the eighteenth century was, so to speak, an infant industry and that power manufacturing had not yet emerged to revolutionize age-old methods of acquiring wealth. Finally, it is well to remember that during the mercantile period in western Europe the military leader who could command large quantities of the precious metals was the leader who could hire soldiers, fight wars, and retain or acquire control of political affairs.

THE SECOND PERIOD

During the eighteenth century the center of interest shifted from favorable trade balances for the purpose of augmenting bullion stocks to protection of home manufactures against foreign competition in the domestic market. This stage in the evolution of European nationalism is ordinarily included as a phase of mercantilism; it might equally well be considered separately. Protection in the second stage of the mercantile period served as a shield to prevent the decay of particular vested interests that had ceased to further purposes either of national solidarity or of national growth. Wool, silk, and linen manufacturers were among the more important of the vested interests in question. Prior to the eighteenth century there was little or no cotton manufacturing in western Europe in spite of the fact that for centuries India and China had spun and woven cotton. Fine calicoes, muslins, and other cotton fabrics were imported from the Orient by Europeans during the first part of the seventeenth century and even earlier for con-

sumption by well-to-do families, but it was not until the latter part of the seventeenth century that cottons began to move from east to west for mass consumption by the middle and lower classes of Europe. This shift in demand from wool fabrics to cotton fabrics during the latter part of the seventeenth century and the early part of the eighteenth, with consequent unemployment and loss of profits in wool spinning and weaving industries in England and Continental countries, marks the rise of a type of protectionism fashioned to shield the European wool spinning and weaving industries from the competition of Oriental cotton goods.

The agitation of wool spinners and weavers and of silk manufacturers in England against cotton-goods imports and against the domestic weaving and printing of cotton goods was so successful that in 1720 Parliament prohibited by statute not only the importation of cotton wares but also the manufacture and consumption of certain cotton goods in England. At about the same time France also imposed more stringent prohibitions upon home production and domestic consumption of cotton goods. Both in England and on the Continent the anti-cotton laws are clear-cut illustrations of class legislation for the protection of powerful vested interests and the stifling of new industries. However, in spite of prohibitive legislation, the cotton spinning and weaving industries took hold in the West, particularly in England. In the 1730's the flywheel shuttle for weaving was invented and within three-quarters of a century after the prohibitory legislation of 1720 Hargreaves, Arkwright, Crompton, and others had contributed inventions by which cotton spinning and weaving were improved and cheapened to a degree that foreshadowed the rise of the world's lowest cost cotton textile industry in Manchester and environs. In 1774 the manufacture and use of cotton goods spun and woven in the kingdom were legalized but the import duty on cotton goods continued in effect for another half century or more.

Landlords also were an important vested-interest class who fought to maintain the mercantile system in its declining stages. Protection of agriculture sheltered the landlord class against the rent-reducing competition of low-cost imports of foodstuffs, wool, and other products of the soil.

SUMMARY

By way of summary, the mercantile period may be divided into two stages: (1) the period prior to about 1700, when favorable merchandise trade balances and accumulation of bullion were among the dominant objectives, and (2) the period after about 1700, beginning with legisla-

tion for the protection of the wool spinning and weaving industry and ending with British free trade about the middle of the nineteenth century. The nineteenth century brought power machinery into widespread use and thus saw the release of a new set of economic forces.

What conclusions useful in clarifying confused issues of twentieth-century international trade policy may be drawn from the experience records of the mercantile period? One conspicuous conclusion is that national political considerations and national economic considerations are so interrelated as to defy separate evaluation. The mercantile emphasis placed upon gold and silver as measures of wealth are, for example, absurd from a purely economic point of view in a modern country with national political solidarity, national security, and a functioning credit economy. Mercantile countries had none of these things, and for that reason precious metals assumed a significance out of proportion to their purely economic value.

Another conclusion that may be drawn from mercantile experience is that a striving for favorable trade balances as a means of accumulating national wealth under any and all circumstances is an erroneous conception. This conclusion is suggested by the fact that government regulations to maintain favorable trade balances gave way [7] in the face of production advantages of territorial division of labor. Favorable trade balances were sought during the early stages of the mercantile period with more or less definite objectives in mind: acquisition of precious metals, naval construction, and national defense. Remove the need of protection to promote these ends, and mercantile trade-balance theory has no foundation upon which to rest.

Finally, mercantile experience illustrates the fact that commercial restrictions imposed primarily for the purpose of protecting old industries and excluding new ones are doomed to ultimate failure. Trade restrictions maintained primarily for the protection of minority interests marked the beginning of the end of mercantilism's usefulness as a constructive national policy.

[7] See Chap. XI of the present volume.

CHAPTER VIII

ADAM SMITH

By Adam Smith's [1] time (1723–1790) the transition from local to national political units had been completed in Great Britain and a number of countries on the Continent.[2] Mercantile regulations of commerce had served their nationalizing functions and were becoming mere impediments to continued progress. Furthermore, the interests of certain home-market manufacturing groups and landlord groups, on the one hand, and those of certain powerful export manufacturing and foreign trading groups, on the other hand, had come to a parting of the ways. One era of political-economic development in Great Britain had come to an end; another was on the threshold. Adam Smith was a critic of regulated inefficiency; he was an eighteenth-century courier of nineteenth-century *laissez faire*. It is not surprising that the Smith type of philosophy should have gained momentum in Great Britain earlier than elsewhere because it was the first country to outgrow mercantile practices. Smith's teachings were not concerned primarily with international trade; they were concerned with economic efficiency in all departments of national life. By undermining the logic of an outworn system of trade restrictions and by glorifying the economies of unfettered commerce and division of labor, he laid the foundation for classical free-trade doctrines applying alike to domestic and to foreign commerce.

Smith was a student of a transition period in national policy. The realistic analyst of American economic conditions of the present time likewise is a student of a transition period. Smith was primarily a humanitarian; his concern was to increase the nation's wealth in order that all the people might be more abundantly supplied with goods. Take as an example of his humanitarian philosophy the following passage:

> Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary

[1] Smith's famous volume, *An Inquiry into the Nature and Causes of the Wealth of Nations*, was published in 1776.

[2] Unification of Germany was not accomplished until 1871.

for promoting that of the consumer. The maxim is so perfectly self-evident that it would be absurd to attempt to prove it. But in the existing system the interest of the consumer is almost constantly sacrificed to that of the producer.[3]

The ultimate goal of greater well-being for the masses is as dominant in the minds of American economists today as it was in the philosophy of Adam Smith more than a century ago. The goal toward which the philosophy of the *Wealth of Nations* was directed and the commercial policy recommended for the attainment of the goal are our chief interests in the book. The commercial policy that it recommended became an essential part of classical free trade.

The theory underlying the British free-trade policy had three essential parts, as follows:

1. Unfettered international commerce to augment gains from territorial division of labor.
2. Comparative costs that account for and justify international trade.
3. Price-specie mechanisms for the regulation of international prices.

Smith developed the conception of gains from personal and territorial division of labor, thus establishing the first part of the classical free-trade theory and contributing to the formulation of part two. Starting, in Book I, with the idea that the labor of a nation supplies all its conveniences and luxuries, Smith set himself to find ways and means of increasing labor's effectiveness. One way was to enlarge the scope of the market by removing trade restrictions, thus making possible greater degrees of specialization of labor. The following quotation is self-explanatory:

> The greatest improvement in the productive powers of labour . . . seem to have been the effects of the division of labour. . . . Take an example . . . from a very trifling manufacture, . . . the trade of the pin maker; a workman not educated to this business (which the division of labour has rendered a distinct trade) nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion) could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third

[3] SMITH, ADAM, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 1776, Vol. II, Bk. IV, Chap. VIII.

cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pin is another; it is even a trade by itself to put them in the paper.[4]

Ten men working in a factory, according to this illustration, could make upward of 48,000 pins in a day.

If they had all wrought separately and independently and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is certainly not the two hundred and fortieth . . . part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.[5]

The productivity of groups of workers could be increased by specialization and cooperation, provided the extent of the market made such specialization feasible.

. . . it is the power of exchanging that gives occasion to the division of labour . . . the extent of this division must always be limited . . . by the extent of the market. When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment. . . . It is impossible there should be such a trade as even that of a nailer in the remote and inland parts of the Highlands of Scotland. Such a workman at the rate of a thousand nails a day, and three hundred working days in a year will make three hundred thousand nails in the year. But in such a situation it would be impossible to dispose of one thousand, that is, one day's work in the year.[6]

From these conceptions of specialization and wide markets, opposition to trade restrictions, which tended to limit the extent of markets for products of highly specialized labor, followed naturally. Among

[4] *Ibid.*, Vol. I, Bk. II, Chap. I.

[5] *Ibid.*

NOTE: It is well to note at this point that the illustrated gain from personal division of labor was not primarily a result of the employment of steam power. Steam engines may have been employed in pumping water out of the mines from which coal came for smelting the iron that went into the pins. Water power was used to some extent for the motivation of factory machinery during Adam Smith's time. It was not, however, until after 1781 when Watt took out his patent for rotary motion that steam engines ceased to be used principally for pumping water and became a source of motive power for the running of factory machines. This fact has significance because extension of power machinery during the nineteenth and twentieth centuries contributed to increases in worker productivity much greater than personal specialization alone could have achieved.

[6] *Ibid.*, Chap. II.

the types of trade restrictions, common in eighteenth-century Great Britain, which Smith believed to be detrimental to the best interests of the nation, were the following: [7]

1. Restrictions laid upon the exportation of gold and silver. Such restrictions were opposed because they tended to reduce the volume of international trade and thus to limit the extent of markets for the products of highly specialized labor.

2. Restraints upon the importation of foreign goods. Such restraints were enforced either by high import duties or by absolute prohibitions. They were believed to be detrimental because they discouraged maximization of specialization in low-cost export industries by limiting the market for export goods.

3. Artificial means of encouraging exports. Such devices were opposed on the grounds that exports which had to be subsidized were products of industries in which labor was relatively inefficient.

This list of trade restrictions, opposed by Smith, indicates that his theory of wide markets was not to be confined within the boundaries of a single nation. Arguments for specialization that applied to groups of persons in a nation applied in his reasoning equally well to groups of persons in different nations.

> If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry employed in a way in which we have some advantage. . . . The natural advantages which one country has over another in producing particular commodities are sometimes so great that it is acknowledged by all the world to be in vain to struggle with them.[8]

With arguments such as these Adam Smith prepared the way for Ricardo's doctrines and for removal of the corn laws [9] in the nineteenth century. Arguments for specialization and free trade that were convincing in the eighteenth century, before general application of steam-motivated steel machinery, became even more convincing in the nineteenth century when Great Britain achieved the position of leading industrial nation with manufacturing costs so low as to enable her to undersell competitors in the world's markets for a great variety of manufactured goods.

Policies recommended by Adam Smith seem to have gained widespread and favorable recognition in England and elsewhere not so

[7] *Ibid.*, Bk. IV.

[8] *Ibid.*, Chap. II.

[9] Import tariffs and export bounties on grain.

much because the policies were new as because they were in conformity with dominant social and economic changes that were in progress at the time. From France, as well as from England, emanated ideas of freedom during the nineteenth century—freedom to buy and sell, international commercial freedom, personal liberty, and freedom to choose one's occupation. It appeared for a time as if these ideas would gain acceptance throughout the whole civilized world. One of the most vigorous exponents of commercial freedom in France was J. B. Say (1767–1832).[10] Say reiterated the principles of division of labor expounded in the *Wealth of Nations* and presented his own famous law to the effect that production creates demand.

"Division of labour cheapens products by raising a greater quantity at the same or less charge of production . . . [and] the mere circumstance of the creation of one product immediately opens a vent for other products." [11]

Upon such basic and simple assumptions Say built a structure of logic which led inevitably to the conclusion that that nation was most prosperous whose commerce was free and unfettered. With fine command of rhetoric Say outlined the path of free trade and its advantages so clearly, he thought, that "wayfaring men, though fools, could not err therein." Say's writings were of great influence in spreading throughout Europe the principles stated in the *Wealth of Nations.* Important industrial developments of the time gave further support to these principles even in those countries where, for one reason or another, national policies did not move in the direction of greater freedom of international trade.[12]

[10] SAY, J. B., *Le Traité d'économie politique,* Paris, 1803.

[11] SAY, J. B., *A Treatise on Political Economy,* 3d Amer. ed., 1827, pp. 35*ff.*, J. B. Lippincott Company, Philadelphia.

[12] See Chap. XVII of the present volume.

PART III

THEORY AND POLICY: NINETEENTH AND EARLY TWENTIETH CENTURIES

INTRODUCTORY

The nineteenth century is set apart from all that goes before by a revolutionary transition from dependence upon human energy for industrial work to industrial utilization of coal-generated energy, petroleum-generated energy, and hydroelectric power. To Adam Smith's "two systems of political economy with regard to enriching the people," [1] the one, a system of agriculture, the other that of commerce, was added a third: manufacture with power machinery. Since about 1800 productivity and the size of populations in Western countries have increased rapidly; capital has accumulated faster than ever before; markets for bulky goods have been greatly extended; manufactures have been turned out *en masse* to sell at prices progressively lower in relation to wages.

During the nineteenth century the international commercial policies of Great Britain, France, the United States, Germany, and other nations were adapted to new industrial conditions. Policies of nations first to establish steam-motivated manufacturing systems veered off toward international free trade; in nations slower to make use of the new techniques protective policies were established as shields against the low-cost competition of mass-production manufactures from neighboring countries. Economic forces that power machinery set in motion about a century and a half ago have been active in the molding and shaping of commercial policies ever since.

[1] SMITH, ADAM, *An Inquiry into the Nature and Causes of the Wealth of Nations,* Vol. I, Bk. I, Chap. I.

CHAPTER IX

EMPLOYMENT OF POWER MACHINERY

In the nineteenth century power machinery came into general use in Great Britain, France, the United States, Germany, and various other Western nations. The employment of steam engines quickened the transition from hand-tool manufacturing to machinery manufacturing. Nations making fullest use of machines soon became the low-cost producers of manufactured goods.

A tool is an implement for direct action such as cutting, striking, and rubbing. A machine is a train of apparatus so connected that if one piece is made to move, all the apparatus must move in predetermined fashion. When nonhuman energy was set to the motivation of machines in factories tended by wage-earning workers, each directing some specialized operation, a system of production was achieved quite different from and much more effective than any system of production that had gone before. A striving on the part of many nations for industrialization, with all the advantages accompanying power-machinery production, was one of the most characteristic features of Western civilization during the nineteenth century. One country after another —Great Britain, the United States, France, and Germany—built steam railroads, constructed factories, and replaced sailing vessels with steamships.

EXPANSION OF PRODUCTION AND TRADE

Statistics of per capita production of pig iron and per capita imports of grains and textile fibers are suggestive of the increase in heavy work, such as mining, handling, and fabricating, which employment of the energy of expanding steam and allied technical developments made possible. British data are used in Table 5 for purposes of illustration for the reason that the British were among the first to make general use of power machinery. The table shows per capita imports of grains and textile fibers and per capita production of pig iron for the United Kingdom by decades from 1820 to 1890. Pig-iron production per capita in the United Kingdom was about twelve times as great in 1890 as it had been in 1820; per capita imports of grains were at least

twelve times as great in 1890 as they had been in 1820; and per capita imports of textile fibers were about eight times as great. These data are not presented as a measure of the increase in per capita productivity in the United Kingdom during the nineteenth century. Some industries, agricultural production for example, did not keep pace with mining, manufacture, and trade. However, few persons will question the fact that commerce and the aggregate physical volume of pro-

TABLE 5. UNITED KINGDOM: PER CAPITA PRODUCTION OF PIG IRON AND PER CAPITA IMPORTS OF GRAINS AND TEXTILE FIBERS, BY DECADES, 1820 TO 1890 *

Year	Pig-iron production, lb. per capita	Grain † imports, lb. per capita	Textile fiber ‡ imports, lb. per capita
1820	39	31	8
1830	62	48	12
1840	117	67	24
1850	184	129	27
1860	296	202	53
1870	424	228	51
1880	498	344	60
1890	469	373	64

* SOURCE: Derived from population, export, and import data given in William Page, *Commerce and Industry, Tables of Statistics for the British Empire from 1815*, pp. 140, 180, Constable & Co., Ltd., London, 1919.

† Wheat, barley, and oats.

‡ Raw cotton and raw wool.

duction increased during this period more rapidly than the population. In 1820 Great Britain's population numbered approximately 21 million; in 1890 it was about 38 million. In the same span of time pig-iron production increased more than twenty-fold, and shipping as measured by vessels with cargoes and in ballast entered and cleared at British ports increased about fivefold.[1]

The increase in quantities of heavy, bulky materials that could be produced, handled, and fabricated would not have been possible without enlarged use of mechanical power. In the early centuries the world depended upon man power for the carrying of burdens and the performance of heavy tasks. Drudgery of human slaves was a symbol of ancient civilizations. The pyramids are monuments to this epoch of man's progress. Prior to about the beginning of the nineteenth

[1] PAGE, WILLIAM, *Commerce and Industry, Tables of Statistics for the British Empire from 1815*, pp. 162–163, Constable & Co., Ltd., London, 1919.

century human brawn was a much bigger factor in tilling the soil, mining ores, transporting commodities, and fabricating raw materials, than it is in a power-machinery economy. The work done in the earlier period by oxen, horses, windmills, and water wheels was of little consequence as compared with the energies brought under human control through the medium of steam engines. Had it not been for the steam engine, the day of small things and the period of localized industries would be with us yet.

THE SPREAD OF POWER-MACHINERY ECONOMY

Nineteenth-century political and industrial leaders strove to devise policies that would enable their respective nations to share generously in the production and trading economies made possible by power machinery. Rates of industrial development in various countries were different because political and economic conditions were dissimilar. Coal, iron, scientific knowledge, and capital were essential ingredients of the new system of industrial production. Scientific knowledge and capital were lacking in some nations; coal and iron were not equally accessible in all. Netherlands and Italy had neither coal nor iron resources. Spain was deficient in coal. In Germany and the United States canals or railroads hundreds of miles long had to be constructed before rich mines of coal and iron could be brought into use. Germany was decentralized politically at the beginning of the nineteenth century. The oligarchic system in Russia was too firmly established to permit quick transition from feudalism to a degree of individual freedom comparable with that which promoted rapid industrial development in neighboring states. The two nations that had achieved the highest degrees of industrial development by 1840 were England and France. Aside from Belgium, which is too small to be rated among the five or six leading powers of the world, the three Western countries next to achieve the advantages of industrialization were the United States, Germany, and Russia.

Statistics for pig-iron production in the United Kingdom, France, United States, and Germany indicate roughly the periods of most rapid industrialization in these countries (Fig. 1). Russia is not included in the group because of her late start and a lack of comparability of Russian statistics during the period.

In 1800 Great Britain was well ahead of all competitors in the process of industrialization as indicated by pig-iron output. Expansion of the iron industry continued at a rapid rate in Great Britain until about 1880. In 1840 industrialization in France (as indicated

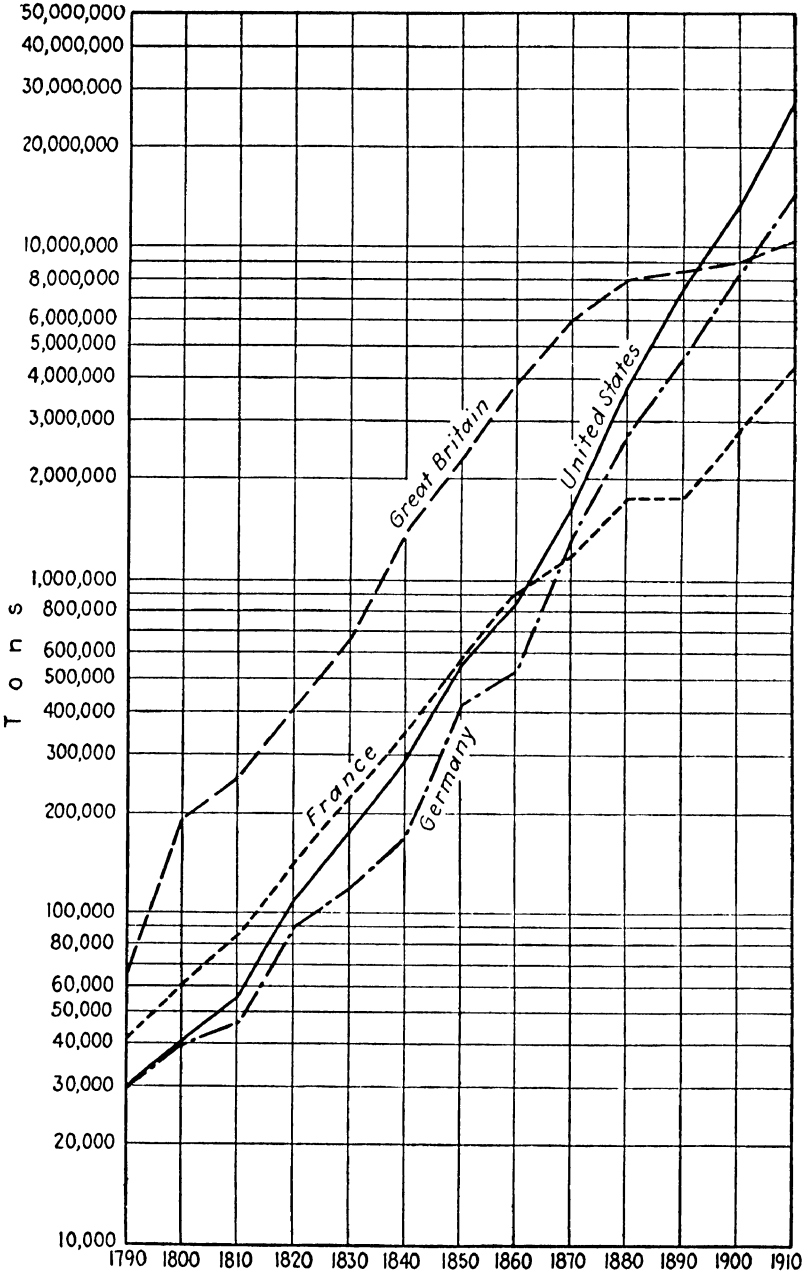


FIG. 1. PIG-IRON PRODUCTION (see opposite page).

by pig-iron output) was well ahead of that in Germany. By 1870 Germany had caught up with France and was beginning to forge ahead. German industrial expansion (as indicated by pig-iron production) increased at a phenomenal rate after 1870. Shortly after 1900 Germany's output of iron exceeded that of Great Britain for the first time. In 1840 iron output in the United States was somewhat less than that of France and only about one-fourth that of Great Britain. During the last half of the nineteenth century, industry (as indicated by pig-iron output) expanded more rapidly in the United States than in any other country.

Along with industrialization in Great Britain, France, United States, Germany, and Russia went fundamental changes in the political and social systems of these nations. In Great Britain a landed aristocracy slowly gave way to a rising generation of industrialists. In France serfdom was abolished by the Revolution in 1789. The United States declared her independence in 1776 and won it in 1783. In Germany serfdom gave way rapidly between 1800 and 1850, and in Russia after 1860. Political transitions in the Western world started before the Industrial Revolution and continued with it. The drift toward economic freedom carried through to include policies of international free trade in Great Britain and a near approach to international free trade in France. Great Britain maintained a policy of international free trade for more than half a century; France maintained a policy approximating free trade for a shorter period. The United States and Germany developed domestic systems of comparative economic freedom during the period of their transition from agricultural to manufacturing states, but neither of these nations opened its markets to the free competition of low-cost British manufactures. Industrialization in Russia and the formulation of an international trading policy for Russia during her process of industrialization are now in progress.

Circumstances in the nineteenth century were more favorable to a policy of extensive and unrestricted international trade in Great Britain than in France, United States, and Germany. (1) Being the initial country to make widespread use of power machinery, Great

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FIG. 1. PIG-IRON PRODUCTION IN GREAT BRITAIN, FRANCE, GERMANY, AND THE UNITED STATES, BY DECADES, 1790 TO 1910

SOURCES: 1790 to 1890, Mulhall, Michael G., *The Dictionary of Statistics*, George Routledge and Sons, Ltd., London, 1892, p. 332. France and Germany, 1900 and 1910, *The Statesman's Yearbooks*, 1903, pp. 590, 667; 1913, pp. 802, 878. Great Britain, 1900 and 1910, Page, William, *Commerce and Industry, Tables of Statistics of the British Empire from 1815*, Archibald Constable & Company, Ltd., London, 1919, p. 200. United States, 1900 and 1910, *Statistical Abstract of the United States, 1930*, p. 755.

Britain was the low-cost country in the production of steel and textile manufactures. (2) Great Britain had an abundance of coal and iron for manufacturing, whereas her agricultural land was relatively scarce. (3) Great Britain had been a trading nation for several hundred years prior to the beginning of the nineteenth century. She possessed a large merchant marine, a banking system suited to international trading, and a personnel skilled in international diplomacy and international commerce. Adam Smith had pointed the way toward British free trade in 1776; David Ricardo developed and expounded the theory from the point of view of an international banker in the early 1800's, and in the 1840's John Stuart Mill elevated the theory of international free trade to a position among the literary classics of England. The fact that these three men, Smith, Ricardo, and Mill, were proclaimed to be economic seers is sufficient evidence that the policies advocated by them were in harmony with the interests of the politically and economically dominant groups.

The French people never did accept free-trade doctrines to the extent that they were accepted by the English, and France never adopted a full-fledged free-trade policy. After the political revolution of 1789 France abolished internal trade barriers but raised her tariffs against external trade. Then followed the English blockade during the Napoleonic Wars and the Continental system of protection, and finally a series of protective tariffs in 1816, 1820, 1822, 1826, and 1841. Not until 1853, when Napoleon III introduced a number of minor relaxations in the tariff by reducing duties on such raw materials as wool, cotton, fats and oils, dyewoods, coal, and iron, was the protectionist trend reversed. By this time France had introduced the steam engine and the factory system and had built railroads.[2] France made a good start toward free trade in the 1850's and 1860's, during which period she was still second only to Great Britain in pig-iron production. Freedom of trade did not persist in France as it did in Great Britain, possibly because France was more of an agricultural nation than Great Britain; possibly because she was less well supplied with coal and iron; possibly because of her loss of Alsace-Lorraine to Germany as a result of the War of 1870; possibly because Great Britain forged

[2] In 1815 there were 15 establishments using steam engines in France; in 1830, 625; in 1847, 4,853. Pig-iron production in 1827 amounted to 220,000 tons; by 1847 it had increased to 590,000 tons; and by 1867 to 1,260,000 tons. In 1867 France had more than 6,000 miles of steam railways.

SOURCE: KNOWLES, L. C. A., *Economic Development in the Nineteenth Century*, pp. 136, 139, 146, 213, George Routledge & Sons, Ltd., London, 1932.

ahead industrially while France was engaged in Continental wars. For these or other reasons less obvious France reverted definitely to a protectionist policy with the passage of the Méline Tariff Act of 1892. She has been a protectionist nation ever since.

In the United States and Germany systems of domestic economy followed paths marked out by Smith and Say, but international policy took a different course from that charted by Ricardo and Mill and followed in Great Britain. In the United States and Germany the dominant policy tendency turned toward aid for the development of young industries, aid in the form of customs tariffs designed to give young industries competitive advantages in the domestic market. Nineteenth-century conditions thus gave rise to the contemporaneous development of divergent national policy tendencies with respect to international trade restrictions. On the one hand, was the British free-trade policy supported by the comparative cost logic of classical economic theory.[3] On the other hand was the protectionist policy of Germany, United States, and other countries supported by protectionist theory such as that expounded by Hamilton and List.[4]

[3] See Chaps. X and XI of the present volume.
[4] See Chap. XVII.

CHAPTER X

COMPARATIVE COSTS—THEORY

THE RICARDO-MILL STREAM OF THOUGHT

During a large part of the nineteenth century Great Britain had no serious rivals in the development of world trade in manufactures. She needed the goods that less industrialized countries had to exchange for manufactures: foodstuffs, and fabricating materials such as cotton. Low-wage common labor, a nucleus of trained mechanics, an abundance of coal and iron, experienced bankers and traders, capital reserves, need of foodstuffs, a strong centralized national government, and a laissez-faire sentiment already crystallized and popularized by Adam Smith were the basic elements from which Ricardo fashioned his doctrines of international trade.

David Ricardo (1772–1823) was the third son of a Dutch Jew who had emigrated from the Netherlands to England and acquired a fortune in the British stock market. He was educated in England and Holland for a mercantile career. Financed by a friend of his father, he acquired a fortune in his own name through stock-exchange operations by the time he was thirty years of age. Thenceforth his interests were divided between business and politics. He purchased a country estate, bought his way into the House of Commons via the prevailing system of "close-borough" politics, and soon became known for his political sagacity. Ricardo's economic philosophy was elaborated in his *Principles of Political Economy and Taxation,* published in 1817. His economic reasoning was influenced by Smith's *Wealth of Nations* and by a lifelong friendship with Malthus, whose *Essay on Population* [1] appeared in 1798.

Combining Adam Smith's doctrines concerning division of labor and trade with Malthus's population theory, relating these to the circumstances of Great Britain's forwardness in manufacture and her overcrowded agriculture, and influenced by his own remarkable profit-making proclivities, Ricardo developed a very convincing chain of logic.

[1] MALTHUS, THOMAS ROBERT, *Essay on the Principle of Population as It Affects the Future Improvement of Society,* London, 1798.

It has been my endeavor to show throughout this work that the rate of profits can never be increased but by a fall in wages and that there can be no permanent fall of wages but in consequence of a fall of the necessaries on which wages are expended. If therefore, by the extension of foreign trade . . . the food and necessaries of the labourer can be brought to market at a reduced price, profits will rise.[2]

Lower tariffs to reduce food prices, to lower living costs, to make possible wage reductions, to lower manufacturing costs, to increase manufacturing and trading profits formed the sequence of the argument. It assumed that wages would inevitably sink to an existence minimum, that labor and capital within the nation were mobile, and that agricultural workers in Great Britain produced less per capita than agricultural workers in other countries because of Great Britain's dense population and diminishing returns in agriculture.[3]

At the center of the Ricardian theory of international trade is the so-called "principle of comparative costs," sometimes called the "principle of comparative advantage." The idea that nations may well specialize in the production of those goods in which they have special advantages has survived to the present time. Ricardo's original statement in his *Principles of Political Economy and Taxation*[4] has a modern ring.

It is . . . important to the happiness of mankind that our enjoyments should be increased by the better distribution of labour, by each country producing those commodities for which by its situation, its climate and its other natural or artificial advantages, it is adapted, and by their exchanging them for the commodities of other countries.

Ricardo went on to explain the operation of the principle of comparative costs in bringing about trade among nations. His ideas were later clarified and elaborated by John Stuart Mill (1806–1873), a philosopher and a scholar who had the literary abilities to clothe Ricardo's crude, vigorous statements with the raiments of classical literature. Mill's *Principles of Political Economy* was published in 1848. In it Mill reiterated Ricardo's principle of comparative costs, expounded

[2] RICARDO, DAVID, *The Principles of Political Economy and Taxation,* Chap. VII, John Murray, London, 1817.

[3] "It must be evident to those who have the slightest acquaintance with agricultural subjects, that in proportion as cultivation is extended, the additions that could yearly be made to the former average produce must be gradually and regularly diminished." MALTHUS, *op. cit.,* 5th ed., pp. 9–10.

[4] RICARDO, *op. cit.,* Chap. VII.

and clarified the theory of international prices introduced by Ricardo, and added his own conception of the equation of international demand. In restating the principle of comparative costs he used the Ricardian theory of value pertaining to domestic trade, a theory to the effect that goods exchanged in proportion to the quantities of labor utilized in their production. The labor theory of value was discarded by Mill in the treatment of other phases of economics and, in time, it was discarded by other economists in the exposition of the comparative-costs theory. This change did not undermine the essential validity of the comparative-costs theory as expounded by Ricardo and Mill. Hence the crude illustrations used by them to transmit a complicated idea in simple arithmetical terms can be reproduced without unnecessary confusion. Mill clearly distinguished two separate conditions of international cost differences: equal differences and comparative differences. The illustrations employed by him follow.

Illustration I. Equal Differences.

DAYS OF LABOR REQUIRED TO PRODUCE EQUAL QUANTITIES OF CLOTH AND CORN IN POLAND AND ENGLAND

Country	Corn	Cloth
Poland.....	100 days	100 days
England.....	150 days	150 days

Under these circumstances there is no gain from trade. Suppose the quantities involved in the assumption to be 50 bushels of corn and 200 yards of cloth produced in each country, when there was no trade between them.

WITHOUT TERRITORIAL SPECIALIZATION

Country	Corn	Cloth
Poland.....	100 days labor, 50 bu.	100 days labor, 200 yd.
England.....	150 days labor, 50 bu.	150 days labor, 200 yd.
Total.....	100 bu.	400 yd.

WITH TERRITORIAL SPECIALIZATION

Country	Corn	Cloth
Poland.....	200 days labor, 100 bu.	
England.....	.....	300 days labor, 400 yd.
Total.....	100 bu.	400 yd.

In this case the comparative costs of the two articles in England and in Poland were supposed to be the same, though the absolute costs are different; *i.e.*, Poland's superiority over England in the production of corn was assumed to be of the same degree as her superiority in the production of cloth. On this supposition, as already stated, there would be no gain to either country by confining its labor to one of the two products and importing the other.[5]

Illustration II. Comparative Differences.

DAYS OF LABOR REQUIRED TO PRODUCE EQUAL QUANTITIES OF CORN AND CLOTH IN POLAND AND ENGLAND

Country	Corn	Cloth
Poland.....	100 days	100 days
England.....	200 days	150 days

Supposing as before the quantities involved in the assumption to be 50 bushels of corn and 200 yards of cloth, we find that the aggregates of corn and cloth produced are greatest when the countries specialize and trade.

[5] MILL, JOHN STUART, *Principles of Political Economy*, Bk. III, Chap. XVII, Longmans, Green & Co., Inc., New York, 1911.

WITHOUT TERRITORIAL SPECIALIZATION

Country	Corn	Cloth
Poland.....	100 days labor, 50 bu.	100 days labor, 200 yd.
England.....	200 days labor, 50 bu.	150 days labor, 200 yd.
Total	100 bu.	400 yd.

WITH TERRITORIAL SPECIALIZATION

Country	Corn	Cloth
Poland.....	200 days labor, 100 bu.	
England.....	. . . . .	350 days labor, 466⅔ yd.
Total.....	100 bu.	466⅔ yd.

According to this illustration, a day's labor produced more corn in Poland than in England. A day's labor also produced more cloth in Poland than in England. Poland had an advantage in the production of both corn and cloth, but she had a greater advantage in corn production than in cloth production. A day's labor produced twice as many bushels of corn in Poland as were produced in England and only 1½ times as much cloth. Consequently, more corn and cloth in the aggregate would have been produced in the two countries if Poland specialized in corn production and England specialized in cloth production. The net gain from trade indicated in the illustration was 66⅔ yards of cloth.

Mill was not content to stop with illustrations to show that there was a gain from specialization and trade. He raised the further questions: Just how was the gain divided between the trading countries? What proportion of the gain went to each country? The ratio of labor costs of production of corn and cloth in Poland, viz., 1 bushel of corn for 4 yards of cloth, was one limit to the possible ratio of exchange between the two countries. Poland would not pay more for cloth than it had cost her to produce it. The ratio of labor costs of production of corn and cloth in England, viz., 1 bushel of corn for 5⅓ yards of cloth, was the other limit to the possible ratio of exchange between the two countries. England would not pay more for corn than it had

cost her to produce it. Thus, if the exchange ratios were greater than 1 to 5⅓ or less than 1 to 4 there would have been no reason for trade between the two countries. The value of a bushel of corn, then, in terms of cloth would have been somewhere between 5⅓ yards and 4 yards.

If it be asked what country draws to itself the greatest share of the advantage of any trade it carries on, the answer is, . . . that the countries which carry on their foreign trade on the most advantageous terms are those whose commodities are in most demand by foreign countries, and which have themselves the least demand for foreign commodities.[6]

This is Mill's so-called "Equation of International Demand."

Mill concluded his exposition of the principles of international trade with an analysis of the so-called "price-specie-flow" theory.[7] Briefly, this theory holds (1) that the value of money when it consists of the precious metals, or of a paper currency convertible into them on demand, is entirely governed by the value of the metals themselves; [8] and (2) that an increase in the supply of the precious metals in relation to need for money raises prices, encourages imports, discourages exports, and causes precious metals to flow out of the country in settlement of an unfavorable balance of trade. Prices fall in the gold-exporting country and rise in the gold-importing country, and thus international price equilibrium is reestablished. Subsequent theorists attempted to harmonize Mill's barter terms-of-trade analysis with a marginal money cost-of-production theory of value and thus make it consistent with the price-specie-flow analysis, but Mill let the theory rest before attempting to carry it that far.

EVALUATION OF THE PRINCIPLE OF COMPARATIVE ADVANTAGE

Stated simply, the principle of comparative advantage is as follows: *A country tends to export those products in the production of which it has the greatest advantage or the least comparative disadvantage and to import those products in the production of which it has the least advantage or the greatest comparative disadvantage.*[9]

[6] MILL, *op. cit.*, Bk. III, Chap. XVII.

[7] Expounded earlier by David Ricardo. See Ricardo's "High Price of Bullion a Proof of the Depreciation of Bank Notes, 1810." *Works of David Ricardo,* ed. by J. R. McCulloch, London, 1846.

[8] See Chap. XII of this volume for further and more comprehensive treatment of the price-specie-flow theory of foreign exchanges.

[9] For further exposition of the principle of comparative advantage as developed by a neoclassical economist, see F. W. Taussig, *International Trade,* Chaps. I–X, The Macmillan Company, New York, 1927.

The output per worker employed in automobile manufacturing in the United States is greater than in Japan. So also is the output per worker employed in the manufacture of textiles greater in the United States than in Japan. But productivity of workers in the United States is relatively greater in the manufacture of automobiles than it is in the manufacture of textiles. In automobile manufacturing the productivity differential between United States workers and Japanese workers is greater than the wage differential. Hence United States automobiles are produced at a lower money cost than Japanese automobiles. These conditions prevail even though the United States automobile industry is among the highest wage industries in this country. In the textile industry the productivity differential between United States workers and Japanese workers is not so great as the money wage differential. Hence money costs of United States textiles are higher than money costs of Japanese textiles and, therefore, the United States imports textiles.

The case for territorial specialization and international trade is even stronger than the foregoing illustration suggests, when one country has an absolute advantage in one industry and another country has an absolute advantage in some other industry.[10] Japan, for example, with a dense population of patient, skillful workers and relatively few natural resources, was able, for many years, to export raw silk and manufactures requiring large amounts of hand labor per dollar of sales. Argentina, on the other hand, with a sparse population and an abundance of fertile agricultural land per capita, has long exported wheat and wool, in the production of which relatively little labor per dollar of sales is utilized.[11]

Economists of the present day accept the fundamental principle

[10] This may be thought of as a third aspect of comparative costs (or advantage) and has received more emphasis since Mill's time than it was accorded by Mill. It is commonly referred to as a condition of "absolute differences" in costs. In the illustration of Poland and England described above, absolute differences might be illustrated by assuming that Poland had an absolute advantage over England in the production of corn, *i.e.*, could produce a bushel of corn with less labor than could England; and that England had an absolute advantage over Poland in the production of cloth, *i.e.*, could produce a yard of cloth with less labor than could Poland. Under such conditions the aggregate production of corn and cloth in the two countries is increased by territorial specialization.

[11] Another example of absolute advantages is exchange of Canadian nickel for United States petroleum. Canada is deficient in petroleum resources, and the United States is deficient in nickel deposits.

that production advantages arise from territorial division of labor. However, they are aware of the fact that the law of comparative advantage, couched in terms of labor ratios, is not very realistic. As a result of efforts to apply the classical formulation of principles governing gains from international trade to present-day problems, the whole subject has been reexamined by thoughtful students, and tangible results have been achieved in the way of more realistic statements.

The older formulation of the comparative-advantage doctrine expressed costs in terms of human effort or sacrifice as measured by days of labor. Goods were supposed to exchange in domestic markets in proportion to the amounts of labor (homogeneous labor) embodied in them. Internationally, goods were presumed to exchange (within the limits of labor cost differences in various countries) in proportion to relative intensities of reciprocal demand. Present-day economic theory assumes that the ratios of exchange of goods, in both domestic and international markets, are in proportion to marginal money costs of production.[12] In addition to labor, a number of factors contribute to production costs. Outlays for dissimilar production factors are expressed in a common unit, money. Opportunity costs, measured in money units, determine the uses to which production factors are put. Present-day theory thus substitutes marginal money costs of production for homogeneous labor content as a standard for the determination of ratios at which various kinds of goods exchange in both domestic and international markets.

Gold prices of internationally traded commodities tend to differ in freely trading countries by relatively small amounts. Export commodities tend to sell in countries of origin for amounts only slightly below prices of such goods in freely trading import countries. Differences in prices of international commodities[13] between freely trading countries arise mainly from transportation costs and other expenses incidental to transfer of the goods from one country to another. Comparative advantage is reflected more largely by differences in labor efficiencies and in wage levels in the trading countries and by geographical concentration of the various industries than by differences in money prices of internationally traded goods in different countries.

[12] This statement applies to reproducible goods, which constitute the greater part of goods that enter the channels of trade, and it assumes perfect competition. The situation under noncompetitive conditions is discussed briefly on p. 120*ff*.

[13] An international commodity is one that freely enters the channels of international trade.

If marginal money costs [14] of producing a particular international commodity in two freely trading countries diverge by amounts much greater than carrying costs, equalizing economic forces are set in motion. These forces tend to initiate rearrangements in trade that continue until the volumes of goods of various classes produced in each country are consonant with near equality of marginal costs and prices in the two countries.[15] In the absence of customs tariffs and other artificial trade barriers, international commodity price differences between trading countries and money-cost differences (in terms of gold) at the margin in the various trading countries tend to be relatively small. The price and money-cost equalizing process takes place

[14] Marginal cost is the average cost of production per unit of product of those firms which, over a period of years, realize just enough profits to induce them to continue in business. This is the cost about which selling prices tend to fluctuate. Firms with lower costs realize more profits than marginal firms, their profit per unit of sales being the difference between their money cost per unit and the prevailing prices. Firms with per unit costs that exceed those of marginal firms will, in time, be forced either to reduce their costs or to discontinue production. This statement assumes that all firms operate under conditions of "decreasing and increasing costs."

For the purpose of international comparison money costs must be expressed, of course, in comparable units: dollars, pounds sterling, francs, or some other common denominator.

[15] In the case of goods produced under competitive conditions in all the trading countries, the fact is obvious that the ratios of exchange, both intranational and international, are approximately equal to the ratios of marginal costs of production of the goods traded. This conclusion rests on two conditions: (1) that prices and marginal costs of production in every producing region tend to equality and (2) that international prices tend to equality. In the case of goods that are not produced in all the trading countries, the ratios of exchange of those which are bought and sold internationally tend also to be in proportion to marginal costs of production. The reason is twofold: (1) Sale of international goods for substantially more than their marginal costs of production results in increased output in relation to other domestically produced goods, followed by changes in relative costs and prices of the classes of goods effected. (2) Sale of international goods for less than their marginal costs results in reduced production and changes in cost and price in relation to costs and prices of other domestically produced commodities. Substitution and shifts in production factors from one industry to another in the domestic markets of the trading countries tend to hold international, as well as purely domestic, goods at prices that approximate their marginal costs of production. The term "opportunity cost" has been used in this connection to indicate forces that condition expenses of production in situations where production factors are in demand for many competing uses.

See HABERLER, GOTTFRIED VON, *The Theory of International Trade,* Chap. XII, William Hodge and Company, Ltd., London, 1939.

through expansion of strong firms and bankruptcy liquidation of the weaker ones. The weak concerns (weak from a competitive point of view) may be forced out of business, or their costs of producing per unit may be reduced (by the writing down of the valuations of their fixed capital assets or otherwise). Thus as a result of cost adjustments necessitated by competition, international commodity price differences (in terms of gold) at the margin [16] in the various freely trading countries tend to be relatively small. It is not a wide price differential per se that stimulates the flow of trade from one country to another so much as it is desire on the part of low-cost producers to increase sales volume at world-market prices. Similarity of marginal money costs of production and similarity of prices of international commodities in the various trading countries are in harmony with the theory of comparative advantage, not in contradiction to it.

Comparative Advantage Rests on Principle of Proportionality. The foregoing conclusions and those to follow turn on the principle of proportionality. From an interregional or an international standpoint this principle may be stated simply as follows: *Disadvantage attends any excess or deficit in the supply of productive factors relative one to another.*[17]

It is common knowledge that different nations are differently endowed with the various factors of production.[18] Some countries have large populations and relatively meager supplies of agricultural and mineral resources: Italy and Japan, for example. Other countries have small populations in relation to available supplies of agricultural land and mineral resources. Political instability discourages capital from flowing to some countries whereas apparent stability of existing governments tends to encourage capital investments in other countries. For this and other reasons, capital is not distributed over the world in proportion to natural resources and populations. Furthermore, improved technical skills are not achieved at the same time and in the same degrees in all countries. In consequence of these circumstances, factors of production are available in substantially different proportions in the various commercial nations. The actual combination of productive factors in any particular country where capitalism is in vogue tends to be determined by judgments of business leaders who constantly seek to produce goods at money costs low

[16] See note 14, p. 110.

[17] DAVENPORT, H. J., *The Economics of Enterprise*, p. 423, The Macmillan Company, New York, 1919.

[18] Land, labor, capital, business and technical leadership.

enough to permit the goods to be sold at a profit. In a country like Italy, where labor is relatively cheap, those industries thrive best which employ relatively more labor and relatively less capital and natural resources than is the case in countries like the United States and Canada, where capital and natural resources are more plentiful in relation to available supplies of labor. In countries of the latter class, heavy, mass-production industries and agricultural staples industries tend to predominate. Examples are steel smelting and wheat growing. In countries of the former class (Italy, Japan, etc.) light industries tend to predominate in manufacturing and intensive industries in agriculture. Examples of comparatively light manufacturing industries are textiles, jewelry, hats, gloves, toys, pottery, and drugs. Agricultural emphasis in the densely populated countries tends to be placed more upon intensive undertakings (such as poultry raising and vegetable and fruit growing) and relatively less upon the growing of staples (such as wheat) than is the case in sparsely populated countries. These tendencies toward regional specialization result from the activities of businessmen who seek to maximize their profits by producing low-cost goods that can be sold at a profit.

Least Cost Combinations. In a free-market economy,[19] producers must combine available factors of production in such manner as to result in least money cost per unit of product if they are to maximize their profits. In a country where labor is abundant and relatively cheap, industries that can make profitable use of an abundance of cheap labor tend to predominate. Within such industries the most profitable producing units tend to be those in which natural resources, labor, capital, and management are combined in such fashion as to minimize money costs of production per unit of output. A clearer conception of the least cost combination of factors in a single producing unit may be had from the arithmetical illustration in Table 6.

The least cost combination of factors in Table 6 is $9,310 worth of labor and $5,740 worth of raw materials associated with the $10,000 outlay covering fixed costs. The least cost per unit of product is $3.58. More labor and raw materials or less labor and raw materials associated with the given expenditure for management and other relatively fixed costs results in costs per unit of product higher than $3.58. Given prevailing market prices for raw materials, labor, management,

[19] The free-market economy is one in which consumer choices, freely made, in the purchase of goods, on the one hand, and competitive activities of profit-seeking enterprisers to produce such goods at a profit, on the other hand, regulate production and direct the utilization of a country's productive factors.

and other requisites of production, and little or no control over such prices by any one producer, the producer has the problem of associating and utilizing these factors in a manner calculated to minimize money cost per unit of output.

TABLE 6. COST PER UNIT OF OUTPUT IN A PARTICULAR FACTORY IN THE SHOE-MANUFACTURING INDUSTRY OF A SPARSELY POPULATED COUNTRY

Salaries of management, taxes, interest on investments in fixed equipment, and other comparatively fixed costs	Variable costs		Units produced	Fixed costs per unit	Variable costs per unit		Total costs per unit
	Labor	Raw materials			Labor	Raw materials	
$10,000	$ 6,000	$4,000	5,000	$2.00	$1.20	$0.80	$4.00
10,000	7,500	4,800	6,000	1.67	1.25	0.80	3.72
10,000	9,310	5,740	7,000	1.43	1.33	0.82	3.58
10,000	10,650	6,375	7,500	1.33	1.42	0.85	3.60
10,000	11,620	6,942	7,800	1.28	1.49	0.89	3.66

If, by chance, the concern represented by the data in Table 6 is a representative firm, one that over a period of years earns just enough profit to keep it going, the sales price of the product will tend to be in the neighborhood of $3.58 per unit. If the product in question is an international commodity, produced in greater or smaller amounts in nearly all countries—ordinary shoes, let us say—selling prices and marginal costs of producing like quantities of shoes in the several freely trading countries will not vary much from $3.58 (gold) per pair. This statement assumes the firm in Table 6 to be a marginal firm in a low-cost country which has facilities for expansion of output for export.

Similarities in Marginal Costs of International Commodities in Various Trading Countries. The fact that marginal costs of producing international commodities in various trading countries are not very different is suggested by a comparison of prices of freely traded commodities. Wheat is one of the best examples of such a commodity for three reasons: (1) Wheat is grown in greater or less amounts in nearly every important commercial country. (2) It is a standardized commodity, thus affording reasonably accurate quality comparisons in various countries. (3) Wheat prices, over a period of years, are easily available for different markets. In terms of dollars in St. Louis, United States, and Liverpool, England, the prices are shown in Fig. 2,

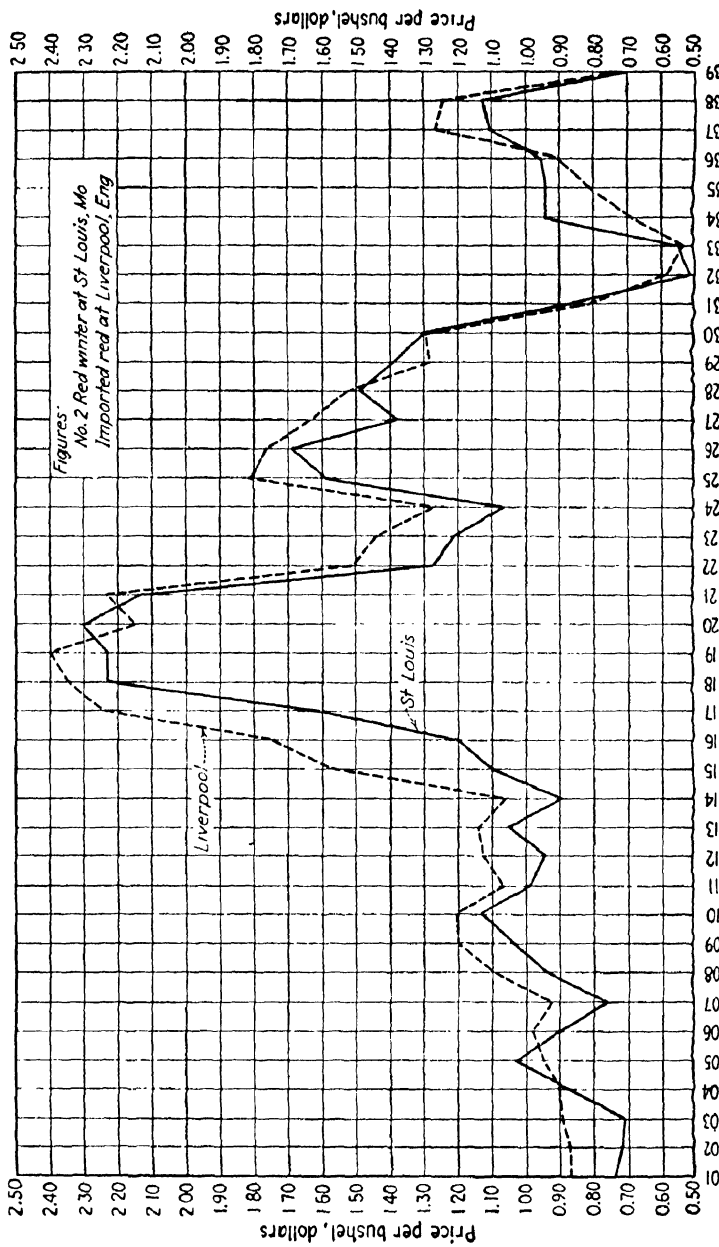


FIG. 2. WHEAT PRICES, ST. LOUIS, U.S.A., AND LIVERPOOL, ENGLAND. CROP YEAR AVERAGES, 1900–1901 TO 1938–1939.

SOURCE: *Agricultural Statistics*, 1936 and 1942, U. S. Department of Agriculture. Liverpool market closed, September, 1939.

year by year from 1900 to 1939. In spite of the fact that Great Britain imports wheat, she produces a substantial amount at home each year. Before the First World War, when wheat entered the British market substantially free of import tariff duties, wheat prices in Liverpool year after year were above those in St. Louis by amounts approximately equal to the costs of moving wheat from the one market to the other. The only year between 1900 and 1913 when wheat prices in St. Louis were above those in Liverpool was the crop year 1904–1905; in fact, the relationship of St. Louis wheat prices to Liverpool wheat prices held reasonably stable right through the First World War and the interwar period. Had marginal costs of producing wheat in England been very much more than prices of wheat in the Liverpool market, English farmers would have ceased to grow wheat altogether, or, at least, they would have reduced the acreage planted much more than they did prior to reestablishment of protection during and after the war.[20]

Although price data for all international commodities in the various markets are not easily available for comparisons similar to that made for wheat in St. Louis and Liverpool, such information as is available suggests that marginal costs of production in the various countries and prices in the various countries do, in the absence of tariffs, bounties, and other trade restrictions, tend toward near equality, as is the case for wheat. This conclusion does not necessarily mean that land, labor, capital, and other productive factors are associated in equal proportions in the production of similar goods at near-equal marginal costs. If the factors of production were freely mobile, internationally, factor combinations would be approximately the same in similar industries in the various trading countries. However, the factors of production are not freely mobile internationally; some of them, particularly labor, are highly immobile. As a result, factor combinations may be very different in the different countries, even though marginal costs of producing similar commodities are nearly the same.

Mobility of Factors in Relation to Least Cost Combinations. Labor is among the least mobile of the several productive factors. Custom, home ties, racial bonds, lack of knowledge of conditions elsewhere, and legislated immigration restrictions in sparsely settled countries, all

[20] Acreage planted to wheat in Great Britain in five typical years was as follows: 1900, 1,845,000 acres; 1910, 1,809,000 acres; 1920, 1,929,000 acres; 1930, 1,400,000 acres; 1938, 1,912,000 acres. *Statistical Abstract of the United Kingdom.*

act to prevent mass migration of populations from overcrowded nations. One might argue that agricultural land, mineral deposits, and other natural resources are even less mobile than populations. In a sense this is true. However, the first derivatives of agricultural land and mines move internationally more freely than do populations. In case of the extractive industries—agriculture, mining, lumbering, fishing—land is less mobile than labor. In case of manufacturing industries, labor is less mobile than raw materials, *i.e.*, metals, textile fibers, fuels, etc. Crude products of agriculture, such as wheat, raw cotton, and unmanufactured wool; metals, such as iron ore, copper ore, or blister copper; and fuels, such as crude petroleum and coal, are among the leading international commodities.

Capital, like the raw materials of manufacturing, is more highly mobile internationally than is labor. Interest rates tend toward equality in different countries, where competition in comparatively free markets is a characteristic institution and where differences in political stability are not extreme. When a country rich in natural resources is in the early stages of settlement and industrialization, returns on capital investments are likely to be somewhat higher than are returns on capital in industrially older nations.[21] However, if political conditions in the new country are stable and investments reasonably secure, capital flows to it from older countries where interest rates are lower. In time, yields on investments in the new country approach levels of near equality with those in the older country. For purposes of indicating divergencies of interest rates and yields on investments in various countries, average rates of interest on the face values of certain government bonds and average yields on the market values of these bonds for the period 1901 to 1913 are given in Table 7.

Differences among yields on bonds of the United Kingdom, France, and the United States as listed in Table 7 are small, the maximum difference being about ¼ of 1 per cent. The largest difference in yield indicated in the table, 2 per cent, is between British consols and Brazilian bonds. This difference may be accounted for in large part by inequality in the risk factor between investments in Great Britain and Brazil. Magnitudes of international capital movements are treated elsewhere in the present volume.[22] The point of emphasis here is the tendency for capital costs, like the costs of international

[21] In the older countries relatively more capital has, in all probability, already been associated with available natural resources.

[22] See Chap. XXVII.

commodities, to seek uniformity in world-wide markets, as a result of international mobility of capital.

A third production factor, technical ideas, appears in times gone by to have been comparatively immobile, at least for short periods of a few years or a few decades. However, improved communications facilities make possible at the present time comparatively quick acquisition of new technical ideas by all the more progressive nations. Technical ideas are at present relatively mobile.

TABLE 7. RATES OF INTEREST ON GOVERNMENT SECURITIES IN A NUMBER OF COUNTRIES AND AVERAGE YIELDS ON THESE SECURITIES FOR THE PERIOD 1901 TO 1913 *

Country and issue	Rate of interest, per cent	Average yield, per cent
Brazil, 1889	4	4.94
Argentina, 1886–1887	5	4.93
China, gold	4½	4.74
Japan, sterling	4	4.73
Russia	4	4.43
Hungary, gold, 1881–1892	4	4.43
Austria, gold, 1876	4	4.07
German bonds	3	3.54
Cape of Good Hope	3	3.47
New Zealand	3	3.41
India, stock	3	3.36
United States, 1925	4	3.21
Canada, stock	3	3.15
France	3	3.12
United Kingdom, consols	2½	2.94

* SOURCE: Report of the Board of Inquiry, Ottawa, Canada, on *Cost of Living*, Vol. II, pp. 707–716, 1915, as adapted by Warren and Pearson, *Prices*, p. 277. Used through the courtesy of Messrs. Warren and Pearson.

Aside from mines, agricultural land, and other immovable resources that contribute to primary production, labor, as already stated, appears to be the least mobile of the factors of production employed in modern industry. In consequence, and as already remarked, light industries that utilize relatively large amounts of labor tend to gravitate to densely populated, low-wage countries if artificial barriers against movements of capital, raw materials, and finished goods do not prevent. Illustrations are the rapid growth of cotton and wool

manufacturing in Japan and the rapid growth of the rayon industry in Italy.[23]

As a result of labor immobility (and to a less extent costs of transporting fabricating materials, fuels, and finished goods) least cost combinations in a particular industry may be quite different in different countries. The arithmetic example of least cost combination presented in Table 6 might take on some such characteristics as those exhibited in Table 8 if the industry in question were being examined in a more densely populated country than that represented in Table 6.

TABLE 8. COST PER UNIT OF OUTPUT IN A PARTICULAR FACTORY IN THE SHOE-MANUFACTURING INDUSTRY OF A DENSELY POPULATED COUNTRY

Salaries of management, taxes, interest on investments in fixed equipment, and other comparatively fixed costs	Variable costs		Units produced	Fixed costs per unit	Variable costs per unit		Total costs per unit
	Labor	Raw materials			Labor	Raw materials	
$5,000	$ 9,500	$4,000	5,000	$1.00	$1.90	$0.80	$3.70
5,000	11,700	4,800	6,000	0.83	1.95	0.80	3.58
5,000	14,560	5,740	7,000	0.71	2.08	0.82	3.61

The marginal cost per unit of producing shoes is the same in Table 8 as it was in Table 6, *viz.*, $3.58. Relatively more labor is associated with relatively less capital and management in the Table 8 illustration. Labor is abundant, and wage rates are relatively low in the

[23] In the United States in the interwar period labor expenses ranged from about 25 per cent to more than 50 per cent of total expenses of production in cotton manufacturing and rayon industries, as compared with labor expense of only about 5 to 10 per cent of total expense in the blast-furnace industry, an average labor expense of about 20 per cent in "iron and steel and their products" industries, and 15 to 20 per cent in the aluminum industry. The foregoing data are based on Census of Manufactures statistics. The proportions of labor expense to total expense in these industries in other countries varied with the availability and relative wages of labor, and prices of raw materials, fuels, capital, and other requisites of production and their association in least cost combinations.

Between 1913 and 1930 rayon output in Italy increased from about 200,000 metric tons to approximately 30,000,000 metric tons per annum. In the United States, where the rayon industry was protected by import tariffs, the increase in output during this period was from about 700,000 metric tons to approximately 53,000,000 metric tons per annum. The rate of increase was greater in Italy than in any other country. Likewise, the rate of increase in output of cotton and wool fabrics was greater in Japan in the decades before the Second World War than in other countries.

second illustration. If a day's labor produces five pairs of shoes in the first illustration (Table 6), the wage rate may be $6.65 per day. If in the second illustration (Table 8) a day's labor produces two pairs of shoes, the wage rate may be only $3.90 a day. In general, wage rates and labor efficiency tend to be low in the country with a large population and a scarcity of raw materials, even though raw materials are freely available for purchase abroad at world-market prices. Conversely, the country with an abundance of natural resources and a relatively small population will have a relatively high wage level if its people have or can secure capital, technical leadership of a high order, and business leadership of a high order. The country with a high wage level may have large and profitable mining industries, large and profitable mass-production manufacturing industries, and profitable extensive farming industries. Differences in national prosperity are conditioned more by differences in factor combinations than by differences in money costs of production. Also differences in factor combinations are more significant than differences in money costs in determining both the geographical location of industries and the flow of international trade. Minimization of artificial trade barriers tends to result in maximization of the volume of international trade, maximization in the degree of territorial specialization, and minimization of differences in factor combinations in a particular industry in different countries. In order for territorial division of labor to be maximized by the development of light manufacturing industries in countries with an abundance of cheap labor and relatively little natural resources, these countries must be able to purchase fabricating materials and fuels at world-market prices, and they must have access to foreign markets for their finished goods. Without access to foreign markets for finished goods, the densely populated country is likely to be without the necessary purchasing power with which to buy foreign raw materials. The advantage of free trade and a maximum degree of territorial division of labor arises from more effective combination of production factors in all the trading countries and a tendency thus to increase the combined productions of such countries, as illustrated hypothetically by Mill.[24]

Comparative Advantage, a Labor Efficiency Principle. "Comparative advantage" in the international sense in which the term is used in classical economic theory signifies a relatively high degree of labor

[24] The qualifying term "tendency" is here employed because labor efficiency is conditioned by national industrial stability and many other factors in addition to territorial specialization.

efficiency. The industry with the greatest advantage is the one in which, because of abundant natural resources, superior scientific and business leadership, or some other favorable condition, labor is most efficient and wages are relatively high. "Least comparative disadvantage" is a phrase employed to refer to the most efficient industry in a country where, because of a dearth of natural resources, inadequate technical knowledge, ineffective business leadership, or some other cause, productivity of labor and wages are, in general, low. Industries with the greatest advantages or the least comparative disadvantages tend to be the export industries and, for the country concerned, the industries that contribute to establishment of the highest competitive wage level possible for that country.

International trade permits every country to employ its labor force in those industries where labor efficiency tends to be greatest. Where trade is free, prices of international commodities are determined by world-wide conditions of supply and demand. The country with superior labor efficiency in particular industries can pay relatively high money wages (in terms of gold), produce its export goods at marginal money costs no higher than marginal costs of similar goods in import countries, and sell its goods at world-market prices. Thus "comparative advantage," in the sense in which the term is employed in international trade, rests upon comparative labor efficiency. Labor efficiency, in turn, is conditioned in no small part by factor combinations. As already stated, money costs of production (at the margin) and prices of international commodities tend toward near equality in freely trading countries. Labor efficiency and wages in the various trading countries do not necessarily tend toward equality.

Exchange Values. As already stated, value theory as developed by present-day investigators applies alike to international purchase and sale and domestic purchase and sale. Value analysis may be divided into three aspects, dependent upon the presence of effective competition, the absence of competition, or the presence of a state of imperfect competition or partial monopoly. Competitive value tends to rest upon marginal cost of production, *i.e.*, average costs [25] per unit to produce, on the part of firms that, over a period of years, realize little or no profit over and above expenses of management, going rates of return on capital investments, and other outlays incident to continued operation. When profits in a competitive industry are greater than

[25] This statement applies to conditions of decreasing and increasing costs of particular firms, the condition that is most typical of modern industry.

those in surrounding industries, the high-profit industry tends to expand and competition tends to reduce prices of the goods produced by it. Competitive firms that do not keep their average costs per unit to produce equal to or below average price per unit of goods sold are called "submarginal" firms. A submarginal firm will, in time, be forced to find ways and means of reducing its costs or go out of business. Competition among low-cost firms and withdrawal of submarginal firms are the flexible elements in a competitive economic system which, over a period of time, cause the lower limit of prices of reproducible goods to fluctuate about costs per unit to produce on the part of the marginal firms, as defined.

Assumptions underlying the foregoing statement of value determination are essentially those associated with "free" or "perfect" competition. When competition is not free, as is often the case, prices do not necessarily tend toward average costs per unit to produce on the part of marginal firms. Possibly the most characteristic market condition of modern times is that where gradual and imperceptible gradations are to be found all the way from a condition of near-perfect competition in some industries to a condition of complete monopoly in others. A monopoly, as the term is employed in economics, is a condition of complete and unified control of the supply of particular kinds of goods. If the total supply of a product is controlled by a unified group of producers, their best interest, ordinarily, is to control the flow of the product to market in such a manner as to maximize their net profits. An example of a monopolized industry is diamond production. The British South African diamond mines are so far superior to any other known diamond mines in the world as to place the group who exercise unified control of these mines in a monopolistic position in the sense that effective production control is possible. Furthermore, the two other essentials of an effective monopoly are present in the case of diamonds; (1) no low-cost substitute exists and (2) the demand for diamonds is inelastic.[26] Monopolized goods tend to exchange in international trade at ratios determined by the prices per unit that maximize monopoly profits.

Between the two extreme market conditions just cited, the one described as free competition, the other as monopoly, a great many

[26] If the demand for diamonds were highly elastic, monopoly might exist, but the fact that higher prices would tend sharply to reduce the number of diamonds sold under this condition would tend to narrow the range of price increase that would be profitable to the monopolist.

degrees of imperfect competition or partial monopoly exist in both domestic commerce and international trade.

Division of Gains from Trade. Without attempting to review the whole complicated theory of market value, we may cite a number of generalizations that have an important bearing upon the question as to how the gains from international trade are divided among the trading countries.

1. Low-cost production and international competition tend to affect export prices of competitive international commodities much as low-cost production and competition affect domestic prices of competitive domestic goods. If, for example, an international commodity can be produced competitively in a number of countries, marginal cost of production in some one of the low-cost producing countries that has ample resources for expansion for the industry is likely to be the point toward which export prices of the commodity, wherever it be produced, tend to gravitate.[27] Low-cost production of cotton textiles in Japan, for export, is tending, for example, to force British textile exporters either to meet Japanese prices or to lose a part of their foreign markets. So also low-cost production of wheat in Canada, Argentina, and elsewhere is tending to force United States exporters either to meet Canadian and Argentine price competition or to lose a part of their foreign markets for wheat. What is true in this respect in cotton textiles and wheat markets is true also in greater or less degrees in the marketing of other international commodities.

2. The volume of demand for particular types of international goods and its elasticity affect the amount of import goods purchased abroad and the amount of export goods sold abroad. Thus volume of demand and its elasticity condition the amounts of labor and other production factors that can be concentrated in industries of relatively high productivity. Since gains from territorial specialization and international trade arise from concentration of production factors in industries with relatively high productivity, both the volume of demand for particular types of goods and its elasticity condition the amounts of such gains that may be realized.

3. The elasticity of demand for international goods affects the amounts by which prices of such goods produced under monopolistic conditions may be held above marginal cost of production in the low-cost country, much as elasticity of domestic demand affects monopoly

[27] Allowance being made for differences in transportation and other marketing costs.

prices of purely domestic goods.[28] International goods produced under conditions of imperfect competition do not necessarily exchange at ratios that tend to be proportional to marginal cost of production under competition, *i.e.*, average costs of production of representative concerns. Nevertheless, since goods are not purchased abroad unless foreign prices are less than domestic prices of comparable goods, the conclusion that gains from international trade are divided among the trading countries holds true even though the goods entering the channels of international trade are produced under monopolistic or semi-monopolistic conditions.[29]

4. Since the gain from territorial specialization is not subject to precise measurement and since its division among several trading countries is conditioned by a complexity of price-making forces, each country's share of the gain is not subject to accurate measurement.

5. One can conclude with certainty, however, that, under conditions of equilibrium, international specialization and trade contribute to increased aggregate production in the trading countries and that this production increase (which represents the gain from trade) is in most cases divided among the trading countries. Rarely, if ever would any one of the trading countries fail to share in greater or less degree in the gain from trade. In no case could any one of them lose from territorial specialization and trade if it may be assumed that valuable production factors are fully employed in all the trading countries.

Even though the amounts of increase in total production arising from territorial specialization and trade may be neither measured nor prorated to the several trading countries with a high degree of accuracy, it is possible to determine whether a country's terms of international

[28] Furthermore, if competition among the several producing and exporting countries is not free, a demand that is not highly elastic combined with decreasing production costs in an exporting country may encourage dumping. "Dumping" may be defined as sale abroad at prices below those prevailing in the producing country. In this case, different degrees of elasticity of demand in exporting and importing countries may affect export prices. Also import tariffs imposed by importing countries may affect export prices of goods produced under conditions of increasing and decreasing costs.

[29] The foregoing conclusions are based on assumptions of full utilization of valuable production factors in all the trading countries. If, because of economic disequilibrium, valuable production factors are not fully employed in some or all of the trading countries, the gains from international trade may be zero or negative. Furthermore, there is no basis for concluding that under conditions of widespread disequilibrium, gains or losses from international trade are shared by the trading countries. See Chap. XV of this volume for a discussion of disequilibrium.

trade are tending to become more favorable or less favorable. It is common knowledge that in international trade, as in domestic trade, an industry that can produce at relatively low cost goods which are in relatively great demand and which are subject to relatively slow increase in supply is in a favored trading position. Conversely, an industry producing goods the demand for which does not increase so rapidly as supply and the prices of which sink lower and lower in relation to costs in the less efficient establishments is likely to be faced with the necessity of liquidating high-cost units. These liquidation processes may lead to acute conditions in geographical areas dependent largely upon one or two export industries.

CHAPTER XI

COMPARATIVE COSTS AND NATIONAL POLICY

The theory of comparative costs may be thought of as the central core about which nineteenth-century international trade theories developed and expanded. The salient features of the body of theory expounded by Ricardo and Mill may be summarized as follows:

1. Production opens a demand for products. Say's law reiterated by Mill.

2. The ultimate advantage of foreign commerce consists in the imports.

3. Labor costs determine relative advantages and disadvantages of countries in the production of particular kinds of goods. When international trade is unrestricted, a country exports goods in the production of which it enjoys the greatest comparative advantage or has the least comparative disadvantage.

4. Labor and capital are much more mobile within a country than among countries.

5. International trade, by encouraging territorial division of labor, increases aggregate production of the trading countries and makes for greater harmony of international relations.

6. Division of the gains from international specialization and trade depends upon relative intensities of demand of the trading countries for the various kinds of goods traded. Mill's Equation of International Demand.

7. Prices in different gold-standard countries are kept in equilibrium by specie movements and the effect of an increase or a decrease in specie upon the value of money in a country. The price-specie-flow theory of international prices.

The theory of international trade as developed and explained by Ricardo and Mill was criticized, refined, and modified in minor respects before the end of the nineteenth century by Cairnes,[1] Marshall,[2]

[1] CAIRNES, JOHN ELIOT, *Some Leading Principles of Political Economy*, Harper & Brothers, New York, 1874.

[2] MARSHALL, ALFRED, *Principles of Economics*, Macmillan & Co., Ltd., London, 1890.

and others. Basically, however, it remained the accepted philosophical justification for the international trade policies followed by Great Britain during the major part of the nineteenth century. The dominant factor in these policies was the persistent trend toward freer and more extensive international trade. Habitual modes of practice that have become anchored in legislative statutes change slowly. Smith, Ricardo, Mill, and half a century of eroding time were required to sweep away a tariff system in Great Britain inherited from the mercantile period. The industrial stage was set for free trade early in the nineteenth century; the last of the important tariff restrictions in Great Britain were revoked after the middle of the century.

During the period from 1815 to 1914 Great Britain was engaged in no major war. However, the aftermath of the Napoleonic Wars was a contributing cause of a decade of deep depression at the beginning of the period. Great Britain's national debt in 1816 was approximately 878 million pounds sterling; the tax burden was heavy. Several hundred thousand men[3] had returned from war to be reabsorbed in industry. Thousands of domestic manufacturers had lost their markets through the cessation of demand for army clothing and armaments. The currency was inflated.[4] In spite of an increase in prohibitions upon the importation of corn, in 1815 agriculture was depressed. Large numbers of workers in the iron and textile trades could not find employment.[5] As is usually the case in time of extreme business depression, many remedies were suggested, among which in this case was free trade. In 1821 a general plan was laid before Parliament for revision of the navigation laws. The recommendations were divided into two parts: (1) concerning clauses of the Navigation Act which applied to intercourse with foreign nations and (2) dealing with laws relating to colonies, coasting trade, fisheries, and registry. In 1822 acts which prohibited commerce with the Netherlands and the German states and which restricted trade with Russia and Turkey were repealed. The number of articles of European produce that,

[3] The total population of the United Kingdom in 1816 was between 19 and 20 million.

[4] The Bank Restriction Act passed in 1797 and renewed from time to time until 1820 in effect established an inconvertible currency of bank notes. PAGE, WILLIAM, *Commerce and Industry,* pp. 41, 42, Constable & Co., Ltd., London, 1919.

[5] Taking the Birmingham district as a fair sample of the iron industry, out of a population of 84,000 persons about 27,500 received parish relief. One-third of the working people were wholly out of employment and the remainder were on part time. In the textile industry workers thrown out of employment by the introduction of machinery could not find work in other trades. PAGE, *op. cit.,* pp. 31, 32.

under the old law, could be imported only in British ships or in ships of the country of origin was reduced and restrictions upon imports from Asia, Africa, and America were relaxed. In 1825 the trade of the British colonies was thrown open to ships of all states which had colonies and which granted like privileges to British ships. In 1824, 1825,[6] 1826, and 1827 import duties of various manufactures and raw materials were revised downward; among them, metals, wool, silk, and timber. The resistance to a lowering of tariffs on manufactures was on the whole less than that offered to a lowering of tariffs on home-produced agricultural commodities, because, apparently, manufacturers were better able than farmers to meet foreign competition. The severest part of the struggle for free trade centered about the corn laws.

In the Reform Parliament (1830–1841) liberal legislation continued bit by bit; duties on glass, soap, paper, and other manufactures were lowered or removed, but the corn laws resisted assault. However, the fact that Great Britain could not largely increase her exports of manufactures without largely increasing her imports was obvious. Foodstuffs were logical imports. In the 1840's such export industries as hardware, nail making, cutlery, textile manufacturing, and shoemaking were severely depressed. Food costs were excessive, and the agitation for repeal of the corn laws grew in violence. The break came with the passage of a bill providing for a sliding scale of duties on corn in 1842.[7] In spite of the protectionist arguments that free trade would be the ruin of agriculture, that land would be thrown out of cultivation by the competition of corn grown in Europe and United States, and that political power would be transferred from the agricultural to the industrial class, a proposal for further reduction in the corn duties looking to free trade at the expiration of a 3-year period (1849) was passed in 1846.[8] Thus by the middle of the nineteenth century Great Britain's foreign commerce was reasonably free from trade restrictions imposed at home.

[6] Under the act of 1825 over 1,100 customs acts then in force were repealed, thus sweeping away laws of the customs that had accumulated during the course of 550 years. PAGE, *op. cit.*, p. 54.

[7] In the Custom House account of 1840, 190 principal articles were enumerated. Over 93 per cent of the duties were collected on 18 of these articles: corn, sugar, tea, molasses, tobacco, spirits, wine, timber, coffee, cotton, wool, butter, tallow, silk, currants, raisins, seeds, and cheese. PAGE, *loc. cit.*

[8] The duty on corn was reduced in 1849 to a nominal figure; in 1869 it was entirely repealed.

EFFECTS OF GREAT BRITAIN'S FREE-TRADE POLICY

Paralleling and following the swing from a highly protectionist policy in Great Britain to a low tariff policy went five developments of particular interest from the point of view of the effects of international commercial policy upon industry and trade. (1) Joint-stock trading and manufacturing companies increased in number and magnitude. (2) Exports of manufactured goods and imports of raw materials and foodstuffs increased. (3) Agriculture declined in relation to manufacturing. (4) Capital exports increased. (5) For a time Great Britain's balance of trade was increasingly favorable.

The joint-stock trading company as a type of business organization was not new to nineteenth-century England, many such companies having been engaged in overseas trade during the seventeenth and eighteenth centuries. However, few joint-stock companies were formed for carrying on manufacturing in England prior to about the end of the first quarter of the nineteenth century. Reduction of interest rates paid on government bonds in 1822 and 1824, the downward trend of tariffs beginning about this time, repeal of the law of 1720 requiring joint-stock companies to be incorporated, increase in the amount of capital needed in manufacturing ventures, and various other causes resulted in a rapid growth of joint-stock companies and a widening of their field of activity. In 1825 it was estimated that at least 300 or 400 such companies were in operation in Great Britain.[9] In 1855 a bill was passed to limit liabilities of members of companies under certain conditions. By this time Adam Smith's idea that joint-stock companies, except in business and banking, could not be successful without monopoly privileges[10] had been abandoned. In 1862 the Joint-Stock Companies Act made registration compulsory where the company consisted of 20 or more persons. Twenty-four years later, in 1884, there were 8,692 registered companies in Great Britain with paid-up capital of £475,551,000.[11] In 1900 the number had increased to 29,730 registered companies with paid-up capital stock of £1,622,-641,000.[11]

Manufacturing industry in Great Britain increased rapidly during and after the period of downward tariff revision. In 1835 there were 3,156 textile factories in the United Kingdom employing an aggregate

[9] PAGE, *op. cit.*

[10] Most of the early trading companies, the East India Company for example, enjoyed certain monopoly rights.

[11] PAGE, *op. cit.*, p. 124.

of 355,000 persons. By 1870 the numbers had increased to 6,807 and 907,000,[12] respectively. Pig-iron production increased from 1,000,000 tons in 1835 to approximately 6,000,000 tons in 1870.[13] The value of exports of cotton and woolen goods and yarns increased from approximately £29,000,000 in 1835 to approximately £98,000,000 in 1870.[14] Between these dates, 1835 and 1870, the value of iron and steel exports increased from £1,600,000 to £23,500,000; that of cutlery, hardware, implements, and instruments from £1,800,000 to £4,100,000. Agricultural growth did not keep pace with manufacturing. Total acres in the United Kingdom in crops between 1866 [15] and 1890 declined from 11,494,000 to 9,574,000. Wheat production between 1884 [16] and 1900 declined from 10,258,000 quarters to 6,790,000 quarters.[17] Wheat imports to the United Kingdom increased from 242,000 quarters in 1836 to 8,611,000 quarters in the 1870's. Wool imports increased from 64,240,000 pounds in 1836 to 263,250,000 pounds in 1870.[18]

A complete balance sheet of international payments for Great Britain extending back to the beginning of the nineteenth century is not available. The fragmentary data that are available indicate that capital exports (foreign loans) played an important role in determining the direction of net merchandise movements. Merchandise exports exceeded merchandise imports every year from 1815 to 1853; thereafter, imports exceeded exports each year from 1854 to 1914.[19] During the first period capital exports appear to have exceeded interest receipts and collections of principal on earlier loans; during the second, interest and principal receipts appear to have increased in relation to new issues. In the early stages of a country's experience with an increasing volume of foreign loans, when payments of interest and repayment of principal by borrowing countries are less, annually, than new loans, the effect is to increase merchandise exports in relation to imports. As time goes on and the loans continue, the accumulation of principal becomes so large that annual payments of interest made by the borrowing countries to the lending country exceed new loans. At this point merchandise imports of the lending country tend to exceed merchandise exports.

[12] *Ibid.*, p. 229.
[13] *Ibid.*, p. 180.
[14] *Ibid.*, p. 133.
[15] *Ibid.*, p. 184. Data for years before 1866 not readily available.
[16] *Ibid.*, p. 185. Data for years before 1884 not readily available.
[17] *Ibid.*, p. 216. Wheat prices were 48*s.* 6*d.* in 1836 and 46*s.* 11*d.* in 1870, per quarter.
[18] *Ibid.*, p. 140.
[19] *Ibid.*, pp. 70, 72.

During the period from 1815 to 1853 British capital flowed east and west, to Europe and to America, for the financing of governments, the building of transportation systems, and the equipping of industrial undertakings with improved machinery. The magnitude of capital movements from England to Europe and America during the first decade following the end of the Napoleonic Wars is suggested by the amount of loans raised in England for foreign governments from 1818 to 1825. These data are summarized in Table 9.

TABLE 9. LOANS MADE BY ENGLAND TO FOREIGN GOVERNMENTS OF EUROPE AND SOUTH AMERICA, 1818 TO 1825 *

Country	Amount of Loan
Europe:	
Prussia	£6,540,000
Spain	7,320,000
Naples	6,426,000
Russia	2,250,000
Denmark	4,219,000
Portugal	1,305,000
Austria	2,870,000
Greece	1,610,000
South America:	
Colombia	5,844,000
Chile	700,000
Peru	1,491,000
Buenos Aires	850,000
Brazil	2,500,000

* HOBSON, C. K., *The Export of Capital*, p. 101, Constable & Co., Ltd., London, 1914, by permission of the publisher.

Here is an aggregate of some 44 million pounds of loans to European and South American governments. In addition some 5 or 6 million pounds of loans were made to Mexico and Central American governments during this period, and investments of an indeterminate amount were put into mining companies, shipping companies, and other industrial undertakings in foreign countries. After about 1825 loans extended by the British for the construction of canals and establishment of a banking system in the United States increased at a rapid rate. It has been estimated that European holdings of United States government and corporation bonds and stocks in 1839 (a large part of which were held in Great Britain) amounted to 200 million dollars.[20] In the 1840's and 1850's Great Britain made large loans to Belgium, France,

[20] HOBSON, C. K., *The Export of Capital*, p. 111, Constable & Co., Ltd., London, 1914.

and Germany for railway construction. Even though the records are not complete, the fact is obvious that British capital flowed out in large amounts during the 38 years after 1815 prior to the shift in merchandise trade balance.

After 1853 capital exports continued to increase in amount but not, apparently, at a rate of acceleration sufficiently great to prevent a constantly accumulating volume of annual receipts on account and a swing from a merchandise export balance to a merchandise import balance. Hobson [21] estimates British capital exports from 1870 to 1909 to have been of the following magnitudes:

Years	Exports of Capital
1870–1879	£288,900,000
1880–1889	422,400,000
1890–1899	362,000,000
1900–1909	653,900,000

In connection with the question of capital exports and British trade balance, Taussig draws the following conclusion: [22]

The excess of imports which developed during the second half of the century is easily explained, or at least easily interpreted. It was the natural result of two circumstances. One was the stage which Great Britain had reached as an international lender—the stage of maturity so to speak. The process of making loans to foreigners had been going on for many years, and had been on a large scale from 1830 to 1850. Capital had been invested in the Continent of Europe, especially for railway construction, and it had been invested also over-seas, in North and South America. The American borrowings of all kinds were heavy after 1830; some of them with profitable results, others with disaster. Taking the operations as a whole, they had been remunerative, and a growing stream of payments of interest and income was setting in toward the lending country. . . .

A second factor was the new position which Great Britain's shipping trade attained, or, to be more precise, the accentuation of its already dominant position. British ships had long done more than their share—their "fair" share of one half—in carrying the imports and exports. With the advent of steam, and especially with the advent of iron steam-ships, an even greater part of the country's own carrying to and fro was done in British ships and in the outside carrying trade—that between third countries—a similar extension took place. This item also reflected itself in the excess of merchandise imports.

[21] *Ibid.*, p. 223.

[22] TAUSSIG, F. W., *International Trade*, pp. 237–238, The Macmillan Company, New York, 1927. Quoted by permission of the publishers.

The phrase "external economic expansion" describes what was happening to the economy of the United Kingdom in the nineteenth century. Agriculture gave way to manufacturing. Human labor was supplemented with steam-driven mechanical labor. Political domination of a landlord class was superseded by political domination of a banking-trading-manufacturing class. British machines were sold on credit to less industrialized regions in all parts of the world while British culture and influence expanded in an ever-widening circle.

British investors exported between 1815 and 1875 a capital surplus amounting to about half a billion pounds. . . . To a considerable extent the surplus consisted in enterprise, in creations of credit, in capital goods. . . . It involved financing on a large scale. It gathered great resources under the control of bankers who were more interested in employing them abroad than at home. . . . Imperialism was not a prominent factor in the movement of British capital. Nor was political authority interposed to ensure its profits abroad. Only sporadically, in Canada, in India, in Turkey and Egypt, London capitalists showed a disposition to control the economic life of distant countries thru the action of their money market, or less directly, thru the policy they could persuade statesmen to adopt. . . . London was able to remain until 1914 the world's leading money market. . . . Foreign income and capital were incessantly withdrawn from Europe and put to work in South America, in the Dominions, in the United States, and finally in the development of the tropics and the Far East. They were put to work in the interest of binding markets to the British mill and in developing sources of supply for foodstuffs and raw materials.[23]

Capital flowed from Great Britain to less intensively cultivated parts of the world in response to forces that economists describe as the "principle of proportionality of the factors of production." This principle calls attention to a stage in economic expansion where additions of any one production factor, in the productive process, at a more rapid rate than additions of associated factors, tend to result in less than proportionate increases in output. The United Kingdom is a small country measured in square miles of area. Its area in the nineteenth century was only about 94,000 square miles. The population increased from approximately 19 million in 1811 to approximately 27 million in 1850 and to 40 million in 1900. Capital appears to have increased about as fast as population or possibly at an even greater rate.[24]

[23] JENKS, LELAND HAMILTON, *The Migration of British Capital to 1875*, pp. 333–335, Alfred A. Knopf, Inc., New York, 1927, by permission.

[24] Population in the United Kingdom increased at a rate of 12 to 15 per cent per decade in the nineteenth century. Capital also increased. The rate of in-

Natural resources in certain foreign countries, the United States for example, were much greater in relation to both capital and labor than in Great Britain. As capitalistic techniques of production came to be employed in such countries, both capital and labor migrated to them because of the possibility of higher productivity. Evidence of the greater productivity of capital appeared both in high interest rates and in speculative gains sufficient to induce British citizens to send some of their savings abroad in place of investing all of them at home.

In nineteenth-century Great Britain the interrelationships between theories of international trade and their applications were so close that it is impossible to tell whether specific national policies were the applications of previously developed theories or whether formulation of the theories resulted from analyses of the policies. In no other country were there similar concomitant developments of economic thought, industrial techniques, and national policy. England's world leadership in the decades prior to the First World War led many statesmen and economists in other nations to advocate similar policies for their own countries. In considering the applicability to other nations of free-trade policies based on comparative costs, analogies based on British experience must be used with caution. In the first place, the success of Britain's policy is not so self-evident in the mid-twentieth century as it appeared at the turn of the century. Second, even if it were demonstrable that nineteenth-century British trade policies were the best that could have been devised for that time and place, it would not necessarily follow that they would be best for other nations at other times.

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crease of capital is less definite than that of population. In fact any estimate of the rate of increase in capital can be little more than a guess based upon such data as new capital issues and growth in miles of railroads, number of merchant vessels built for home and colonial use, number of factories, etc. The following estimates are suggestive:

Year	Capital in United Kingdom	British capital abroad	Total
1875	.....	.....	£ 8,545,000,000
1885	£ 8,735,000,000	£1,302,000,000	10,037,000,000
1895	9,063,000,000	1,600,000,000	10,663,000,000
1905	11,009,000,000	2,025,000,000	13,036,000,000

SOURCE: HOBSON, *op. cit.*, p. 207.

Under the system of free trade British businessmen sought the most favorable economic opportunities all over the world. According to classical theory the combined activities of these individual profit-seekers were the means by which the nation followed the principle of comparative advantage. In Ricardo's words, "Under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each." [25] Some of the twentieth-century consequences of Great Britain's nineteenth-century policies have raised doubts in many minds concerning the ultimate benefits of the policies. For one thing, free trade contributed to the development in Great Britain of a lopsided, top-heavy industrial structure. Great Britain's textile industry, for example, is too large for the twentieth century now that extensive textile plants have been established in many other parts of the world. Against nineteenth-century profits which she made during the course of developing such export industries must be charged the costs of twentieth-century liquidation and readjustment. Intense concentration on manufacturing industry has brought other less measurable disadvantages to modern England. The limited nature of employment opportunities has contributed to unrest and dissatisfaction at home. The dangers of extreme dependence on other countries for many of the necessities of existence were dangerously evident during the Second World War.

To the domestic problems inherent in the nature of Great Britain's past economic development must be added the difficulties arising from her capital ventures in foreign countries. It seems probable that many of them, in various parts of the world, especially Asia, will be lost to her as a result of political upheavals. The consequences of such losses will be particularly serious since they will deprive Great Britain of the means to pay for essential imports.

In spite of Great Britain's present difficulties it is still true that during the decades prior to the First World War she was the greatest economic power in the world. It is frequently urged that other nations, especially the United States, should emulate the British free-trade, comparative advantage program of the nineteenth century in order to attain a similar position. In attempts to balance the advantages and disadvantages of such a policy, certain dissimilarities between the twentieth-century situation of the United States and the situation of nineteenth-century England should be noted.

1. The United States has become a great industrial nation while

[25] RICARDO, *op. cit.*, Chap. VII.

following a policy of highly protective tariffs. American resources and abilities were doubtless more responsible for the volume of industrial development in this country than were any particular types of legislation. It is true, nevertheless, that tariff laws influenced the direction of industrial development and that some industries, especially those which employ relatively large amounts of labor as compared to capital, would find it difficult if not impossible to survive under free trade. Thus the industrial reorganization necessary to the success of a free-trade policy in the United States would probably be much more costly than was the reorganization for free trade in nineteenth-century Great Britain.

2. The world situation in respect to foreign investments is markedly different from that of the nineteenth century. There are fewer areas with relatively sparse populations and stable governments offering opportunities for profitable investment. It seems probable that the factor of risk in relation to possible gains is greater than it was in the nineteenth century. It also seems unlikely that the United States can supply as unified an administration of foreign loans as was possible during the period when London dominated the money markets of the world. The outstanding superiority of the United States as a source of supply of capital in the years immediately after the Second World War cannot be doubted. But the existence of other industrialized nations—some with sharply competing political and economic ideologies—is likely to preclude the long-time domination by the United States of the capital markets of the world.

3. The people of the twentieth century are much more concerned with problems of full employment and economic stability than were those of the nineteenth century. The theory of comparative costs rested upon the assumption that all the valuable factors of production were fully employed. It has not been demonstrated, however, that the free-trade policy implicit in comparative-cost theory will contribute more to industrial and employment stability in a highly industrialized nation than would some policy of trade restriction. Possibly stability is more important than gains from greater territorial division of labor.

IMPLICATIONS OF CHANGES IN TERMS OF TRADE

One aspect of comparative costs which is ever present in considerations of national policy in respect to international economic relations is that of changes in terms of trade. The way in which the aggregate increase in production resulting from territorial specialization is divided among the specializing nations was stated in general terms in

Mill's Equation of International Demand.[26] The nature of policy problems posed from time to time for particular nations can be understood by considering some specific illustrations.

Changes in the trading position of one-industry countries are most easily ascertained. Such a country, especially if it enjoys a monopoly or near-monopoly situation in the production of a basic commodity, may be in a position to obtain a very substantial proportion of the gains from trade—its product is likely to be more in demand by specific foreign countries than the products of any one country are in demand by it. Such a country, however, is highly vulnerable to changes in demand and to technological developments that may undermine its position. Sicily's situation as a producer of sulphur furnishes a good illustration. Prior to 1900 Sicily produced about 90 per cent of the world's sulphur, which sold at relatively high prices compared with other commodities. After 1900 the Frasch process of extracting the element was introduced in the United States with the result that costs and prices of sulphur declined and United States producers forced a large part of the Sicilian sulphur-producing industry out of business. The changing economic position of sulphur producers is shown in Table 10, which gives indices of prices of sulphur and average prices of several

TABLE 10. INDICES OF SULPHUR AND ALL-COMMODITY PRICES IN THE UNITED STATES, 1900 TO 1935 *

(Base year, 1900, equals 100)

Year	Indices of sulphur prices	Indices of prices of all commodities
1900	100	100
1910	104	125
1920	113	279
1930	85	162
1935	85	142

* SOURCE: U. S. Bureau of Labor Statistics, *Wholesale Prices Series of Bulletins*, U. S. Department of Labor, Washington, D. C.

hundred leading commodities at wholesale from 1900 to 1935. In 1935 sulphur prices were 15 per cent lower than they had been in 1900, whereas the index of all-commodity prices was 42 per cent higher in 1935 than it had been in 1900. Sicily experienced great difficulty in

[26] See Chap. X of this volume.

finding substitute industries to employ the labor and capital that had been utilized in sulphur production prior to the industry's migration to the United States.

Other examples of regional difficulties arising from declines in relative prices of leading export commodities are to be found in various countries. Introduction into Europe and the United States of methods for the fixation of atmospheric nitrogen during and after the First World War crippled Chile's principal export industry—the mining of nitrates. Thereafter Chile was hard put to it to find profitable employment for labor and capital formerly engaged in nitrates production. During the depression of the 1930's several countries found themselves receiving declining shares of the gains from trade because their export industries were turning out products whose prices in world markets fell more rapidly than the prices of import goods. Outstanding examples were Cuba, where the price of sugar, a leading export crop, fell drastically; Japan, where declining raw-silk prices caused serious hardships; and the Malay States, whose economy was disrupted by the world-wide decline in raw-rubber prices.

During and immediately after the Second World War those countries which were able to produce greatly needed commodities for sale in world markets were in particularly advantageous trading positions. The prices of agricultural products, for example, were high, enabling a country such as Argentina to sell export products advantageously. South American countries profited from high wartime and postwar prices of agricultural products even though wartime scarcities of manufactures for import and shipping difficulties prevented the agricultural exporting countries from full realization of the gains from trade as implied by relative price changes.

The task of measuring changes in the over-all trading position of a country becomes more complicated when its export and import trades are diversified. Further complications are added when, in addition to a diversity of merchandise exports and imports, invisible items, such as shipping services, interest on foreign loans, emigrant remittances, and capital exports, constitute substantial items in payments balances. Bowley,[27] Taussig,[28] and other students of the subject have suggested two methods of approximating changes in a country's *barter terms of*

[27] BOWLEY, A. L., "Statistical Methods and the Fiscal Controversy," *Economic Journal,* December, 1903. See also his book, *A Short Account of England's Foreign Trade in the Nineteenth Century,* 1st ed. (1893), rev. ed., George Allen & Unwin, Ltd., London, 1922.

[28] TAUSSIG, *op. cit.,* Chap. XXI.

trade. One approach to the subject is through construction of indices of so-called "gross barter" terms of trade. Another approach to the problem is through construction of indices of so-called "net barter" terms of trade. The net barter terms-of-trade indices are less complicated and more generally used than the gross barter terms-of-trade indices.[29]

Net Barter Terms of Trade. The indices of net barter terms of trade are a series of ratios between average-per-unit prices of export goods and average-per-unit prices of import goods. An example is given in Table 11.

TABLE 11. NET BARTER TERMS OF TRADE OF GREAT BRITAIN, 1890 TO 1910 *

Year	Import price index (1900 equals 100) * (1)	Export price index (1900 equals 100) * (2)	Net barter terms of trade (1) ÷ (2) × 100
1890	107	95	113
1900	100	100	100
1910	110	95	112

* SOURCE: TAUSSIG, F. W., "The Change in Great Britain's Foreign Trade Terms After 1900," *Economic Journal*, March, 1925.

NOTE: When import prices are divided by export prices and the results multiplied by 100, indices are secured which decline as the terms of trade improve. A less confusing comparison is obtained by dividing export prices by import prices and multiplying the results by 100. In this case the indices increase as the terms of trade improve.

Between 1890 and 1900 prices of merchandise imported declined in relation to prices of merchandise exported. Between 1900 and 1910 a reverse movement occurred; *i.e.*, prices of merchandise imported increased in relation to prices of merchandise exported. One cannot arbitrarily conclude that a nation's foreign trade is becoming less advantageous from the mere fact that average prices per unit of its export goods are declining in relation to average prices per unit of its import goods. The decline in prices of export goods may be a result of cost reductions in export industries made possible by technological improvements. Furthermore, the composition of aggregate exports and aggregate imports may be changing from year to year in such a manner as to affect the ratios of average-per-unit prices without af-

[29] For a detailed illustration of gross barter terms-of-trade indices, see Taussig, "The Change in Great Britain's Foreign Trade Terms After 1900," *Economic Journal*, March, 1925, or his *International Trade, op. cit.*, Chap. XXI.

fecting the division of the gains from trade. A shift in a country's exports from a preponderance of fine goods to a preponderance of coarse goods might, for example, reduce the average-per-unit prices of the exports without affecting its foreign trading advantage. When, however, the limitations of terms-of-trade indices are recognized and taken into account, such indices are useful as a starting point in estimating directions of change in a country's foreign trading position.

The net barter terms-of-trade index as calculated in Table 11 suggests that Britain's foreign trade became more favorable between 1890 and 1900 and less favorable between 1900 and 1910. Inasmuch as the character of British exports and imports did not undergo extreme modification during the 20 years between 1890 and 1910 and inasmuch as there is no evidence of a radical change in the rate of technological improvements in British export industries during this period, the evidence points rather definitely to a worsening of Great Britain's foreign trading position during the first decade of the twentieth century. Other evidences that point in the same direction are increased exports between 1900 and 1910 of low-cost German steel goods for sale in competition with British steel exports and increasing vigor of Japanese-British competition in foreign markets for textile manufactures.

Great Britain's terms of trade were tending to improve in the interwar period. The break in agricultural prices in the early 1930's was a particularly favorable factor. The index of the net barter terms of trade, computed on a 1913 base as 100, was 84 in 1923 and 72 in 1933.[30]

The period since the Second World War has been too short to permit statistical calculations of changes in Great Britain's terms of trade. There can be little question of the fact, however, that the high agricultural prices of the immediate postwar years have materially worsened her trade position. A country, such as England, which must import agricultural products, is able to command a relatively small proportion of the gains from trade in periods when agricultural prices are unusually high.

Current daily news items furnish abundant evidences of problems posed for national policy makers by changes in a country's terms of trade. Since the leading nations of the world have abandoned faith in the efficacy of automatic economic adjustments, any threats to a country's trading advantage seem to call for governmental action.

[30] SOURCE: League of Nations, *Review of World Trade*, 1930 and 1933. Geneva, 1931 and 1934. Used by courtesy of the International Documents Service, Columbia University Press, New York.

CHAPTER XII

THEORY OF INTERNATIONAL PRICES WITH FREE GOLD STANDARDS

The whole system involving terms of trade and comparative advantage involves monetary costs and prices. Since each country has its own peculiar monetary system, some explanation of the connection between different national price systems is called for if the comparative-cost theory is to be meaningful. The role of linking together different national price systems and of maintaining consistency in their movements was assigned by the classical economists to gold flows.

The mercantile writers had recommended that a country sell abroad more than it purchase abroad and collect the difference in gold or silver thus to augment national wealth. The classical economists discarded this thesis. They took a variety of different kinds of nonmerchandise transactions into account and worked out a theory to show how changes in the value of merchandise movements kept international payments arising from all types of transactions in balance. Mill[1] states for example, that as a result of

> . . . international payments not originating in commerce . . . such as tribute, interest to foreign creditors, or a government expenditure abroad . . . international values will so adjust themselves that either by greater exports or smaller imports, or both, the requisite excess on the side of exports will be brought about.

Since merchandise movements were assumed to adjust themselves in such a manner as to bring about a balance in the aggregate of all types of international financial transactions, we may ask ourselves what mechanism, according to the classical analysis, regulated these adjustments in merchandise trade. To international gold movements and their effect upon domestic prices was assigned the function of maintaining an appropriate merchandise trade balance.

[1] MILL, JOHN STUART, *Principles of Political Economy*, Bk. III, Chap. XXI, London, 1848.

THE PRICE-SPECIE-FLOW THEORY

The classical economists held that necessary adjustments in international movements of merchandise were initiated by specie flows among countries with specie money in free circulation. The specie flows, in turn, were believed to cause price levels of the trading countries to change, falling in the gold-exporting country and rising in the gold-importing country, in accordance with the quantity theory of money. The country in which prices rose, according to the classical analysis, became a better market in which to sell and a dearer market in which to buy. Conversely, the country in which prices fell (the gold-exporting country) became, according to the theory, a cheap market in which to buy and a poor market in which to sell. Thus, as a result of changing prices in the two countries, commodity trade was automatically altered by amounts sufficient to maintain an equilibrium of international payments.

The price-specie-flow theory rested upon two basic assumptions.

1. Exchange rates in gold-standard countries fluctuated between upper and lower limits determined by expenses of transferring gold from one country to another—the so-called "gold-shipment points."

2. Changes in a nation's price level were functions of its monetary gold supplies which, in turn, were controlled by international gold movements. If the price-specie-flow mechanism were to operate with high degrees of sensitivity and precision, it would be necessary for the total currency of a country (bank credit included) to remain always in a fixed ratio to monetary gold supplies and for velocity of circulation to remain relatively constant, or for both the amount of currency and its velocity of circulation to be functions of monetary gold supplies. Let us examine these two basic assumptions of the price-specie-flow theory of international prices, one at a time.

Gold-shipment Points. Statistical tests show that fluctuations of exchange rates between monetary units of gold-standard countries have tended to range within narrow limits. Before the First World War the cost of moving gold from Great Britain to the United States or vice versa was in the neighborhood of 2 cents for each pound sterling transferred from the one country to the other. The 2 cents covered expenses of packing, shipping, insuring, and loss of interest on the gold while en route. Costs of shipping gold, like costs of performing any other business transaction, are variable. The 2 cents per pound cited is believed to have been somewhere near the cost of

shipping gold from London to New York or vice versa [2] during a period of two or three decades before the First World War. The prewar gold dollar contained 23.22 grains of fine gold. The British pound sterling contained approximately 113 grains of fine gold. The par of exchange between dollars and pounds was $4.8665 per pound sterling, *i.e.*, 113 divided by 23.22. If 2 cents is taken as the approximate cost of shipping 113 grains of gold between London and New York, the upper gold-shipment point (at which movement of gold from New York to London took place) was represented by a dollar-sterling exchange rate of approximately $4.8865 in New York, *i.e.*, par of exchange plus the 2-cent cost of shipping gold from New York to London. The dollar-sterling exchange rate tended to rise above par ($4.8665 per pound sterling) whenever demands for sterling bills presented to United States banks exceeded offerings of sterling bills to them. A sterling bill of exchange corresponds with a check drawn upon a British bank. A British importer of American cotton, for example, might have drawn a check upon a London bank and sent it to the American exporter in payment for the cotton. In order to realize on the sale in dollars, the American cotton exporter must have sold the British check to a United States bank that was willing to pay out dollars for it. Conversely, a United States importer of British woolens might have wished to buy with dollars in the United States a London bank check to be forwarded to the British exporter. When more checks on London banks (bills of exchange) were demanded of banks in the United States than were offered to them (more in aggregate value), one way for the United States banks to have put themselves in position to continue the sale of checks on British banks was to make additional deposits in British banks by shipping them gold. Thus, before the First World War, when the demand for checks on London by banks in the United States tended to exceed supply, the dollar-sterling exchange rate, responding to forces of demand and supply, rose to around $4.8865, and gold tended to be moved from United States banks to British banks. Conversely, when supplies of sterling bills in the United States tended to exceed demands for them, the dollar-sterling exchange rate tended to fall. When it fell to a figure around $4.8465 per pound sterling—the

[2] The cost of shipping gold from New York to London was ordinarily a fraction of a cent less per pound sterling than the cost of moving gold in the opposite direction. Inasmuch, however, as the cost of moving gold varied according to the form in which the gold was shipped and the bank making the shipment, fractional differences in costs are ignored at this point for purposes of clarifying the illustration of the principle.

lower gold-shipment point (par of exchange less the assumed cost of shipping gold from Great Britain to the United States)—gold tended to be moved from British banks to United States banks. The fact that dollar-sterling exchange rates stayed within narrow limits during the period from 1890 to the beginning of the First World War tends to substantiate the first assumption of the classical price-specie-flow explanation of the manner in which international financial transactions were kept in balance. High and low quotations for dollar-sterling exchange rates for a series of years before 1914 are given in Table 12.

At no time during the entire period of 24 years cited in Table 12 was sterling exchange posted in New York at a rate exceeding $4.915 or below $4.827. These extremes are not within the specific upper and lower gold-shipment points cited, *i.e.*, $4.8865 and $4.8465. However, the 2 cents per pound sterling specified as being the cost of shipping gold is an arbitrary figure, 2 cents being selected as probably somewhere near a variable actual cost. Furthermore, it is quite reasonable to expect that actual rates might have fluctuated above or below par by amounts slightly in excess of gold shipping costs for short periods of time during commercial crises. This condition is due to the time required to move gold from London to New York or vice versa and the uncertainties that prevail in times of financial stress, 1895 and 1907, for example. The 1907 rates (high $4.915 and low $4.8325) were, in a sense, depreciated money rates—not gold rates—inasmuch as the New York quotations were in New York bank funds, which for a temporary period during the financial panic were not fully transferable into gold. In general, the statistical facts tend to bear out the first assumption of the price-specie-flow analysis. So long as gold was free to move from one country to another and so long as it was available in quantities ample for the settlement of international balances in case gold settlements were demanded, there was no cause for variations of exchange rates largely in excess of costs of transferring gold from one nation to another. Businessmen tend to think and deal in futures. The fact that gold could be had from abroad in the course of time tended to induce exchange speculators to absorb current offerings of bills of exchange when rates were such as to hold promise of a small margin of profit.

During the years 1890 to 1913 both United States and Great Britain maintained free gold-standard monetary systems except for brief periods, as in 1907. Paper currencies and subsidiary currencies of these nations (and in addition silver dollars in the United States) were freely convertible into gold, and bankers were privileged to move

TABLE 12. DOLLAR-STERLING EXCHANGE RATES: YEARLY HIGH AND LOW FOR YEARS BEFORE THE FIRST WORLD WAR

Year	High	Low
Posted rates for sight exchange at New York on London, banking bills *		
1890	$4.900	$4.840
1891	4.900	4.840
1892	4.895	4.850
1893	4.905	4.830
1894	4.900	4.865
1895	4.910	4.875
Actual rates for sight foreign exchange at New York on London for bankers' bills *		
1896	$4.895	$4.8425
1897	4.885	4.8425
1898	4.870	4.830
1899	4.8825	4.8425
1900	4.885	4.830
1901	4.885	4.840
1902	4.880	4.8525
1903	4.883	4.827
Actual rates of sterling exchange at New York on London, cable transfers †		
1904	$4.8910	$4.8440
1905	4.8855	4.8535
1906	4.8815	4.8370
1907	4.9150	4.8325
1908	4.8785	4.8575
1909	4.8875	4.8585
1910	4.8850	4.8525
1911	4.8750	4.8550
1912	4.8820	4.8485
1913	4.8870	4.8530

* 1890–1903, inclusive, from National Monetary Commission, *United States Senate Document 570*, Vol. XXI, pp. 189–202.

† 1904–1913, inclusive, from *Financial Review*, published annually by William B. Dana Company, New York, publishers of the *Commercial and Financial Chronicle*. Annual numbers 1905, p. 52; 1906, p. 52; 1907, p. 55; 1908, p. 59; 1909, p. 60; 1910, p. 60; 1911, p. 66; 1912, p. 75; 1913, p. 77.

gold freely from one country to another. During this period fluctuations of dollar-sterling exchange rates were confined within narrow limits. More recently, when the monetary system of one of these nations was "off gold," *i.e.*, when paper currencies in one of the countries were not freely convertible, fluctuations of dollar-sterling exchange have not been confined within the gold-point range. In Table 13 are low-high rates of dollar-sterling exchange for the years 1922 and 1932.

Table 12 indicates that dollar-sterling exchange rates conformed roughly with the "gold-shipment-point" assumption of the price-specie-flow theory before the First World War, when the United States and Great Britain maintained free gold-standard monetary systems. Table

TABLE 13. DOLLAR-STERLING EXCHANGE RATES: MONTHLY LOW AND HIGH, 1922, AND APPROXIMATE MONTHLY LOW AND HIGH, 1932 *

Month	Par of exchange	1922 cables		1932 cables	
		Low	High	Low	High
January	$4.8665	$4.1865	$4.2767	$3.35½	$3.50½
February	4.8665	4.2878	4.4322	3.42¼	3.49½
March	4.8665	4.2936	4.4408	3.48½	3.83¼
April	4.8665	4.3765	4.4300	3.63¼	3.83¼
May	4.8665	4.4291	4.4510	3.65⅜	3.72¾
June	4.8665	4.3838	4.5095	3.57	3.70⅜
July	4.8665	4.4240	4.4605	3.49⅞	3.61½
August	4.8665	4.4429	4.4831	3.45	3.52½
September	4.8665	4.3660	4.4734	3.45	3.49¾
October	4.8665	4.3869	4.4748	3.27⅜	3.46¼
November	4.8665	4.4488	4.5210	3.20½	3.34½
December	4.8665	4.5198	4.6799	3.14½	3.34⅜
Year	$4.8665	$4.1865	$4.6799	$3.14½	$3.83¼

* SOURCES: *Statistical Abstract of the United States*, 1922, p. 718, and the *Annalist*, New York Times Co., New York, Jan. 20, 1933. The *Annalist* quotations are weekly low and high rates. Inasmuch as some weeks overlap the end of one month and the beginning of another, one is not sure in which month the high or low quotation for such a week occurred. However, the quotations as given serve the purpose at hand.

13 indicates that in 1922 and again in 1932, when Great Britain's monetary system was off gold, dollar-sterling exchange rates did not stay within the gold-point limits. These facts are in accord with the gold-point theory.

International Gold Movements in Relation to Changing Price Levels. The second assumption of the classical price-specie-flow ex-

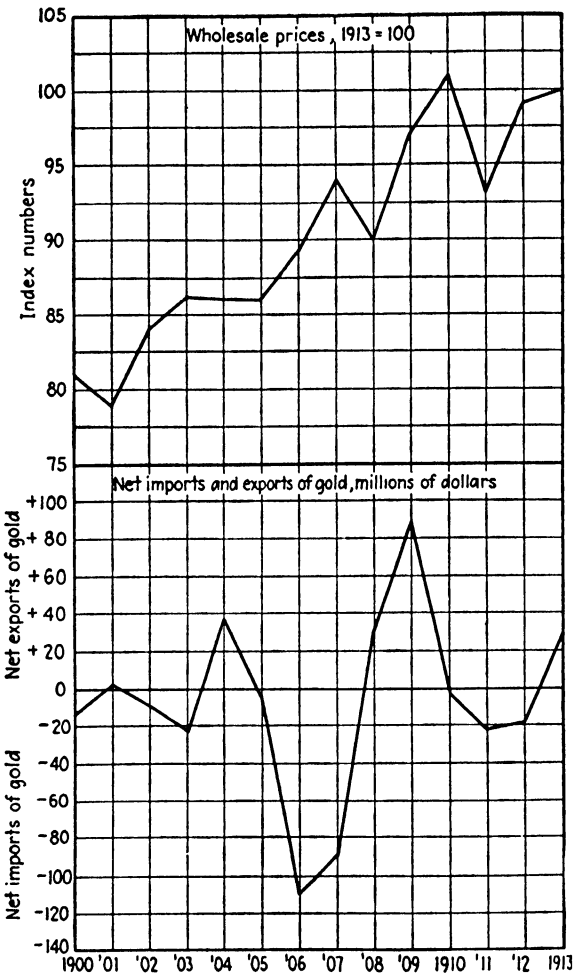


FIG. 3. WHOLESALE PRICES AND GOLD MOVEMENTS, UNITED STATES, 1900 TO 1913

SOURCES: *Statistical Abstract of the United States, 1930*, p. 472, and Bureau of Labor Statistics, *Wholesale Prices Series, Bulletin 335*, 1923, p. 9.

planation of the manner in which international payments were kept in balance, *if interpreted in a literal and short-time sense,* was rejected by nearly all economists well before the depression and war periods of the 1930's and 1940's. Statistical studies have shown very little short-

period conformity between changes in general price levels and international gold movements.

It is perfectly obvious that neither the magnitudes nor the directions of the international flow of gold are adequate to explain those close and comparatively rapid adjustments of payment-disequilibria, and of price relationships, which were witnessed before the war.[3]

In all countries using deposits and checks freely, the looseness of the connections between bank reserves and banks deposits leads not infrequently to a chronological order different from that assumed in the Ricardian reasoning. An inflow of specie may follow, not precede, an enlargement of the circulating medium and a rise in prices. So it may be, at least, for a short time, even for a period of many months. Indeed, if there be further forces at work than those merely monetary, it may remain so for years.[4]

Figure 3 shows the relationship between a general price level in the United States as measured by the Bureau of Labor Statistics index of wholesale prices and gold movements into and out of the country from 1900 to 1913. The correlation obviously was not very close even for this period of relatively stable world economic conditions. One can be reasonably sure without pursuing the subject further that a high degree of correlation between international gold movements and changes in national price levels did not necessarily exist. This conclusion does not imply that the price-specie-flow explanation of international prices had no significance, nor that price movements did not contribute to keeping international payments in balance. It merely suggests that adjustments of price levels and gold flows did not necessarily coincide in short periods of a few months or in some cases, even a few years.

SIMILARITY OF NATIONAL PRICE-LEVEL TRENDS

In a number of cases subjected to statistical analysis, movements of general price indices in different countries (in terms of gold) have been found similar with respect to long periods of several years or more. By way of example take the movements of prices in Great Britain and the United States from 1830 to 1930 (Fig. 4). The two series fluctuated in the long-period movements in similar directions. Whether international gold movements were the results or the contributing causes of these similarities in the long-time trends of price levels in these two countries is a question that has not been answered to the

[3] ANGELL, JAMES W., *The Theory of International Prices*, p. 400, Harvard University Press, Cambridge, Mass., 1926.

[4] TAUSSIG, F. W., *International Trade*, pp. 207, 208, The Macmillan Company, New York, 1927. Quoted by permission of The Macmillan Company.

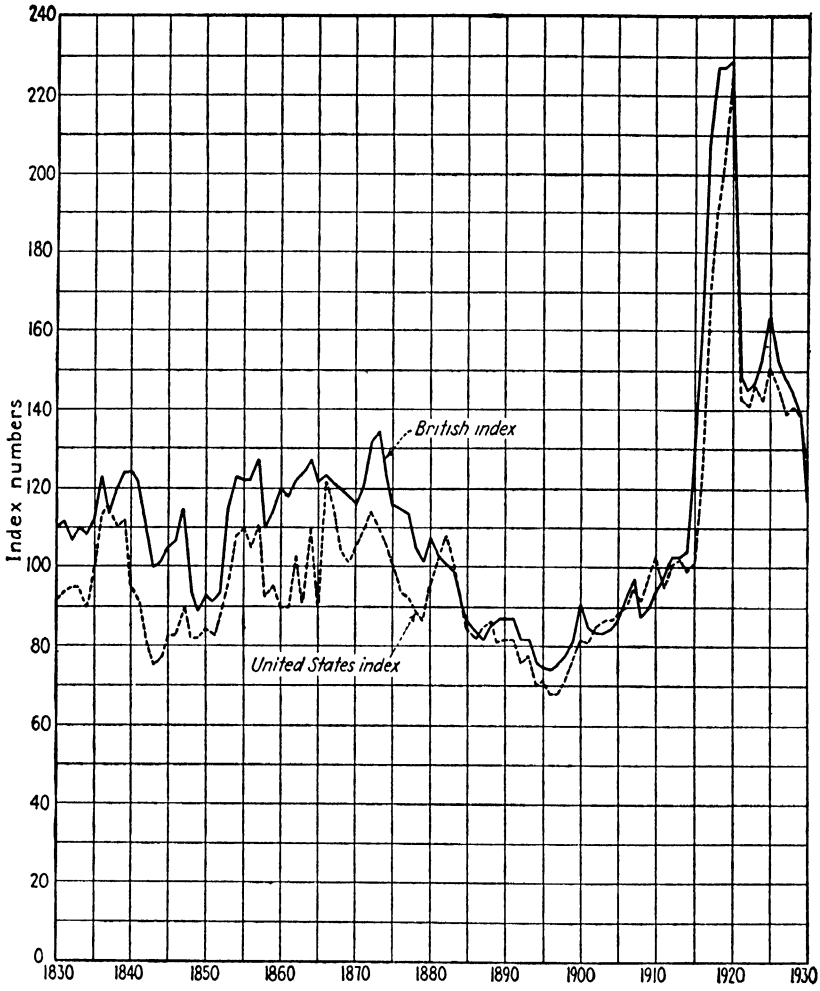


FIG. 4. INDEX NUMBERS OF WHOLESALE PRICES IN GREAT BRITAIN AND UNITED STATES IN TERMS OF GOLD, 1830 TO 1930

1910–1914 average equals 100 per cent

SOURCES: Data from Warren and Pearson, *Prices*, John Wiley & Sons, Inc., New York, 1933, and *Aldrich Report*, *United States Senate Report 1394*, 52d Congress, 2d Session. The British index is in terms of gold prices. It was assembled from various generally recognized British sources, by Warren and Pearson. (See their *Prices*, note p. 75.) The United States index was compiled by Warren and Pearson for years earlier than 1890. Their figures 1860–1880 are supplemented by the Aldrich report index in terms of gold, converted to a 1910–1914 base period (see *Aldrich Report*, Part I, pp. 99–100). The figures from 1890 to 1930 are Bureau of Labor Statistics figures as adapted to a 1910–1914 base period and reproduced by permission of Messrs. Warren and Pearson.

satisfaction of many students of the subject. Gold movements were not the only influences at work to create greater or less degrees of mutual interdependence among different national price systems.

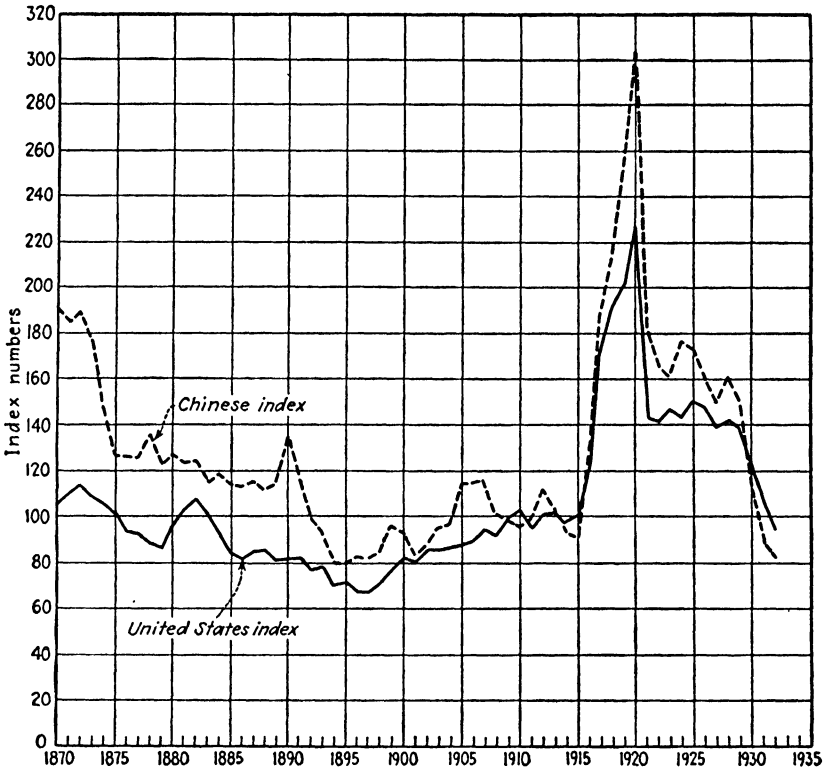


FIG. 5. INDEX NUMBERS OF WHOLESALE PRICES, UNITED STATES AND CHINA, IN TERMS OF GOLD, 1870 TO 1932.

1910–1914 average equals 100 per cent

SOURCES: The Chinese index from 1870 to 1932 is from Warren and Pearson, *Prices*, John Wiley & Sons, Inc., New York, 1933, p. 148. Ratios of exchange between silver and gold used in reducing the Chinese index to terms comparable with that of the United States were obtained from the same source, p. 144. Data used by permission of Messrs. Warren and Pearson. The United States devalued her gold dollar in 1933. The Chinese index is more representative of port cities than it is of China as a whole.

One important economic force that acts to bind national price systems into a universal whole, whether or not the countries concerned are on gold standards, is the action of the prices of those goods which regularly enter into international commerce. In Fig. 5 price levels in China and the United States are compared from 1870 to 1932. The

long-time trends of the two index numbers for this period were similar in spite of the facts that they were computed from different combinations of commodity prices differently weighted and that the two countries had very different monetary systems. The manner in which prices of international commodities like silver, wheat, rice, and cotton are determined accounts, at least in part, for the apparent connection between both the American and British and the American and Chinese price systems. Prices of some commodities are dominated by supply and demand factors operative in relatively small market areas, whereas the markets for other commodities are practically world-wide in the sense that factors of world supply and world demand are more dominant than conditions of local supply and demand. When the world crop of wheat, for example, is abnormally large, wheat prices in the United States tend to be low more or less regardless of the size of the wheat crop in this country. The reason is obvious. United States farmers produce a surplus of wheat for export. Domestic prices tend to equal the prices that export surpluses of wheat will bring in foreign markets (allowance being made for carrying costs and other marketing expenses) because no farmer will sell for export if his wheat will bring a higher price for domestic consumption. Similarly, if the world wheat crop is abnormally small, wheat prices in the United States tend to be high.

It is evident that fluctuations in the supplies of internationally traded commodities will have similar effects on the prices of those commodities in all the countries where they are bought and sold. The combined influences of changes in the prices of international goods on various national price systems cannot be measured with exactness. The generally available index numbers of prices have not been compiled primarily with the idea of differentiating between domestic and international commodities. Recognition of the importance of such a classification, however, resulted, in the interwar period, in a number of special studies segregating commodities into domestic and international groups.[5] Like the effect produced by pulling one corner of a fish net, some parts of the price system may respond to a depressing or an elevating force more readily than others until the force brings the

[5] Federal Reserve Board, *Prices in the United States and Abroad,* 1919 to 1923, Washington, D. C., 1924. Harvard Economic Society, *Weekly Letter 7,* Feb. 19, 1927. KREPS, THEODORE J., "Export, Import, and Domestic Prices in the United States, 1926–1930," *Quarterly Journal of Economics,* Vol. XLVI, February, 1932. ELLSWORTH, P. T., "Export, Import and Domestic Prices in the United States, 1931–1936," *Review of Economic Statistics,* Vol. XIX, November, 1937.

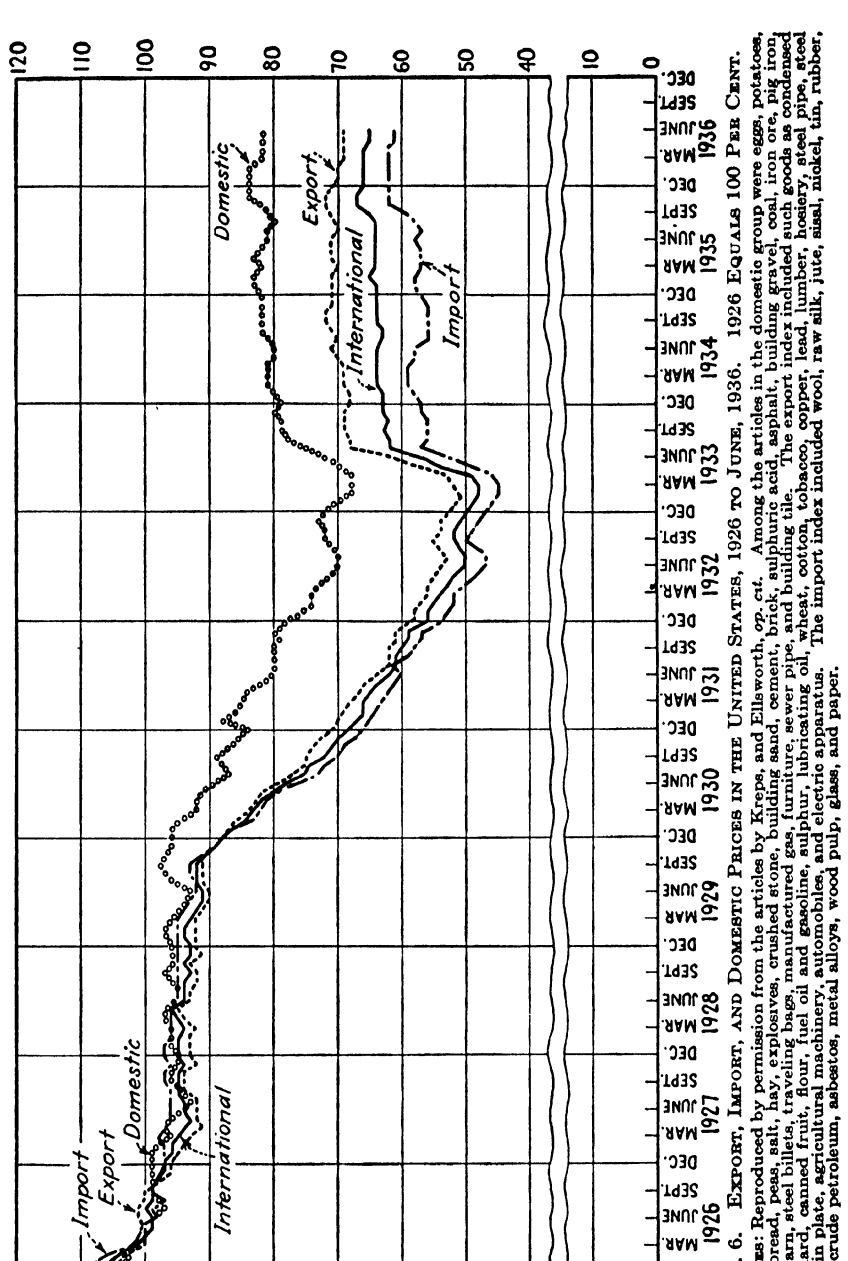


FIG. 6. EXPORT, IMPORT, AND DOMESTIC PRICES IN THE UNITED STATES, 1926 TO JUNE, 1936. 1926 EQUALS 100 PER CENT.

SOURCES: Reproduced by permission from the articles by Krepe, and Ellsworth, *op. cit.* Among the articles in the domestic group were eggs, potatoes, milk, bread, peas, salt, hay, explosives, crushed stone, building sand, cement, brick, sulphuric acid, asphalt, building gravel, coal, iron ore, pig iron, wool yarn, steel billets, traveling bags, manufactured gas, furniture, sewer pipe, and building tile. The export index included such goods as condensed milk, lard, canned fruit, flour, fuel oil and gasoline, sulphur, lubricating oil, wheat, cotton, tobacco, copper, lead, lumber, hosiery, steel pipe, steel rails, tin plate, agricultural machinery, automobiles, and electric apparatus. The import index included wool, raw silk, jute, sisal, nickel, tin, rubber, hides, crude petroleum, asbestos, metal alloys, wood pulp, glass, and paper.

whole system into motion. Figure 6 suggests that domestic and international prices share common underlying trends although their month-to-month fluctuations frequently differ. In 1927–1928 and again in 1934–1935 both domestic and international prices showed considerable stability. They both declined markedly between 1929 and early 1933 and then turned up sharply to reach the relatively stable positions—although at differing levels—which they retained for the remainder of the period covered (to mid-1936). The fact that international prices fell more precipitately and rapidly than domestic prices may be attributed, at least in part, to the fact that most of the prices entering the international index were of "primary commodities with world markets, sold under intensely competitive conditions." [6]

The connection between export and domestic prices may run through the indirect channel of demand. On the downgrade, industries with reduced margins of profit because of reduced prices of international commodities buy less industrial goods and employ less labor. United States wheat and cotton farmers who receive low prices for their cash crops have less money to spend for farm improvements requiring the purchase of building materials. The Argentine wheat farmer who also receives a low price for his cash crop is in a position to purchase less farm machinery and fewer American-made automobiles. Losses in sales and "layoffs" of labor in practically all sectors of industry follow: in the farm-machinery industry, in the automobile industry, in the building trades, and elsewhere. Unemployment increases; buying power for domestic goods and for import goods is progressively reduced. The price decline spreads. Reverse changes occur as prices rise. Thus the fact that market areas for many important commodities and dominant forces of supply and demand that condition prices cut across national boundaries helps to explain the centripetal force that appears to act upon prices of goods in all countries. Similar reasoning applies to prices of invisible goods that are bought and sold in international trade, *viz.*, services, securities, etc. These several prices also tend toward conformity in the national markets where international purchase and sale are common practice. Existence of general tendencies toward conformity of national price levels does not imply that prices of particular goods or even averages of all prices are exactly the same in different countries. Tariffs, costs of transportation, and other influences tend to prevent absolute equality of prices in different countries. Furthermore, the pulls of international commodities upon the

[6] ELLSWORTH, *op. cit.*, p. 196.

several price systems may not be equally potent even though their effects are to move the several price systems in similar directions. Finally, this explanation of one of a number of possible connecting links among national price systems, reasoning as it does from international commodity prices to industrial profits, to changes in demand, to changes in national price levels, does not exclude gold movements either as a primary or as a secondary price-making force. So long as all kinds of money in trading countries were freely exchangeable for gold, international gold movements were likely to exert some effect upon the national price structures of both the gold-exporting and the gold-importing countries. However, because gold movements were not the only connecting link between national price systems, national price levels did not need to be highly sensitive to changes in gold reserves in order to ensure a rough conformity among them.

International payments adjustments among free gold-standard countries were achieved during the last quarter of the nineteenth century and the first decade of the twentieth century without disruptions of domestic economies in the countries concerned as serious as those experienced after the 1920's. During the 1920's earnest attempts were made in many countries to reestablish the free gold standard on a permanent basis but these efforts were not successful.[7] During the depression years of the 1930's international exchanges were thrown into a state of great confusion. Measures for internal adjustment and stabilization of domestic economies in many countries were carried out with little regard for their effects on world prices, gold movements, or the foreign exchanges. The Second World War aggravated the underlying and unsolved maladjustment problems.

International exchange proposals and policy measures introduced since the Second World War have taken into account the experience of the First World War and its aftermath. Two pertinent conclusions that have been drawn from this experience follow.

1. The automatic gold-flow mechanism alone is inadequate for the regulation of international payments balances.

2. International payments items other than merchandise movements are of such magnitude as to warrant more attention than they were given by early theorists.

[7] See BROWN, WILLIAM ADAMS, JR., *The International Gold Standard Reinterpreted 1914–1934,* National Bureau of Economic Research, Inc., New York, 1940, for detailed treatment of this subject.

CHAPTER XIII

INTERNATIONAL PAYMENTS BALANCES

The magnitudes of nonmerchandise transactions that give rise to international payments among modern nations are not insignificant in comparison with the magnitudes of international merchandise transactions. For example, United States merchandise exports in the 1920's and 1930's varied from an annual high of 5.1 billion dollars to a low of 1.6 billion dollars. During the same period American tourist expenditures abroad amounted to as much as 800 million dollars in some years; immigrant remittances, 500 million dollars; interest receipts, 900 million dollars; foreign loans ran up as high in some years as 3 billion dollars. In 1936 foreigners spent 3,475 million dollars for United States long-term securities in this country and only 2,456 million dollars for merchandise.

The balancing of a nation's external pecuniary transactions is comparable in important respects with the balancing of income and outgo of individuals or corporations. Every transaction into which the corporation enters is recorded. Every credit is offset by a debit on the corporation's books; every debit is offset by a credit. The aggregates of all credits and debits must necessarily balance. In like manner the aggregates of a country's international receipts and payments must balance. In the terminology of international transactions, sale of goods and services abroad is referred to as a "credit," an "export," or a "receipt." These terms are used interchangeably. Purchase of goods or services abroad is referred to as a "debit," an "import," or a "payment." [1]

PAYMENTS BALANCE OF THE UNITED STATES

Although the details of all payments made by citizens of one country to citizens of other countries and the *quid pro quo* which they receive in exchange are not recorded in any one set of books, estimates of

[1] In using the terms "credit" and "debit" appearing in prewar balance-of-payments statements, accounting students are sometimes perplexed by the plus sign attached to the credit column and the minus sign attached to the debit column. The following explanation may help to clarify some of the confusion that they

the magnitudes of various types of transactions can be made with sufficient accuracy to justify the compilation of yearly balance of international payments statements for each country. A balance-of-payments statement for the United States for the year 1935 is given in Table 14.

Merchandise exports and imports, payments for American freight shipped on foreign boats, and many other items entered into the balance of international payments of the United States in 1935. When income and outgo for each type of transaction are compared, net balances by types of transactions are secured. In 1935 the United States had a net income on merchandise transactions of 255 million dollars; *i.e.*, the value of United States exports exceeded the value of United

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experience in trying to compare balance-of-payments statements with double-entry bookkeeping.

In the assets account of a set of double-entry books, debit means plus; credit means minus. Visualize for the United States an inventory account and a foreign-exchange account (both assets). These accounts might be as follows:

UNITED STATES

Inventory Account		Foreign-exchange Account	
Debit	Credit	Debit	Credit
Plus	Minus	Plus	Minus

An export of merchandise might be credited to the inventory account and an offsetting debit entry placed in the foreign-exchange account. An import of merchandise might be debited to the inventory account and an offsetting credit entry placed in the foreign-exchange account.

Now combine these four entries in a balance-of-payments statement as follows:

BALANCE-OF-PAYMENTS STATEMENT OF THE UNITED STATES

Credit	Debit
Plus	Minus

A merchandise export is a credit to inventory and a plus to foreign exchange. Put this credit and this plus in the left-hand side of the balance-of-payments statement. A merchandise import is a debit to inventory and a minus to foreign exchange. Put this debit and this minus on the right-hand side of the balance-of-payments statement. If one thinks of the effect of a merchandise movement on inventory, he uses the "credit" and "debit" terminology of the balance-of-payments statement. If he thinks of the effect of the merchandise movement on foreign exchange, he uses the "plus" and "minus" terminology. Thus, in a sense, an inventory account and a foreign-exchange account are rolled together in an international balance-of-payments statement. In the balance-of-payments statement the pluses and the minuses are in the left and right columns, respectively, as in double-entry bookkeeping; the credit and debit columns are reversed in position.

States imports by that amount. This country sold 2,009 million dollars' worth of securities to foreigners and bought only 1,547 million dollars' worth of securities from foreigners. Foreigners, therefore, were

TABLE 14. UNITED STATES BALANCE OF INTERNATIONAL PAYMENTS, 1935 *

(Millions of dollars)

Items	Receipts from foreigners for exports (credits)	Payments to foreigners for imports (debits)	Net credits (+), debits (−)
Trade and service:			
Merchandise	$2,388	$2,133	$+255
Freight and shipping	63	99	− 36
Tourist expenditures	117	409	−292
Immigrant remittances	5	92	− 87
Charitable, educational, and other contributions	.....	28	− 28
Interest and dividends	521	146	+375
Government transactions	28	83	− 55
Miscellaneous services	116	40	+ 76
Total trade and service items	$3,238	$3,030	$+208
Capital:			
Long-term capital movements	$2,009	$1,547	$+462
Movements of short-term banking funds (net)	.....	.....	+970
Miscellaneous capital items (net)	.....	.....	+105
Movements of silver and paper currencies	49	386	−337
Other miscellaneous items (net)	.....	.....	+331
Totals other than gold (net)	.....	.....	$+1,739
Gold imports and exports	2	1,741	−1,739

* SOURCE: *The Balance of International Payments of the United States in 1935*, U. S. Department of Commerce, Washington, D. C., 1936.

obligated to pay a net balance to United States citizens of 462 million dollars on long-term security transactions. In the case of short-term loans the net inflow to the United States ("credit," "export of rights to draw on American banks," or "receipts," in payments statement) amounted to 970 million dollars. When all items except gold are taken into account, foreigners owed citizens of the United States a net

balance of 1,739 million dollars on transactions negotiated during the year 1935. This sum was paid in gold; *i.e.*, a net balance of 1,739 million dollars' worth of gold moved from foreign countries to the United States during the course of that year.

In 1935 the United States balance of payments was "favorable"; *i.e.*, foreigners shipped gold to this country to balance the account. The term "active" or "favorable" payments balance has a number of connotations: (1) It may imply an excess of sales over purchases on income and capital accounts that is offset by gold imports (as illustrated by the case just cited). (2) It may imply an excess of sales over purchases on income account only (merchandise, services, and interest) which is offset either by gold imports, imports of foreign securities (capital exports), or both. (3) It may have reference to a using up, within a given period, of exchange accumulated during an earlier period. If, for example, foreign countries used up during the calendar year 1947, dollar exchange accumulated prior to 1947, the United States payments balance in 1947 might be referred to as "active" or "favorable." The balancing item in this case would be a reduction in foreign-owned bank deposits in the United States in place of United States gold imports or United States purchase of long-term foreign securities.

The balance of trade of the United States was also favorable in 1935; *i.e.*, the value of this country's merchandise exports was greater than the value of her merchandise imports. A "favorable" balance of trade is sometimes referred to as an "active" balance of trade, the two terms being synonymous in current use. International transactions other than merchandise exports and imports are called "invisible" items—invisible in the sense that they do not appear in customs records. Merchandise that crosses national boundaries is entered or cleared by customhouse officials. This is not the case with so-called "invisible" items.

Current balance-of-payments statements published by the U. S. Department of Commerce are set up in a different manner from those published before the Second World War. The terms "receipts" and "payments" are used in the postwar statements in place of "credits" and "debits" in the prewar statements, but the principles involved and the balancing process are the same. In Table 15 is an international balance-of-payments statement for the United States for the year 1946. The data show that in that year the value of United States merchandise exports was 12,140 million dollars. The value of goods

imported by the United States was 5,264 million dollars. In Table 15 immigrant remittances, charitable contributions, lend-lease shipments, and other gifts are lumped together under the heading "unilateral trans-

TABLE 15. INTERNATIONAL TRANSACTIONS OF THE UNITED STATES IN 1946 *

(Millions of dollars)

Transactions	Totals
Receipts:	
Goods and services:	
Goods	$ 12,140
Income on investments	611
Other services	2,513
Total goods and services	$ 15,264
Unilateral transfers	$ 219
Long-term capital:	
Movements of United States capital invested abroad	990
Movements of foreign capital invested in United States	1
Total long-term capital	$ 991
Total receipts	$ 16,474
Payments:	
Goods and services:	
Goods	$ 5,264
Income on investments	173
Other services	1,694
Total goods and services	$ 7,131
Unilateral transfers	$ 3,329
Long-term capital:	
Movements of United States capital invested abroad	3,992
Movements of foreign capital invested in United States	341
Total long-term capital	$ 4,333
Total payments	$ 14,793
Excess of receipts (+) or payments (−):	
Goods and services	$+8,133
Unilateral transfers	−3,110
Goods and services and unilateral transfers	+5,023
Long-term capital	−3,342
All transactions	$+1,681
Net flow of funds on gold and short-term capital account:	
Net increase (−) or decrease (+) in gold stock	$ −623
Net movement of United States short-term capital abroad	−293
Net movement of foreign short-term capital in United States	−883
Net inflow (+) or outflow (−) of funds	$−1,799
Errors and omissions	$ +118

* SOURCE: *Survey of Current Business*, March, 1947.

fers." Furthermore, freight and shipping services, tourist expenditures, and government transactions other than gifts and capital transactions are lumped together under the heading "other services." Otherwise the items listed in the balance-of-payments statements for 1935 and 1946 are comparable.

The data in Tables 14 and 15 indicate that the value of United States exports exceeded the value of United States imports in 1935 and 1946. The value of a nation's merchandise exports may exceed consistently the value of its merchandise imports (or vice versa) year after year for long periods of time—even for decades. The transition from a predominantly agrarian status to a predominantly manufacturing status has been accompanied in a number of countries, for which historical records are available, by similar patterns of international transactions. A first stage has been characterized by a merchandise import balance, a second stage by a merchandise export balance, and a third stage by a reversion to a merchandise import balance. These definite and long-sustained changes in merchandise trade balances have been related closely to long-term financing. Such shifts in trade balances and related phenomena are sometimes referred to as "international debtor and creditor stages."

TRADE BALANCES AND FOREIGN INVESTMENTS

Starting with a nonindustrial country that borrows foreign capital to enable it to develop young industries, the first stage is one of excess merchandise imports. If borrowings continue, the foreign debt becomes so large, in the course of time, that annual interest and amortization payments exceed the annual amounts of new borrowings. At this point the merchandise trade balance tends to change. Exports exceed imports, the excess of exports being absorbed in service and amortization charges on capital borrowed in earlier years. If the borrowed capital proves to have been wisely invested, a time comes when the borrowing nation's productivity and capacity for saving are largely increased. As the years go by, the borrowing country may gradually retire its old obligations; in fact, it may become a creditor nation itself. During the whole period when a country's interest and principal payments annually exceed its new borrowings and later when its annual loans are in excess of annual service charge receipts on old loans, merchandise exports tend to exceed merchandise imports. In the course of time, the original debtor country may become a creditor country on so large a scale that its collections of interest and principal exceed the annual amounts of its new loans. Then again the mer-

chandise trade balance tends to shift. This time the trade balance tends to become once more unfavorable; *i.e.*, merchandise imports tend to exceed merchandise exports.

Balance-of-payments data are scarce for years prior to the First World War. Such data as are available, however, indicate that modern nations have tended to go through these stages in the relationship of their trade balances and their foreign investments. Some of the early balance-of-payments data for the United States, Great Britain, and France are presented in paragraphs to follow along with analyses of the current debtor and creditor positions of these and a number of other countries.

United States. In the period 1896 to 1914, the United States was a debtor nation. She had borrowed large amounts of capital from

TABLE 16. UNITED STATES BALANCE OF PAYMENTS IN TERMS OF NET INCOME AND NET OUTGO BY CLASSES OF TRANSACTIONS FOR THE PERIOD 1896–1914 *

(Millions of dollars)

Type of transaction	Net exports	Net imports
Excess of merchandise exports over imports	$8,853	
American tourist expenditures abroad and immigrant remittances to foreigners	.....	$6,080
Payments of interest	.....	3,599
Security movements, *i.e.*, increase in United States securities held abroad less increase in foreign securities held in the United States	1,000	
Gold movements	.....	174
Total	$9,853	$9,853

* SOURCE: PEAK, GEORGE N., *Letter to The President of the United States on Foreign Trade*, 1934.

Europe for use in building railroads and in making other improvements, and she was obligated to transfer to Europe large annual interest payments on these borrowed funds. The aggregates of net payments made in one form or another by the United States to Europe during the period 1896 to 1914 and the aggregates of net receipts from Europe during this period were as indicated in Table 16. No account is taken in the balance-of-payments statement in Table 16 of shipping services and other invisible items of less importance. The first official estimate

of annual balance of payments of the United States was issued in 1923 for the transactions of the preceding year. Since that time regular annual statements have been issued. The data for the years prior to 1922 are not complete. Notwithstanding their shortcomings, the data in Table 16, taken in conjunction with other historical records of the period covered, indicate that this country was in the second of the investment stages during the last part of the nineteenth century. The main features of the payments balance for the period in question were merchandise balance on the export side and, on the import side, a large interest item.

During the First World War and the postwar years 1918 to 1928, the United States paid off some of its old borrowings abroad and extended large sums of long-term credit to foreign countries. During the 1930's it appeared that the United States was about to enter the third stage in the relationship of trade balances and foreign investment. In 1933 interest and dividend receipts exceeded net exports of capital. In view of this fact and of the status of other payments balance items it seemed probable that the merchandise trade balance of the United States would soon become unfavorable or passive as had been the case in Great Britain, France, and Germany when the returns of these countries on foreign investments had come to exceed their new loans.

By 1936 the export trade balance of the United States was only 34 million dollars as compared with 4,016 million dollars in 1919 and 1,037 million dollars in 1928. The change to an excess of merchandise imports seemed imminent. However, a number of events contributed to the postponement of the time when this transition in the trade balance of the United States would be made. During the depression years of the 1930's and the war years of the 1940's some of the United States investments abroad became worthless thus reducing this country's interest income. A large proportion of the exports of the United States during the war were made without provision for direct return. The bulk of these exports to the recipients of lend lease and through the United Nations Relief and Rehabilitation Administration would not have been possible if the countries concerned had been required to make payments. A third reason for the continuance of the United States active trade balance is the fact that this country has resumed substantial foreign lending.

In 1946 the United States had a merchandise export balance of nearly 7 billion dollars, as indicated in Table 15. In that year the net balance of unilateral transfers plus this country's net long-term loans

totaled more than 6 billion dollars. Further foreign loans and unilateral transfers may postpone for some years the problems incident to this country's absorption of a merchandise import balance. The United States can continue to give goods away—unilateral transfers—without creating a repayment-balance problem although not without domestic problems for the taxpayer and the consumer. If, however, the United States continues to make large foreign loans and if she collects the annual service charges on her foreign investments, the time is likely to come when the value of her merchandise imports will exceed that of her merchandise exports. The change may cause far-reaching readjustments in this country's industrial structure. These readjustments, involving expansion of some industries and contraction of others, may be extremely difficult to absorb.

Great Britain. British balance-of-payments data for the year 1913 are presented in Table 17. The figures for each category of visible and

TABLE 17. ESTIMATE OF BALANCE OF PAYMENTS OF THE UNITED KINGDOM, 1913 *

(Millions of pounds sterling)

Imports:	
Excess of imports of merchandise and bullion over exports....	158
Available for investments abroad.....	181
	339
Exports:	
Net income from overseas investments.....	210
Net national shipping income	94
Commissions	25
Other services.....	10
	339

* SOURCE: League of Nations, *Memorandum on Balance of Payments*, 1925. Used by courtesy of International Documents Service, Columbia University Press, New York.

invisible items in the table are net amounts. Under "Net income from overseas investments," for example, is included the income from "investments in empire and foreign countries remitted to the United Kingdom, less the income remitted overseas on account of the investments of other countries in the United Kingdom." "Balance available for overseas investments" is a rough estimate. It is not the same as new issues floated in London for various reasons.

New issues may to some extent represent the funding of private credits granted to facilitate the export of goods in past years. . . . Further, large

amounts of certain of the foreign loans floated . . . have been left in the country in the form of bank deposits.[2]

In spite of possible errors in the British balance-of-payments estimates the fact is clearly evident that the income from old investments abroad was in excess of new foreign loans in 1913. In addition to income on old investments the United Kingdom had a large net income in 1913 from shipping services and other services rendered to foreigners. Gold movements in this case are not segregated from merchandise, but this fact does not obscure the essential conclusion, *viz.*, that part of Great Britain's net income from foreign investments was offset by net imports of merchandise. Her merchandise trade balance was unfavorable.

Great Britain's creditor position developed gradually in the course of the nineteenth century. In the latter part of the eighteenth century she borrowed from the Netherlands. Eighteenth-century Netherlands was a wealthy trading nation, as was also Great Britain. In contrast with Great Britain, however, the Netherlands did not, for one reason or another, build such great manufacturing industries as those which were constructed in Great Britain. This, in part, is a reason for the Netherlands' surplus of capital for export and Great Britain's need of more capital (for domestic and overseas ventures) than she had available from her own savings during the last half of the eighteenth century.

As the nineteenth century unfolded, Great Britain's overseas interests increased, as did also her domestic productivity and the aggregate of her national income from which to save. Foreign-investment statistics are not complete at the present time. Nineteenth-century statistics are even less numerous and trustworthy than those of the twentieth century. Nevertheless various estimates give an idea of British foreign holdings at particular times in the nineteenth century. In the late 1870's or early 1880's British investments in foreign securities probably aggregated between 1 and 1⅓ billion pounds sterling. By 1913 British overseas investments had increased to about 3½ billion pounds sterling. In order to secure a net figure it would be necessary to deduct foreign investments in the British Isles. This figure is not avail-

[2] League of Nations, *Memorandum on Balance of Payments*, 1925, p. 70. Used by courtesy of International Documents Service, Columbia University Press, New York.

able, but there is every reason to believe it was small as compared with British holdings of foreign securities.[3]

Great Britain's merchandise trade balance shifted in 1854. Between 1815 and 1854 (and possibly before 1815) exports exceeded imports every year. For the year 1854 and thereafter until 1914 merchandise imports exceeded exports.[4] Had not Britain's net national shipping income amounted to a substantial figure, the merchandise trade balance might have been "favorable" for a longer period. It will be noted that in 1913 the net national shipping income was nearly half as large as the figure for net income from overseas investments.

TABLE 18. PROVISIONAL FIGURES FOR BALANCE OF PAYMENTS OF THE UNITED KINGDOM, 1946 *

(Millions of pounds sterling)

Payments:	
For imports (f.o.b.)	1,100
Net overseas government expenditures.	300
	1,400
Receipts:	
From exports and reexports (f.o.b.)	900
From interest, profits, and dividends †.	60
From other sources (net)	−10
	950
Deficit	450

* British White Paper (Cmd. 7046) presented to Parliament in February under the title "Economic Survey for 1947," quoted in the *Federal Reserve Bulletin*, April, 1947, p. 374. By courtesy of the Federal Reserve Board.

† Excluding oil, shipping, and insurance.

Great Britain emerged from the First World War with a substantial proportion of her foreign investments intact. Net balances of interest and dividends, receipts from overseas investments, and other services income from overseas were sufficient to permit large annual import balances and an enlargement of Britain's overseas investments during the interwar period. Great Britain used up a larger proportion of her foreign investments in the Second World War than she did in the First World War. Furthermore, Great Britain's domestic capital equipment was subject to greater destruction in the Second World War than was

[3] HOBSON, C. K., *The Export of Capital*, Chap. VI, p. 207, Constable & Co., Ltd., London, 1914.

[4] PAGE, WILLIAM, *Commerce and Industry*, pp. 70, 72, Constable & Co., Ltd., London, 1919.

the case in the First World War. Both of these circumstances are reflected in current estimates of Britain's balance of payments for 1946, shown in Table 18.

The form of the 1946 statement differs from that for 1913, but these differences do not obscure the basic changes that have taken place. Great Britain's excess of imports over exports in 1946 was nearly a third larger than in 1913—200 million as compared with 158 million pounds sterling. In 1913 Great Britain had 210 million pounds income from foreign investments, and in 1946 only 60 million pounds. The deficit in the 1946 balance of payments was made up largely by drawings on United States and Canadian credits.[5] Great Britain is faced with a serious problem of adapting her internal economy to her postwar status in world finance and world trade. If her economy is to function efficiently, she must find some other means of paying for those foodstuffs and raw materials which she formerly purchased with the proceeds of her foreign investments. In order to pay for imports with increased exports it will probably be necessary for the British to lower their costs of export goods and services in order to meet the costs of goods and services produced abroad. This will be particularly difficult in view of the depleted state of Great Britain's capital equipment and resources.[6]

France. In 1913 the payments balance of France for the various visible and invisible items was as indicated in Table 19.

As in the case of Great Britain, France was purchasing net imports of goods and gold in 1913 with interest and dividends from foreign investments and proceeds from shipping services and other services rendered to foreigners. Estimates indicate that her foreign investments amounted to from 40 to 50 billion francs or about 8 to 10 billion United States dollars in 1913 as compared with about 17 billion United States dollars' worth of overseas investments held by Great Britain.[7] "The balance sheet of French international accounts for the years 1880 to 1913 shows that the total net revenue due to France from her foreign investments was no greater than the total exports of capital

[5] British White Paper, *loc. cit.*

[6] See Chap. XXVI of this volume.

[7] SOURCES: FEIS, HERBERT, *Europe, the World's Banker, 1870–1914,* Yale University Press, New Haven, Conn., 1930. HOBSON, *op. cit.,* Chap. VI, p. 207, and appendix. WHITE, HARRY DEXTER, *The French International Account, 1880–1913,* Appendix, Harvard University Press, Cambridge, Mass., 1933. HANSEN, A. H., *Economic Stabilization in an Unbalanced World,* Chap. IV, Harcourt, Brace & Company, Inc., New York, 1932.

for the same period."[8] By the year 1913, however, France appears definitely to have become a creditor nation with an import trade balance.

In the interwar period France imported more merchandise than she exported although her merchandise trade balance was not consistently unfavorable every year. During the 10-year period 1928 to 1937 the value of French net imports of merchandise totaled approximately 3½ billion United States dollars. During the same period net interest and dividends that France received from foreign investments totaled more than 1 billion dollars (the exact figure is not available).[9]

TABLE 19. BALANCE OF PAYMENTS OF FRANCE, 1913 *

(Millions of francs)

Item	Exports (credits)	Imports (debits)
Merchandise	7,373	9,024
Gold	431	974
Interest, dividends, amortization, etc. (net)	1,900	
Shipping, commissions, insurance (net)	545	
Tourist expenditures and immigrant remittances (net)	420	
Increase in floating debt (net)	.....	671
	10,669	10,669

* League of Nations, *Memorandum on Balance of Payments*, 1926. Used by courtesy of International Documents Service, Columbia University Press.

The French economy suffered severely during the Second World War. The French balance-of-payments statement for 1946, given in Table 20, shows the seriousness of the French position in the first full postwar year. The 1946 figures in United States dollars cannot be compared directly with the figures in Table 19, which are in 1913 French francs. It is noteworthy, however, that in 1913 French imports exceeded exports by only about 22 per cent, whereas in 1946 the imports were almost five times the exports. Only a little over one-fifth of French imports in 1946 were paid for with exports, about half with foreign credits, and most of the remainder by liquidation of gold and foreign asset holdings. As in the case of Great Britain, France is

[8] WHITE, *op. cit.*, p. 301.

[9] SOURCE: League of Nations, *Statistical Year Book*, 1937–1938, Table 118.

faced with the necessity for major adjustments in her internal economy if she is again to become a self-supporting nation.

TABLE 20. ESTIMATED FRENCH BALANCE OF PAYMENTS IN 1946 *

(Millions of dollars)

Item	Credits (exports)	Debits (imports)
Goods and services:		
Estimated exports and imports (including freight)	$ 550	$2,540
U. S. surplus property		300
Services	150	170
Total	$ 700	$3,010
Private donations	$ 50	
Credits utilized (net):		
Lend-lease "pipe-line" credit	240	
Export-Import Bank loans	621	
U. S. surplus-property credits	300	
Other credits	96	
Total	$1,257	
Net sales (or accruals) of gold and foreign assets †	1,003	
Total credits and debits	$3,010	$3,010

* SOURCE: *Federal Reserve Bulletin*, April, 1947, p. 360. Data include France and French Colonies. Used by courtesy of Federal Reserve Board.

† Residual item, includes errors and omissions.

Russia. Prior to the First World War Russia was an industrially backward country. She had borrowed capital abroad during the last part of the nineteenth century and the first decade of the twentieth century for constructing railroads, installing manufacturing and mining machinery, and other such purposes. The First World War and the revolution brought these developments temporarily to an end. In the 1920's industrialization in Russia got under way again and continued at a rapid rate until the Second World War. Nevertheless, with a great wealth of natural resources awaiting exploitation and in the absence of large foreign borrowings for installation of capital equipment, Soviet Russia had not developed her productive facilities prior to the Second World War to a stage where it was to her interest to export large

amounts of capital. During the 10-year period 1928 to 1937, the value of her merchandise exports was about the same as the value of her merchandise imports.[10] The U.S.S.R. payments balance in 1936 in terms of net figures for various categories of visible and invisible items is shown in Table 21. The figures in the table indicate that part of U.S.S.R. net income from foreign countries arising from merchandise, shipping, and tourist transactions was used in financing state expendi-

TABLE 21. BALANCE OF PAYMENTS OF U.S.S.R., 1936 *

(Millions of rubles)

Item	Net exports	Net imports
Merchandise	169	
Shipping, insurance, etc.	69	
Tourist travel	35	
Excess of state expenditures over state receipts abroad	...	55
Interest on short-term balances	...	37
Miscellaneous invisible items	...	30
Long-term and short-term investments and credits	...	151
Total	273	273

* SOURCE: Adapted from Alexander Baykov, *Soviet Foreign Trade*, Princeton University Press, Princeton, N. J., 1946. Used by courtesy of Princeton University Press.

tures abroad, payment of interest on short-term balances, and purchase of other invisibles. The U.S.S.R. ruble in 1936 was worth about 20 cents in United States currency. In terms of dollars, the balance available to U.S.S.R. for purchase of foreign securities or properties in 1936 was small in relation to annual net movements of capital out of or into the United States during the 1930's.

During the Second World War Russian industrial equipment in highly industrialized areas in the western part of the country was seriously damaged. One of Russia's first postwar objectives was replenishment of these losses through removal of capital equipment from occupied countries, domestic production of capital equipment in place of more production of consumer goods, and foreign purchase of capital equipment with proceeds from net merchandise exports and borrowings in foreign countries. Sometime the U.S.S.R. may be one of the world's great creditor nations, but she has not yet reached that stage.

[10] League of Nations, *Statistical Year Book*, 1937–1938, Table 119.

Less Industrialized Debtor Countries. China and India are densely populated countries where labor is cheap, per capita productivity low, and natural resources relatively abundant. These are circumstances conducive to capital imports. In Africa and South America population is less dense, but per capita productivity is relatively low, and a wealth of natural resources await development. These circumstances, likewise, are conducive to capital imports. In Canada and Australia industrialization is well under way. These are sparsely populated countries; agricultural production for export is profitable. Neither country has as yet reached the third investment stage, the interest-receiving, import balance stage. Italy and Japan are densely populated, debtor countries. They do not possess vast quantities of dormant natural resources to be unlocked; they have little but cheap labor to offer in exchange for fabricating materials, fuels, and foodstuffs produced abroad. Labor may be sold to foreigners in the form of goods produced in Italy or Japan from imported materials, in the form of shipping and other services, or in the form of entertainment provided to tourists. Japan, like other countries in Asia, and Italy, like a number of countries in eastern Europe, are capital-importing debtor countries.

IMPORTANCE OF PAYMENTS BALANCE MECHANISM

Commerce and international finance together with communication and transportation join the systems of national economic activity in various countries into an interdependent whole. Compensatory fluctuations in the visible and invisible items that constitute an international payments balance are among the evidences of international interdependence.

Methods of Adjustment in Payments Balances. There must be flexibility in the financial transactions between citizens and institutions of a particular nation and those of other countries. Otherwise debts would accumulate on one side or the other, and repudiation would be a more usual and ordinary procedure than it is. Over short periods of time the items most sensitive to compensatory adjustment in the international balance sheet have been short-term loans and gold movements. Gold movements have been more important, of course, when the countries concerned were on gold standards than when they were not.

Temporary adjustments between the aggregates of money owed by the people of a nation to foreigners and money owed by foreigners to them may be made by short-term loans. In Europe and North Amer-

ica, for example, grain crops and cotton are harvested and placed on the market in larger amounts in summer, fall, and early winter than in other months. As a result industrial countries that import grain and cotton from agricultural countries in the Northern Hemisphere are likely to accumulate debts to such countries in the second half of the year and to make repayments in the first half. If, however, an inequality in payments that is temporarily balanced by short-term credits is persistent, if it is not a seasonal phenomenon that is periodically corrected or the result of an erratic change in business conditions that soon is reversed, more enduring corrections than short-term credit extensions must be brought into play.

In all cases any tendency for international payments to get out of balance is reflected by fluctuations in foreign exchange rates (unless these rates are rigidly fixed by government policy and international agreement). In the past, exchange rates between countries with free gold monetary systems fluctuated within the narrow limits necessary to initiate international gold movements. Gold movements, in turn, may have affected interest rates, domestic price structures, merchandise movements, and other payments balance items in such a manner as to bring about compensatory adjustments. The evidence is abundant and convincing that exchange rate fluctuations among countries with free gold standards were held, in times past, within the narrow range set by the cost of shipping gold.[11] That international gold movements always initiated compensatory adjustments in other payments balance items is not as convincingly supported by the available evidence. Taussig's[12] payments balance investigations suggested that there had been almost simultaneous commodity movements and gold movements rather than an orderly sequence of gold movements, price changes, and changes in merchandise trade balances.

Whatever may have been the part that price-specie-flows had in the operation of international payments prior to the First World War, it is certain that the price-specie-flow mechanism cannot be depended upon automatically to maintain price equilibrium among trading countries under present-day circumstances.

If gold is available in trading countries in sufficient abundance for settlement of international payments during intervals necessary for credit management policies to create international price-level stability, exchange rate fluctuations may be held within a narrow range. If

[11] See Chap. XII of the present volume.

[12] TAUSSIG, F. W., *International Trade*, pp. 207, 208, 260, The Macmillan Company, New York, 1927.

gold is not available in sufficient quantities to serve the foregoing purpose in trading countries and if credit management policies of central banks are not promptly effective in bringing about international price-level stability,[13] foreign exchange rates may undergo extreme fluctuations.

After gold movements and short-term loans the most sensitive item in the international balance sheet has usually been merchandise trade. Adjustments in merchandise-trade balances between countries may take place in connection with changes in the relationship of prices in the countries concerned more or less regardless of the nature of their monetary standards. A country in which the general level of commodity prices rises relative to comparable prices elsewhere tends to be an attractive market in which to sell merchandise and an unattractive market in which to buy—provided, of course, that international exchange rates remain relatively stable. More sales and fewer purchases in such a country tend to build up foreign-owned bank balances in that country. Unless this tendency is curbed by price-reducing credit policies or otherwise, or unless the increases in foreign-owned bank balances are absorbed in the purchase of long-term securities, tourist services, or other invisible items, the rate of foreign exchange at which these balances may be sold will tend to depreciate. As the rate of foreign exchange depreciates, the country tends to become a less attractive market in which to sell merchandise and a more attractive market in which to buy. Thus the tendency toward a passive trade balance which was initiated by rising commodity prices may be corrected, at least in part, through the depreciation in the rate of foreign exchange.

Foreign Exchange. At any particular time the foreign exchange rate is a composite resulting from many individual transactions involving the conversion of the currency of one country into that of another. Consideration of the nature of some of these transactions will clarify the role of foreign exchange in the operation of the payments balance mechanism. Foreign exchange banks or foreign exchange departments of banks facilitate the transferring of values from one country to another and from one currency to another by buying and selling foreign exchange. The banker with a foreign exchange business main-

[13] The term "international price-level stability" as used in this connection implies price-level relationships in the several trading countries such as to prevent accumulation of excesses of foreign-owned bank balances in a particular country of an amount to induce large depreciation of that country's currency in terms of foreign currencies.

tains deposits abroad. When he purchases foreign exchange, he thereby depletes his domestic funds and adds to his foreign balance. When he sells foreign exchange, he thereby increases his domestic funds and depletes his foreign balance. Over a period of time the aggregates of foreign exchange that a banker purchases and sells approximately offset one another (except for profits realized or losses sustained in the buying and selling transactions) thus leaving the balances of his foreign accounts more or less unchanged in amount. Foreign exchange is sold and bought in various forms. *The New York Times* and other daily papers and financial journals quote "90-day" bills, "demand" exchange, "cables," and other types of exchange that differ in degree of futurity. "90-day" bills are collectible 90 days from date or from time of acceptance as the case may be. "Demand" exchange is represented by bills collectible on demand. "Cables" represent exchange transmitted from one country to another by telegraphic communication.

Bills of exchange come into existence as a result of many types of international transactions. A resident of London who imports machinery from the United States may be faced with the problem of exchanging British pounds sterling for American dollars in order to pay the American exporter in the currency of his own country. If the sales contract is in terms of dollars, the importer may purchase from his London bank, with pounds sterling, a check for dollars on an American bank. The check is then forwarded to the United States exporter in payment for the machinery imports. The importer pays pounds sterling to his bank in London. The exporter in whose favor the check is made cashes it for dollars in the United States. The London bank has, by the transaction, augmented its holdings of pounds sterling in London and reduced its deposits of dollars in the United States. If the sales contract was drawn in terms of pounds sterling, the London importer may forward a check drawn on a London bank in terms of pounds in payment for the machinery. The exporter in the United States then sells the check for dollars to a United States bank. The United States bank pays out dollars in this country and in exchange augments its deposit account in London.

An American traveler who is going to Europe may pay dollars to a United States bank in exchange for a check that he can cash in pounds sterling in London. The United States bank in this instance acquires dollars and reduces its deposits in London.

In a manner suggested by the foregoing illustrations, all types of international financial transactions tend either to deplete or to build

up balances held in banks of one country by banks of another country. If bank deposits in London, held by United States banks, tend persistently to expand, United States banks may reduce the dollar price of sterling checks on English banks in order to reduce their balances in England; *i.e.*, the sterling-dollar exchange rate may fall. If gold is available for transfer from London to New York, the sterling-dollar exchange rate may fall by an amount to compensate for the cost of moving gold from London to New York. If gold is not available for transfer from London to New York, the sterling-dollar exchange rate may fall by an amount sufficient to induce United States residents to purchase larger amounts of foreign goods and services that can be paid for with sterling checks drawn by United States banks on British banks. These goods and services may be purchased in England or in some third country so long as the seller will accept sterling exchange in payment. The extent to which the sterling-dollar exchange rate may fall, under these circumstances, will be conditioned by the elasticity of demand in the United States for foreign goods and services that can be purchased with checks on English banks. The effect of the reduction of the sterling-dollar exchange rate is to increase United States imports of goods and services and to increase British exports of goods and services.

Compensating adjustments can be made among the items entering into international payments balances as a result of competitive pressures and without serious dislocations if major changes in the payments balance statuses of the countries concerned occur gradually. If, however, the impact of such changes is sudden, the international network of monetary payments may be so disrupted as to cause financial panic. During the interwar period payments balance stresses and strains contributed to the abandonment of free gold-standard monetary systems in all countries where they still survived. Countries can no longer depend upon international gold movements and their effect upon national price levels to play a predominant role in bringing about a balancing of international payments. The twin problems of keeping international payments in balance and of maintaining stability of international exchange rates constitute a challenge of foremost importance to statesmen and economists of the present generation.

CHAPTER XIV

PAPER CURRENCIES, INTERNATIONAL PRICES, AND PAYMENTS BALANCES

After the First World War it was generally assumed by statesmen and economists that the great commercial nations would reestablish gold standards. It seemed practically axiomatic that, in the decades before 1914, the widespread use of the gold standard had furnished an essential and efficient means for maintaining domestic monetary stability and facilitating the settlement of international transactions. Departures from gold, therefore, were thought of as temporary emergency measures to be abandoned as promptly as possible. The monetary experiences of leading nations, in the interwar period, furnish illustrations both of the hazards and problems of paper currencies and of the difficulties involved in setting up and operating new gold standards. From the international point of view these gold-standard difficulties were undoubtedly augmented by the independent, unilateral manner in which individual countries approached the problem.

ATTEMPTS TO MAINTAIN GOLD STANDARDS AFTER THE FIRST WORLD WAR

For each country one of the first and most important steps in the establishment of a gold standard is the determination of the gold content of the monetary unit. Once this decision has been made by any country, its gold par of exchange with all other gold-standard countries follows automatically. Under the conditions of monetary and price instability that prevailed after the First World War there was no one, easily ascertainable, "right" gold content for each national monetary unit. Individual countries were faced with the alternatives of adopting the prewar gold content of their monetary unit or some other gold content which seemed to offer greater domestic or international advantages. Since market rates of foreign exchange in the early 1920's did not conform to prewar pars of exchange, any return to prewar pars necessitated major economic adjustments in the countries concerned. British experience in the 1920's and early 1930's illustrates this type of situation.

Great Britain. At the end of the First World War Great Britain laid a financial policy course designed to reestablish a free gold-standard monetary system with the prewar gold content of the pound approximately 113 grains of fine gold. At that time the legal gold content of the United States dollar was the prewar content—approximately 23.22 grains of fine gold. The prewar par of exchange between pounds and dollars was $4.8665 per pound; *i.e.*, 113 divided by 23.22. In the early postwar years the pound sterling was seriously depreciated in terms of the dollar; the average sterling-dollar exchange rate in 1920 was $3.6643 per pound, and in 1921 the average rate was $3.8491.

If Great Britain was to be successful in the reestablishment of her prewar gold standard, deflation of the country's internal price structure was called for, thus to stimulate the sales abroad of more British goods and services in relation to Britain's purchases of goods and services abroad. Initially the British were successful in this policy. Domestic prices declined. The decline in prices was accompanied by increased unemployment, reorganization of the capital structures of some of the highest cost producing companies, and other readjustments incident to reduction of costs and deflationary realignment of the price cost structure. During the period 1920 to 1924 the wholesale commodity price index in Great Britain, on a 1913 base, declined as follows: 1920, 295; 1921, 182; 1922, 154; 1923, 152; 1924, 165.[1] During this same period the sterling-dollar exchange rate rose from $3.6643 per pound in 1920 to $4.4171 in 1924.[2]

On May 13, 1925, the Gold Standard Act of 1925 was passed. This act placed the Bank of England under obligation to sell gold bullion in amounts of not less than 400 fine ounces in exchange for legal tender at 77*s.* 10½*d.* per standard ounce or 1 pound sterling per 113 grains (approximately). An earlier act obligating the Bank to buy all gold offered at 77*s.* 9*d.* was still in force.[3] These acts put Great Britain back on the prewar free gold standard so far as foreign exchange rates were concerned, although bank notes might be converted into gold coin only at the option of the Bank of England or by proclamation. Great Britain remained on the gold standard until September, 1931. During the 6-year period when Great Britain was on the gold standard and the

[1] Board of Trade Index.

[2] *Foreign Commerce Yearbook of the United States*, 1938.

[3] BROWN, WILLIAM ADAMS, JR., *The International Gold Standard Reinterpreted, 1914–1934*, Vol. I, p. 381, National Bureau of Economic Research, Inc., New York, 1940. NOTE: The standard ounce is 437½ grains.

sterling-dollar exchange rate was maintained at approximately $4.866, there was little evidence of disequilibrium in the British balance of payments.[4] There was a slight excess of gold exports over gold imports for the years 1925 to 1930, but it was less than the 21 million pounds sterling excess of gold imports for the years 1919 to 1924.[5]

An outstanding effect of the maintenance of the gold standard was the continuation of unemployment and depressed business conditions at home. Under the world conditions of this period—1925–1931—foreigners would not pay $4.866 per pound sterling to buy British-made goods unless their average prices were reduced. The prices of export goods could not be reduced, however, without further depressing effects on the entire British economy. Undoubtedly there were factors in addition to foreign exchange rates that contributed to the difficulties of British industries during this period. Notable among them were shifts in world demand for internationally traded goods and the relatively backward technical condition of some British industries. It is generally agreed, nevertheless, that Great Britain's attempt in 1925 to reestablish the prewar gold standard resulted in an overvaluation of pound sterling in relation to other currencies. The failure of the attempt was acknowledged when Great Britain divorced the pound from gold in September, 1931. By 1932 the average sterling-dollar exchange rate had fallen to $3.5061 per pound.

France. The instability of the international economic situation in the 1920's was augmented by the fact that the policies of leading countries were determined without adequate regard for their effects on each other. The contrast between British and French policies was especially marked. During most of the period—1925 to 1931—when the pound sterling was "overvalued" the French franc was "undervalued." In December, 1926, the Bank of France began the purchase of all dollars offered at a rate of not over 4 cents per franc and of all pounds offered at a rate of not less than 122 francs per pound sterling. This stabilized the gold basis of the franc in such a relationship to other currencies and to the French internal price level as markedly to discourage French imports and encourage French exports.

The franc had undergone much more serious fluctuations than had the pound between 1913 and the mid-1920's. In 1920, the year in this period when the pound was lowest, the average annual dollar exchange rate of the pound ($3.6643) was about three-quarters of its prewar

[4] See League of Nations, *International Currency Experience, Lessons of the Interwar Period,* League of Nations, 1944, especially Chap. V.

[5] *Statistical Abstracts of the United Kingdom.*

par. At the same time the average annual dollar exchange rate of the French franc was $0.0704, only slightly over one-third of the prewar par of $0.19295. The franc rose slightly in 1921 and 1922 and then dropped steadily until it reached $0.0324 in 1926. Thus the stabilization of the franc at approximately 4 cents at the end of 1926 was at about one-fifth of its prewar par and in marked contrast to the British attempt to restore and maintain the prewar par of the pound sterling.

The decline in the foreign exchange value of the French franc was accompanied by increases in the French price level. The wholesale price index in France on a 1913 base increased from 327 in 1922 to 489 in 1924 and to 695 in 1926. The depreciation of the franc at home and abroad was part of the general picture of French economic instability at this time. Large government expenditures were required for internal reconstruction, but heavy taxes were unpopular and the reparations payments from Germany far short of French expectation. The large national debt, distrust on the part of French financial interests in the economic policies of the government, and difficulties which the government experienced in floating bond issues contributed to a continuation of the inflation in the early 1920's. When the external value of the franc was stabilized at the end of 1926, new tax and banking policies[6] were adopted and the inflationary trend at home was arrested.

During the remainder of the 1920's business conditions in France were better than in Great Britain, and the world-wide depression of the early thirties did not begin in France until later than in other countries. This temporarily advantageous position of France in world trade has been attributed, in large part, to the undervaluation of the external value of the franc in relation to other currencies, especially the pound. Later in the 1930's, however, France experienced extreme deflation which led her to the brink of political revolution. Neither economic nor political stability had been attained in France by the time of the outbreak of the Second World War. Both the French and the British balances of international payments and domestic economic difficulties were inextricably interdependent during the interwar period. The fact that the two greatest commercial nations of Europe in the mid-1920's pursued such divergent policies in their attempts to restore their gold standards unquestionably intensified the difficulties of attaining international economic stability during the interwar years.

Germany. The German situation in respect to currency, prices, and

[6] See BROWN, *op. cit.*, pp. 446*ff*.

payments balances in the interwar period was a composite of such violent extremes that it furnishes little useful guidance for more nearly normal conditions. It merits some consideration, however, because of its disturbing effect on the policies and practices of other countries. In the years immediately before the First World War, Germany was one of the three foremost trading nations of the world. In the years 1911–1913, for example, the value of German imports was second to the British, and the value of German exports was exceeded only by those of Great Britain and the United States. Even if the war had completely removed Germany as a factor in international commerce, the resulting hiatus would have necessitated major adjustments in other countries. Along with regaining her trading position in the 1920's and 1930's, Germany added complications to world economy by undergoing hyperinflation followed by the establishment of a gold standard, and by being the unwilling center of the many problems created by reparations.

Before the First World War Germany was on the gold standard; the par of exchange in terms of United States currency was $0.2382 per mark. The exchange rate declined during the war and averaged $0.067 in 1919. Thereafter the unsettled political and economic conditions at home combined with the reparations problems to bring about a precipitate decline and final collapse of the prewar mark. The mark became meaningless as more and more paper money was issued. When the transition currency, the rentenmark, was established in November, 1923, the old mark was stabilized at 1,000,000,000,000 paper marks to 1 rentenmark. In October, 1924, a new reichsmark was established with the same gold content as the prewar mark. During the period between the end of the war and the abandonment of the prewar mark, the progressively more extreme inflation precluded the existence of an orderly relationship among prices, exchange rates, and payments balances.

Reparations were one of the most important factors contributing to disequilibrium in balances of international payments in the 1920's and early 1930's. Numerous plans for collecting varying amounts of reparations from Germany were adopted during this time. The basic requirement that these plans had in common was that of demanding external payments from Germany of such a size as to necessitate a substantial shift in her balance of payments. Before the First World War Germany was a creditor country importing more than she exported. Conformity to reparations demands by exporting more than she imported would have required major industrial shifts within Ger-

many and would have imposed upon other countries the necessity of making adjustments incident to increasing their imports of German goods. The difficulties were particularly acute in the early years because of the impossibility of making sudden shifts in the payments balances of the countries concerned. Before the First World War Germany had imported food and raw materials to keep her industrial system running and maintain her relatively high living standards. In order to develop and maintain a large surplus of merchandise exports Germany's internal costs and German living standards would have had to be forced down and kept down. The Germans were not enthusiastic about the idea of living parsimoniously in order to pay reparations, nor could the internal economies of the Allied nations absorb a surplus of German manufactures without structural readjustment. In the years before the abandonment of the prewar mark, a large part of the pressures resulting from this combination of circumstances manifested themselves in the precipitous decline of the value of the mark, as the practical impossibility of securing sufficient foreign exchange with which to make reparations payments drove Germany to issue paper money in ever-increasing quantities.

The establishment of the gold standard in Germany in 1924 did not remove the basic reparations problems. Business activity there increased, but the transfer problem remained. Great Britain and France, Germany's greatest creditors, were still unwilling to receive large quantities of German goods. The United States was an ultimate creditor by reason of the war debts owed to her by the Allies, but this country was not interested in importing German goods on a large scale. It might have been possible for Germany to shift her trade balance by shipping manufactures and capital goods to unindustrialized countries, but there were at least two impediments to such a procedure. Most of those countries would have had to borrow in order to pay for such goods, but they did not present sufficiently attractive investment opportunities to draw large enough sums from such countries as the United States and Great Britain, which had lending capacity. In the second place, in so far as the unindustrialized countries had purchasing power, the Allies did not welcome increased German competition in their markets. Germany was able to make reparations payments and to maintain a stabilized currency for several years largely by reason of substantial direct borrowing. Thus Germany never made the internal adjustments necessary to acquire a true export surplus. By mid-1931 the world depression plus internal economic difficulties forced her to abandon the attempts to maintain a freely

convertible gold standard Any subsequent stability in German foreign exchange rates was to be attained only through rigid government controls.

The Primary Producing Countries. Even before 1914 the maintenance of the gold standard presented unique problems to the primary producing countries. Australia, New Zealand, and several of the South American countries, each of whose principal exports consisted of a small number of primary raw materials, were in particularly difficult positions. The money values of the merchandise exports of Australia or Brazil, for example, were cut greatly whenever there was a sharp decline in the world price of wool or coffee. When such declines were part of a world pattern of depression, the balances of payments of the primary producing countries were more seriously affected than those of the highly industrialized countries for at least two reasons: (1) The demand for agricultural products is generally more inelastic than that for industrial products. This meant that many of the primary producing countries lost more from the declining prices of their exports than they gained from any declines in the prices of their imports. (2) Most of these countries were debtor countries, which meant that the real burden of their foreign obligations increased as the prices of their primary exports declined.

Both before and after the First World War the primary producing countries frequently met these difficulties by currency depreciation. Before 1913 when the leading trading nations of the world were on stable gold standards, world economy could absorb the shocks of occasional departures from gold in less important countries. In the interwar period the general instability was aggravated by the monetary uncertainties of the primary producing countries. Most of these countries stabilized their currencies on some sort of gold basis in the mid-1920's. If world economic conditions had continued to improve, if foreign loans to the debtor countries had been continuously forthcoming, and if the prices of their exports had been maintained, it would have been relatively simple for them to have kept their currencies stable and their balances of payments in equilibrium. In the absence of these conditions the impact of the world depression which began in 1929 dislodged many of the primary producing countries from their precariously held gold-standard positions. The foreign exchange rates of Australia, New Zealand, Argentina, Brazil, Venezuela, and Uruguay, for example, all began to decline in 1929 and by September, 1931, ranged from 91 per cent of par for New Zealand to 44 per cent

of par for Uruguay.[7] Accompanying difficulties such as declines in the demand for industrial goods and, in some countries, inability to meet interest charges on foreign debts, had serious repercussions on the gold standards and balances of payments in other countries.

United States. The United States occupied a unique position in respect to the gold standard in the 1920's. In mid-1919 this country removed the wartime restrictions on the exports of gold and was thus the first major country to reestablish the gold standard.[8] The prewar gold content of the dollar—23.22 grains of fine gold—was not changed. In contrast to the situation of most other countries at this time, there was little, if any, reason to doubt the ability of the United States to maintain its former gold standard. In fact the dollar stood out in the early interwar years as the one immutable monetary unit. There were other reasons, in addition to its apparent stability, for the world-wide dominance of the United States dollar during this period. During the decades before 1914 the United States had been growing in economic importance both absolutely and in relation to other countries, but the year-to-year changes had not been so great as to bring about sudden changes in the balances of economic power. The First World War set back or at least retarded the economic development of leading competitors of the United States—Great Britain, Germany, and France—and accelerated the development of this country, with the result that the United States entered the 1920's as the world's foremost economic power. During the twenties the United States was the world's leading exporting country, its second largest importing country, and markedly exceeded Great Britain, Germany, and France taken together in national income and industrial production.[9] Thus the sheer volume of dollar transactions guaranteed the United States a dominant role in world trade.

During the First World War years the United States made the transition from a prewar position of debtor nation on international account to a postwar position of creditor nation. This position was further strengthened in the 1920's. After a brief period of internal price deflation and uncertainty between 1919 and 1922 the United States embarked on several years of large-scale foreign lending, domestic credit expansion, internal price stability, and a high level of employment and business activity. The United States monetary gold reserves were

[7] See BROWN, *op. cit.*, Chap. 24.

[8] LARY, HAL B., *et al.*, *The United States in World Economy*, p. 128, U. S. Department of Commerce, Washington, D. C., 1943.

[9] *Ibid.*, pp. 28, 29.

ample, and the dollar was strong in relation to other currencies. In the years 1923–1929, the value of merchandise exports of the United States ranged from 4,167 million dollars in 1923 to 5,241 million in 1929, and the excess of exports over imports from 375 million dollars in 1923 to 1,027 million in 1928.[10] The largest single balancing item that enabled foreigners to pay for the large volume of United States exports was the continuous foreign lending by this country. In the years 1923–1929 the net amount of long-term capital exports of the United States ranged from 45 million dollars in 1923 to 1,037 million in 1927.[10] In each of the years 1924, 1925, 1926, and 1928 net long-term capital exports were well over 500 million dollars.

It is not necessary to go into the controversy concerning the sequence of events that led into the world depression of the early 1930's in order to see the cumulative effect of these events on balances of payments throughout the world. In addition to its indirect involvement, already described, in the problems of Great Britain, France, Germany, and the primary producing countries, the United States had unique problems of its own. Expanding export industries sought foreign markets, but the country as a whole was not prepared to submit to the unregulated operation of the forces described in the classical price-specie-flow analysis. In its simplest terms the operation of price-specie-flows in the international trade of the United States in the 1920's would have resulted in an inflow of gold as exports increased. The ensuing price rise in this country would have tended to reduce exports and increase imports and to redress the balance of merchandise trade. Balance-of-payments theory allows for the postponement of this stage by means of capital exports as was the practice of the United States in the 1920's.

With the inevitable dwindling of capital exports plus the increasing amounts of interest and other charges due to this country as a result of previous capital exports, the time for change was at hand by the end of the twenties. At this time, however, other conditions made it practically impossible for the United States balance of merchandise trade to undergo a major change in direction. For one thing, the tariff policy of this country was such as to preclude any substantial increase in imports. At least as important was the fact that by the end of the twenties the "normal" operation of gold flows envisaged in price-specie-flow theory did not exist. A large proportion of international gold flows even during the brief period in the twenties when leading

[10] *Ibid.*, Table I, facing p. 216.

countries were on gold standards arose from short-term capital movements which frequently represented flights from insecurity or search for speculative gains. The nature of gold movements became even less normal as more and more countries went off gold in the early thirties. Thus the gold-flow mechanism which might have assisted in bringing about an orderly adjustment had, for all practical purposes, ceased to exist. After 1928 United States long-term loans to foreigners declined precipitately, and by 1931 the direction of net movements of long-term capital was reversed. This country's favorable trade balance also dwindled from the level of over a billion dollars in 1928 to less than one-fourth that amount in 1933. Domestic credit contracted in the United States during this period; domestic prices declined and unemployment climbed to the highest levels ever before experienced. Monetary gold stocks in the United States were not seriously depleted.[11] Nevertheless, the legal gold content of the dollar was reduced on Jan. 31, 1934, by Presidential proclamation, from 23.22 to 13.7 grains of fine gold. The effect of this proclamation, implemented by legislation and by a United States Treasury policy of purchasing gold at $35 an ounce, was to depreciate dollar exchange.

Here was a case where depreciation of the foreign exchange rate of a country's currency was resorted to for reasons of internal economics rather than because of weakness in the world value of its currency. This experience is suggestive of conflict between two end products for which present-day society is striving. One is greater production and higher living standards. To this end international trade contributes. Another is job stability and economic security. With this end product international trade at times is in conflict because of the fact that production economics of international trade are purchased at a cost incident to the readjustment of domestic economic activities in harmony with economic changes abroad.

PRICES AND PAYMENTS BALANCES WITHOUT GOLD STANDARDS

Before the middle of the 1930's it was evident that the world trading nations were either unable or unwilling to maintain the kind of world gold standard that had existed before the First World War. It had been demonstrated that the mere setting up independently of formal gold standards by individual countries did not automatically restore

[11] Monetary stocks of gold coin and bullion in the United States in 1928 amounted to approximately 4.1 billion dollars; in 1929, to 4.3 billion dollars; in 1932, to 3.9 billion dollars; in 1933, to 4.3 billion dollars. SOURCE: *Statistical Abstract of the United States*, 1943, p. 311.

the prewar international gold-standard mechanism. Some of the outstanding obstacles to the successful operation of an international gold standard in the interwar period were the unilateral determination of such important matters as the gold content of monetary units, the distorting effect of the reparation problem, conflicts between the external and internal economic policies of individual countries, erratic and extensive movements of both gold and short-term capital funds in response to speculative pulls, and fluctuations in confidence.

It becomes necessary, therefore, to find an explanation of the manner in which international payments may be balanced without gold standards. This subject aroused a great deal of discussion during and shortly after the Napoleonic wars and has excited intermittent interest ever since. One of the results of the monetary upheavals of the period between the two world wars was the widespread renewal of attempts to formulate a body of theory to explain the interrelationships between paper currencies, prices, and payments balances in a nongold-standard world.

When the currencies of trading countries are not united by the same metallic base, their most important common bond is to be found in the prices of internationally traded goods and services. At any particular time, for example, there is a market price for a bushel of wheat in terms of dollars, pounds, francs, and many other currencies. The same thing is true of the price of a bale of cotton, a ton of pig iron, a pound of bacon, or the cost of ocean freight. The cost to an Englishman of buying a bushel of wheat from the United States depends upon the dollar price of wheat and the sterling price of the dollar. When both countries are on a gold standard, the sterling price of the dollar fluctuates within the narrow range determined by the gold points. When one or both of the countries are off gold, the range of fluctuation may be wide.[12] In either case the combination of the exchange rate and the price of goods will be an important determinant of the direction of trade.

The interrelationship among prices, exchange rates, and trade balances without free gold standards may be illustrated by considering a hypothetical situation between two countries, the United States and Great Britain. If, for any reason, the dollar is dear in terms of the pound sterling and prices of goods are stable, the British will buy less American goods and, since the pound is cheap in terms of the dollar, Americans will buy more British goods. The resulting decrease in the

[12] See Tables 12 and 13, Chap. XII.

demand for dollars in Great Britain and the increase in the demand for pounds in the United States will tend to lower the price of the dollar in Great Britain and increase the price of the pound in the United States. The same changes in the nature of transactions that have affected the exchange rates will also have an influence on the prices of goods. The prices of goods that the British customarily purchase in the United States will tend to fall as British demand declines, and the prices of goods that Americans customarily buy in Great Britain will rise as American demand increases. Thus the decrease in British imports from the United States and the increase in United States imports from Great Britain, initiated in this instance by the foreign exchange rate, may be reversed as the dollar becomes cheaper in terms of the pound and as prices drop in the United States and increase in England. This type of analysis of prices, exchange rates, and balances of payments has given rise to the purchasing-power-parity theory.

Purchasing-power Parity.[13] The purchasing-power-parity theory has been developed with a number of different emphases. In its simplest form it may be reduced to a formula for explaining the relation between paper money, price levels, legal gold pars of exchange, and market rates of exchange between two countries both of which have been on gold standards and have been forced off gold. In such a case the legal gold par has ceased to be the focal point around which market rates of exchange fluctuate within the narrow range determined by the cost of shipping gold. The purchasing-power-parity formula has been devised for the computation of the purchasing-power par (or parity), which may be thought of as a substitute for the legal gold par in furnishing a basic figure around which exchange rates may be expected to fluctuate. The formula is based on the assumption that the prices at which goods and services may be purchased in one country in relation to the prices at which goods and services may be purchased in the other country will determine the exchange rates.[14]

[13] The purchasing-power-parity theory was developed at the time of the bullion controversy early in the nineteenth century. It was revised by Professor G. Cassel during the First World War. See his article, "The Present Position of Foreign Exchanges," *Economic Journal*, 1916; *La monnaie et la change depuis 1914* (translated by G. Lachapelle), Paris, 1923; *Money and Foreign Exchange after 1914*, Constable & Co., Ltd., London, 1922; *The World's Monetary Problems*, Constable & Co., Ltd., London, 1921, and others of Cassel's publications.

[14] As usually applied the formula takes only merchandise prices into account. Services and other nonmerchandise transactions taken into account in the theory are, for statistical reasons, excluded in the formula.

The formula may be illustrated with price indices in France and Great Britain for the year 1921. This was a time when both countries were off gold and when much attention was being given to the problem of setting such a postwar franc-pound par of exchange as would contribute to the maintenance of equilibrium between French and British balances of payments. The equation for calculating purchasing-power parity is in this case:

$$\frac{\text{French price index, 1921}}{\text{British price index, 1921}} \times \text{gold par} = \text{purchasing-power parity, 1921}$$

Average price indices for 1921 on a 1913 base may be used in this calculation since the 1913 exchange rate was approximately equal to the gold par between francs and pounds sterling. Substituting the appropriate figures, we get

$$\frac{345}{182} \times 25.2 = 48$$

Thus the average purchasing-power parity in 1921 was 48 francs per pound sterling. The actual average rate of exchange between francs and pounds in 1921 was around 52 paper francs per paper pound. The purchasing-power parity, unlike the gold par, is not a value fixed by law but a value that fluctuates with changes in the price level in one or both of the countries concerned. By 1924, for example, the French price index was 489 and the British, 165. These price indices give a purchasing-power parity of 75 francs per pound. The actual average rate of exchange between the franc and the pound in 1924 was about 85 francs per pound.

The purchasing-power parities of other currencies are of the same general nature as those between the franc and the pound. The computed figures differ by varying amounts from the market rates of exchange. The direction of change from year to year is usually the same for both the purchasing-power parity and the actual rate of exchange, but the amounts of change may be very different. The discrepancy between the purchasing-power parity and the actual rate is likely to increase as the time after the base year becomes greater.

Since the Second World War purchasing-power parities have been calculated for countries, one or both of which were on paper-money standards in the base period. In such cases relative changes in price indexes in relation to the base period are related to market rates of exchange in the base period. Purchasing-power parities so derived

have little or no significance as norms about which market rates of exchange may be expected to fluctuate, unless one may assume that the base-period market rates of exchange reflect conditions of approximate payments balance equilibrium.

It is evident that, although the purchasing-power-parity formula provides a useful expression of the nature of the relationship between prices and exchange rates, it cannot be used as a precise measure of that relationship. The primary reasons for its lack of precision are to be attributed to the nature of price indices and to the inclusion of numerous factors other than merchandise in the payments between nations. The customary index numbers of prices for a particular country include both domestic and international goods usually weighted by some criteria of their relative importance at a fixed date. It is probable that there will be a tendency for the prices of domestic goods to rise and fall in harmony with the rise and fall of the prices of internationally traded goods, but the connection will be neither immediate nor precise. It is also true that as time goes on the relative importance of international and domestic goods may change materially thus lessening the accuracy of existing index numbers. Thus, even if merchandise trade were the only item in the balance of payments, the purchasing-power-parity formula would show a tendency rather than an exact relationship. If price indices containing only international goods were used, the discrepancy between the purchasing-power parities and the actual rates of exchange would probably be reduced. Even here the inevitable changes in the nature and volume of goods entering into the trade between nations would render any given index number an imperfect measure. The other basic difficulty with the purchasing-power-parity formula—that it fails to provide for the influence of nonmerchandise transactions—is self-evident. The fact that capital and speculative transactions vary materially in volume and direction from year to year makes their influence especially confusing.

In spite of the difficulty of an exact application of the purchasing-power-parity theory, it is true that when gold has been abandoned as a bond uniting two currencies the most important remaining bond is the trade in goods between the countries concerned. A close interdependence exists between the national price systems of trading countries whether the countries have gold-standard monetary systems or paper-standard monetary systems.

Interdependence of Paper-standard Price Systems. A practical way of arriving at an approximation of relative changes in price levels in two countries in terms of a common unit of measurement is through

the use of exchange rates to translate the prices in one country into the currency of the other. In Fig. 7 are shown price index numbers for France and the United States on a 1913 base for the period 1920 to 1939. The United States index numbers are shown but once as computed from dollar prices in this country. The French index numbers

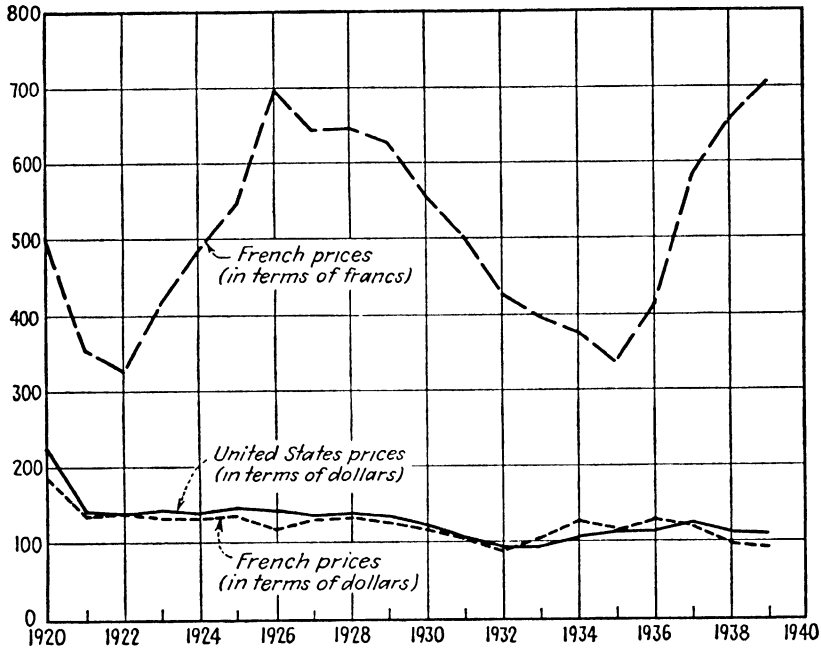


FIG. 7. WHOLESALE PRICE INDICES OF FRANCE AND THE UNITED STATES, 1920 TO 1939

1913 equals 100 per cent

SOURCES: *Monthly Bulletins of Statistics*, League of Nations; *Commerce Yearbooks*, U. S. Department of Commerce; *Federal Reserve Bulletins*, Board of Governors of the Federal Reserve System, Washington, D. C. 1920 to 1925, League of Nations dollar figures for France. 1926 to 1939 dollar figures for France calculated by the authors.

are shown twice. The upper line was computed from franc prices in France. For the lower French line the original index was translated into dollars by multiplying the figure for each year by the ratio of franc-dollar exchange for that year to the prewar par of exchange between the franc and the dollar.[15]

[15] In 1927, for example, the original French price index number was 642 on the 1913 base. The dollar-franc exchange rate in 1927 was 3.92 cents per franc as compared with 19.3 cents per franc in 1913. Thus the dollar value of the franc in 1927 was 0.203 of what it had been in 1913; *i.e.*, 3.92 divided by 19.3. The

The wide variations between the movements of French franc prices and United States prices, especially after 1922, are largely accounted for by the depreciation of French currency at home and in terms of foreign exchange. The general trends of price movements in the two countries in terms of dollars were much more nearly alike in the inter-war period, 1920 to 1939. Even in the period after 1932 when French and American economic policies became increasingly divergent, the directions of movement of the indices were the same in 5 out of the 7 years. Depreciation of the exchange rates of one currency in terms of another tends to measure the extent of monetary depreciation in that country relative to the other.[16]

Conclusions. Although price levels in different countries and exchange rates among the currencies of such countries are related, neither the prices nor the exchange rates need be regarded as cause or result of the other's fluctuations. A more accurate statement probably is that both are common products of common antecedents. The increase in French prices and the depreciation of French exchange between 1922 and 1926, for example, may both be ascribed in large part to the French budgetary deficits and related problems of that period, which have been described earlier in this chapter. When general price levels in countries with relatively stable exchange rates tend to pull away from one another, compensating forces come into play. Among these forces are changes in commodity trade balances and changes in net balances of invisible items. Such changes occur for two reasons: (1) low-priced countries are attractive markets in which to purchase and high-priced countries are attractive markets in which to sell, (2) fluctuations in national price levels are associated with changes in national income and hence with consumer and business expenditures. Levels of consumer and business expenditures, in turn, affect the aggregate national demand for foreign goods and services. There is little reason to assume that the sequence or the relative magnitudes of adjustment of the several payments balance items are uniform among all countries and under all circumstances. When trading countries have

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price index, 642, multiplied by 0.203 equals 130, the French price index for 1927 in terms of the dollar. Similarly in 1939 the French price index was 707 in terms of the franc. The dollar-franc exchange rate was 2.5 cents or 0.13 of 19.3, the prewar par. 707 times 0.13 equals 92, the French price index in terms of the dollar for 1939.

[16] This fact was recognized by Ricardo more than a century ago. See RICARDO, DAVID, "High Price of Bullion, A Proof of the Depreciation of Bank Notes, 1810," *Works of David Ricardo*, ed. by J. R. McCulloch, London, 1846.

gold-standard monetary systems, exchange rates tend to vary within narrow gold-shipment-point limits while price levels may undergo comparatively wide fluctuations. When there is no possibility of making payments balance adjustments by means of gold flows, they may be made either through the medium of widely fluctuating exchanges or through that of fluctuating national price levels, or a combination of the two.

EXPERIMENTATION WITH FOREIGN EXCHANGES IN THE 1930's

The first efforts to restore exchange stability after the First World War took the form of attempts to reestablish freely convertible gold standards. For reasons and in ways already described these attempts were not successful. In the 1930's, as nation after nation abandoned gold, new means were sought for keeping the foreign exchanges under some sort of control.

The motives behind various attempts at exchange regulation were varied and complex. The difficulties, if not the impossibility, of maintaining an extensive network of world trade under conditions of widely fluctuating foreign exchange rates were generally recognized. Part of the pressure for controls therefore sprang from the desire to mitigate the business risks incident to fluctuating exchange rates. In such cases the maintenance of stability at existing rates was likely to seem more important than the establishment of new rates to serve particular purposes. In other cases the value rather than the stability of the rate was of predominant importance. Attempts were made to establish rates at such levels as would help to bring about or maintain particular balances of merchandise trade which might seem important for their own sakes or through their relation to other items in the balances of payments. Finally, the fear motive was seldom absent wherever the financial decisions of the 1930's were being made. Fear of the spread of business depression induced nations to adopt monetary policies designed to protect their internal economies from the impact of conditions abroad. Fear of competitive devaluation was especially prevalent in the middle thirties.

Monetary Policies by Groups of Countries. Although the national monetary policies of the 1930's were independent and uncoordinated, the similarity of economic and political conditions among some countries necessarily resulted in similar policies. Such factors as geographic position, existing commercial, financial, and political ties, and the extent of war mobilization all influenced monetary policy. The U. S. Department of Commerce has made a classification of the world

trading nations of the 1930's which suggests important characteristics that groups of nations had in common.[17] The countries are divided into five groups: (1) sterling-bloc countries, (2) dollar countries, (3) gold-bloc countries, (4) Latin-American paper-currency countries, and (5) war-economy countries.

1. The sterling-bloc countries, sometimes referred to as the "sterling area," consisted of a group of countries that decided, after the pound was depreciated in 1931, to keep their currencies stable in terms of sterling rather than in gold.[18] The composition of this group changed somewhat from time to time but their basic characteristics remained unchanged. It consisted of countries which had been in the habit of carrying on the bulk of their international trade in terms of the pound sterling, which had kept substantial proportions of their exchange reserves in London, and which had either strong political or commercial ties, or both, with Great Britain. The consistent core of the group was the British Commonwealth of Nations, which, with the exception of Canada, adhered to the bloc continuously. These nations were all bound to Great Britain by commercial, financial, and political ties. The other members of the sterling bloc had no political affiliation with Great Britain but had long used London as their financial center and had carried on extensive trade with Great Britain. Outstanding countries that were part of the sterling bloc at one time or another were Denmark, Sweden, Norway, Finland, and Portugal. Only a small proportion of the members of the sterling bloc maintained their currencies at the prewar parity with the pound. The others allowed their currencies to depreciate more than the pound had been depreciated and then maintained stability at the new rate for considerable periods of time. The sterling bloc may be thought of as an informally organized attempt to find a substitute for the day-to-day stability of the old gold standard.

2. The dollar area was never so clearly defined as the sterling area. At one time or another the currencies of some Central and South American countries were linked in effect to that of the United States, the country to which they were most closely related economically. The most interesting aspect of the dollar area was the unique dilemma of Canada. Numerous considerations of a political and economic nature might have led Canada to affiliate herself with the sterling bloc. On the other hand, the Canadian dollar had been of the same

[17] LARY, *op. cit.*, p. 184.

[18] For an excellent brief description of the sterling area, see League of Nations, *op. cit.*, Chap. III.

gold content as the United States dollar, and Canada had close commercial and financial ties with this country. Canada endeavored to pursue a middle course. In 1932, the year of greatest depreciation of both Canadian and British currency relative to the United States dollar, the average exchange rate of the Canadian dollar in terms of the United States dollar was 12 per cent below par while the exchange rate of the pound sterling was 28 per cent below the former par. On the whole those countries whose currencies were loosely related to the United States dollar were more the unintentional followers of the monetary policy of their wealthy neighbor than its deliberate adherents.

3. A still different monetary group was the so-called "gold bloc." These countries remained on the gold standard for several years after its general abandonment had begun. The gold bloc was never formally organized, and its members had little in common beyond a fundamental distrust of further devaluation. France was the leading member of this group. Switzerland and the Netherlands remained on gold as long as France, until September, 1936. Other countries that were part of the gold bloc for shorter periods of time and usually with greater degrees of exchange control were Belgium, Italy, Poland, and Czechoslovakia. Adherence to gold in the face of world-wide currency depreciations placed these countries in increasingly difficult competitive positions in world trade in the middle thirties. By September, 1936, the situation in France was such that the difficulties and dangers of staying on gold loomed larger than the apparent danger of a second devaluation of the franc, and the last of the gold bloc fell.

4. Although a large part of world trade was divided into three separate currency systems related, respectively, to the pound, the dollar, and the franc, there were a number of currencies that were not part of any such group. The loose designation, "Latin-American paper-currency countries," applies to occasional characteristics of the currencies of various Latin-American countries rather than to a uniform specific group of currencies. The Latin-American countries as a whole had not attained, in the years before 1914, a degree of monetary stability comparable to that of the United States, Great Britain, or numerous countries of continental Europe. Their position as primary producing countries made their currencies particularly vulnerable to changes in world business conditions. Political conditions were frequently unstable and treasuries or central banks unwilling or unable to pursue consistent monetary policies. The situation in these respects had changed little by the 1930's, with the result that some of the Latin-

American paper currencies fluctuated in an even more unpredictable manner than those of the rest of the world.

5. The war-economy countries—Germany, Italy, and Japan—did not pursue identical monetary policies but may be grouped together because of the fact that their monetary decisions were dictated by their war aims and preparations. Thus the exchange policies of these countries during the 1930's cannot be analyzed with purely economic tools. The day-to-day monetary policy of a nation that expects to conquer the world will bear little resemblance to that of a nation endeavoring to perpetuate a more or less idealized *status quo*. One common aspect of the implementation of German and Japanese policy is of general economic importance. Each country exercised a substantial degree of control over the money and foreign exchange of a group of satellite countries. The countries of central and southeastern Europe which had long traded extensively with Germany became increasingly subject to German monetary control by means of numerous and detailed exchange control agreements.[19] Japan was the center of the yen area, consisting for the most part of her possessions and conquests.[20]

The Tools for Exchange Experimentation. The naïve assumption that the international gold standard operated "automatically" in the years before 1914 has been rejected by modern economists. It is generally recognized that central banks and treasuries had to follow the so-called "rules of the game" if gold movements were to perform their function in the balancing of international payments. That is to say that gold must have been allowed to move freely, to exercise in full its influence on price levels, and that open-market and discount policies must have been in harmony with existing gold-movement tendencies. Partly because of the predominant position of London at that time these rules were observed more closely in the period before 1914 than in the 1920's. The combined effects of the loss of whatever automatic character gold movements had had and the lack of accepted rules to fit the ever-changing conditions of the 1930's was to increase the hazards of currency experimentation in the thirties.

The new tools for exchange experimentation were of two general

[19] See Chap. XIX of the present volume.

[20] The League of Nations, *op. cit.*, p. 198, states that at the end of 1935 the world was divided into five more or less distinct currency groups: the sterling area, the dollar area, the exchange control area of central and southeastern Europe, the yen area, and the gold bloc. It will be noted that this grouping differs somewhat from that of the U. S. Department of Commerce, which was originally compiled for a different purpose.

types. The first were of the same character as the prewar instruments in that they were designed to deal directly with monetary and exchange matters. The second injected into the foreign exchange mechanism all the paraphernalia of trade restrictions and a growing economic nationalism. The tariffs, quotas, embargoes, and bilateral agreements of the 1930's were a much more significant part of monetary policy than had been the case in the period before the First World War.[21]

The most important new and directly monetary tools of the 1930's were those used by official government agencies set up to deal directly in foreign exchange. The British Exchange Equalization Account, established in July, 1932, was probably the best known of these agencies. The United States Exchange Stabilization Fund was established after the devaluation of the dollar in January, 1934. Many other countries had similar funds. Their nature and purpose have been succinctly described in a recent League of Nations publication.[22]

> An Exchange Stabilization Fund is a collection of assets segregated under a central control for the purpose of intervention in the exchange market to prevent undesirable fluctuations in exchange rates. It may or may not be the exclusive agency for official intervention, and it must operate within the framework of some general system of international settlements.
>
> During the seven years preceding the outbreak of war in 1939 the most active Exchange Funds were developed as instruments for administering an international gold settlement system which was the successor in a large part of the world of the international gold standard. This development in turn was the product of a compromise between the principle of national sovereignty over monetary policy and the principle of adaptation to the requirements of membership in a world monetary system.

Although the stabilization funds were established to operate independently and to purchase and sell exchange each for the benefit of its own country, they could not operate successfully without considering the probable effects of their actions on each other. In spite of their apparently unilateral nature, therefore, the funds may have constituted a step toward world monetary cooperation. The Tripartite Agreement drawn up in September, 1936, between the United States, Great Britain, and France, to be implemented through their respective stabilization funds, gave evidence that these three nations recognized the

[21] See Chap. XIX of the present volume.

[22] League of Nations, *op. cit.*, p. 143. Used by courtesy of International Documents Service, Columbia University Press.

need for such international cooperation. The steps taken in this direction after the Second World War are described in Chap. XXIII, which deals with the Bretton Woods Agreement.

Conclusion. The most serious impediment to a smoothly operating international monetary system in the interwar period was, possibly, the failure to set up a workable and satisfactory initial system of exchange rates. The existence of such a system of rates would not have guaranteed the successful operation of the international monetary mechanism, but its absence made international monetary confusion inevitable. The experiences of the interwar period have furnished useful guides for present and future action. The "importance of establishing an initial system of exchange rates by coordinated and, as far as possible, simultaneous international action" [23] has come to be widely recognized. Some important respects in which the situation in the 1940's is more hopeful than it was in the 1920's and 1930's have been summarized by the League of Nations.[23]

> First, there are no longer any traditional prewar currency parities to which countries would want to return at all costs. Secondly, in the conditions of full employment which it is to be hoped may prevail in the immediate postwar period, price and wage changes may be a more reliable indication of the equilibrium level of exchange rates than in conditions of depression and unemployment. Thirdly, it is between the few leading industrial and trading nations that agreed exchange rates at or near the equilibrium level are of prime importance for the working of the international currency system as a whole. Further, if in any countries government controls have broken down, wages and prices are in a state of flux and dependence on foreign help is great, the simplest procedure might be to fix the exchange at any given level and to adjust internal factors to it. At all events, it seems likely that, in spite of the difficulties, any system of exchange rates reached by international consultation will be better than one in which exchanges are determined either by isolated acts of national sovereignty or by markets subject to speculative transfers of funds.

Even if a system of exchange rates that neither overvalue nor undervalue any country's currency at the time of establishment can be devised, the maintenance of international payments equilibrium with these rates of exchange will not be possible in the absence of appropriate and coordinated national price policies. Furthermore, national price policies and national policies with respect to business cycles must be coordinated if payments balances are to be kept in equilibrium

[23] *Idem*, p. 137. Used by courtesy of International Documents Service, Columbia University Press.

with relatively fixed exchange rates. When an expansion gets underway in some large country, world trade tends to increase and business expansion tends to spread from country to country. In a reverse fashion, if expansion in some one of the larger countries gives way to contraction and if the country's national income falls, its imports tend to decline and depression spreads to other countries.

Even if exchange rates are held relatively stable in a period of depression and if all countries involved refrain from the imposition of trade restrictions, the impact of strain upon payments balances of the several countries involved will be unequal in all probability. Gold reserves [24] or foreign exchange balances [25] of some countries will be drawn down faster than those of others. This result occurs because of differences in relative demands and elasticities of demand for the goods and services of the various countries and differences in price and cost flexibility.

[24] If an international gold standard is in use.

[25] Whether or not an international gold standard is in use.

CHAPTER XV

COMPETITIVE SELF-STABILIZATION

INTRODUCTORY

World economy does not function successfully unless the internal economic systems of the trading countries respond to changes occurring abroad. Each country has an internal economic system somewhat different from that of every other country. Processes of adjustment necessary to a smoothly functioning system of world trade require separate and detailed treatment for every country involved. An appreciation of the difficulty of internal adjustments and some idea of the interplay of internal and external economic forces can be had, however, from an examination of competitive theory. The classical and neoclassical theory of international trade—involving considerations of comparative costs, a competitive international price mechanism, and an automatic balancing of international payments—assumed that competitive forces steered the system back to an equilibrium position whenever instability occurred. The foundational neoclassical theory of international trade is a guide to present-day foreign policy in countries with competitive systems—policy including international exchange stabilization, foreign lending, minimization of monopoly in international trade, and minimization of international trade restrictions. If a free-enterprise system does not function in a manner tending to eliminate maladjustments that prevent full utilization of valuable production factors or if it cannot be made to function in such a manner, much of the free-enterprise international trade theory is not realistic. Since the foundational theory was developed in the nineteenth century, business depression and periods of mass unemployment have received increasing attention by economists and legislators. A crucial issue at the present time is planning to prevent sustained mass unemployment. If self-stabilizing competitive forces operate in a manner to eliminate mass unemployment when it occurs, planning may well involve governmental action to facilitate the operation of competitive forces and to cushion their shocks. If the forces at work in a free-enterprise system did not operate in the direction of ultimate self-stabilization, planning aimed at

eliminating the system would have more justification. These are reasons for painstaking examination of the operation of self-stabilizing competitive forces in the face of a kind of disequilibrium that was acute in Great Britain after the Napoleonic wars, that was acute in the United States and Great Britain after the First World War, and that is likely to reappear after the Second World War.

At this point the following question properly may be raised: Does the competitive analysis have wide significance in a world where many nations are experimenting with planned economic systems or collective economic systems? The answer is "Yes," provided the purpose of territorial specialization and trade is maximization of production of goods freely chosen by consumers. International trade under a system of peaceful international cooperation is not possible unless all the participating countries adjust their internal economic affairs in accordance with their several positions in the world economic system. Whether achieved through competition or through some kind of central control and planning, the general nature of the adjustments called for is much the same. Directions of national industrial specialization in a system of world trade are determined, in broad outline, by the world-wide distribution of populations, natural resources, industrial techniques, etc. The fundamental natures of economic advantages arising from international trade are one and the same whether individual nations have competitive economic systems, planned economic systems, or collective economic systems. Persons who are convinced that national economic planning is both desirable and unavoidable will derive from a knowledge of competitive self-stabilization processes a clearer conception of the directions of change essential to international cooperation in a peacetime world. Others, who cling to the idea that competitive self-stabilization processes should be allowed to function with a minimum of government intervention, will derive from a study of competitive economy clearer conceptions of the difficulties and sacrifices that competitive self-stabilization entails.

Industrial rearrangement in modern nations in keeping with an ever-changing pattern of world trade is peculiarly difficult because of the many rigidities that have accumulated during the last half century or more. Growth of large-scale enterprise and increased use of specialized machinery have tended to anchor existing patterns of territorial and occupational division of labor in place and to reduce interregional and interoccupational mobility of both labor and capital. Unionization of labor has increased wage rigidities. The organization of business groups to shelter their particular branches of industry

against the adverse effects of price changes has spread from industry to industry. Some of these efforts to ameliorate shocks incident to competitive processes and to lessen the financial losses, suffering, and disappointments which competitive change may entail are humanitarian, idealistic, and praiseworthy. Other such efforts are little more than selfish endeavors on the part of common interest groups to shield their own positions. Regardless, however, of the motives involved, all types of activity that tend to fortify particular sections of economic life against competitive change contribute to the same ultimate end, *viz.*, an accumulation of rigidities that magnify the difficulties of readjustment. Developments of this character were accelerated by the strains and stresses incident to the First and Second World Wars. Prices were inflated in both periods. Peacetime activity gave way to war effort, and the peacetime pattern of prewar division of labor was warped to suit the exigencies of world conflict.

With the coming of peace after the First World War nations everywhere were faced with gigantic tasks of economic readjustment if world economy was to function efficiently. During the 1920's, loans extended by the United States to Europe, South America, and elsewhere, eased the postwar adjustment processes both in this country and abroad. Foreign countries, for a time, had easy access to foreign exchange for use in the purchase of goods for reconstruction or for further industrialization, and the United States active trade balance persisted. In the middle twenties the world economic system appeared to be in a reasonably stable condition. Unfortunately this condition was more apparent than real; it was dependent upon foreign loans in volume and of a character that did not continue indefinitely—particularly loans flowing from the United States. The United States was approaching the third stage in the relation of its foreign investments to its balance of trade. Interest obligations to this country were accumulating rapidly. A time was in the offing when the United States must either forego collection of interest on her accumulating foreign loans or absorb sufficient merchandise imports to reduce the active trade balance. Either course pointed in the direction of a period of economic instability. Failure to collect service charges on old loans meant curtailment of new loans. A shift in the United States trade balance from an active to a passive status meant contraction of import industries. Important sections of United States agriculture and light manufacturing are import industries—high-cost industries in the international sense. Dairy farmers, wool growers, beef producers, and textile manufacturers are examples. More imports of types of goods

produced by these classes of long protected domestic industries meant that some high-cost domestic firms would be squeezed out of business and their employees thrown out of jobs. Major industrial changes of this character are likely to be accompanied by more or less industrial depression.

Among the most difficult of the economic adjustments necessary to sustained employment and world peace after the Second World War —as after the First—will be internal economic changes incident to proper meshing of national economies with world economy. Internal economic problems with which the United States must grapple in the period after the Second World War are similar in some respects to those of nineteenth-century Great Britain but more difficult, possibly, because of the rigidities in highly industrialized nations. In addition, there is a possibility that the economic adjustments in the United States may have to be of a magnitude and character to change the pattern of income distribution in favor of low-income classes of the country's population, if unnecessary unemployment and accompanying economic and political instability are to be avoided. Some economists are convinced that opportunities for profitable investment of American capital at home and abroad are less in proportion to the capacity and propensity of the people of the United States to save, than were Great Britain's investment opportunities in proportion to her smaller supplies of capital in the nineteenth century.[1] For these reasons the economists in question visualize a tendency for rates of return to American capital to decline by amounts sufficient to shunt a larger proportion of the United States national income to wage earners and other low-income groups in this country. Such data as are available indicate that nineteenth-century British economy was not faced with a comparable internal problem.[2]

Order of Presentation. The order of presentation starts with general competitive philosophy of the older economists and proceeds to a consideration of pressing problems of our time. Two aspects of economic theory are emphasized: (1) Emphasis is focused upon long-run relations, between real wage rates and rates of return to capital, necessary

[1] See HANSEN, ALVIN H., *Fiscal Policy and Business Cycles,* W. W. Norton & Company, Inc., New York, 1941.

[2] Proportions of the British national income going to high- and low-income classes appear to have changed little, if at all, during the nineteenth century. See STAMP, SIR JOSIAH, *Wealth and Taxable Capacity,* P. S. King & Staples, Ltd., London, 1922, and BOWLEY, A. L., *The Change in the Distribution of National Income, 1880–1913,* Oxford University Press, New York, 1920.

to full utilization of a wealthy nation's available supplies of labor and capital. (2) Attention is called to the severity of economic depressions and problems incident to recovery from deep depression. These were strategic issues in the interwar period. They are issues that will have to be faced in free-enterprise economic systems sometime after the Second World War when credit expansion incident to reconversion and reconstruction has tended to peter out.

In the nineteenth century oversaving and underconsumption theories of business stagnation were conspicuous elements of Marxian economic thinking. In the twentieth century similar theories have found expression in Keynesian dialectics. The economic group whose ideas enjoyed the widest application in the nineteenth century were the classical and neoclassical economists. Neoclassical conceptions of long-run equilibrium adjustment in a mature economy are examined in relation to depression adjustments in highly industrialized nations as analyzed by present-day business-cycle economists. This body of information has a very important bearing upon the solution of so-called "underconsumption domestic problems." It is essential also to correct interpretation of crucial international economic problems that are functionally related to internal difficulties.

MILL'S CONCEPTION OF COMPETITIVE STABILIZATION IN A MATURE ECONOMY

Mill [3] was one of the synthesizers of classical economic theory. His analysis of the nature of competitive adjustments that compensate for changes in supplies of capital in relation to those of other production factors is well worth serious consideration. England's economic adjustment problem after the Napoleonic wars was not identical with that of the United States after the First World War or of that which this country faces after the Second World War, but there are important similarities. During the first half of the nineteenth century manufacturing industries in Great Britain expanded more rapidly than agriculture; exports of British manufactures increased and imports of raw materials and foodstuffs increased. British loans were extended to foreign countries. By the middle of the century Great Britain was the greatest creditor nation in the world. She was approaching the third stage in the relation of her foreign investments to her trade balance—a stage where a consistently favorable trade balance might be expected to give way to a consistently passive trade balance.

[3] See MILL, J. S., *Principles of Political Economy*, London, 1848.

Mill did not believe that the socialists who were calling for government ownership of the means of production, or the communists who predicted a dictatorship of the proletariat, to prevent periodic overproduction, market gluts, and persistent poverty among wage earners, had correctly diagnosed the difficulties of the British economic system. He believed that the principal problem to be solved was one of industrial readjustment. He did not believe that the principal difficulty was one of oversaving or overproduction. Nevertheless, accepting the challenge of his opponents on their own terms, he answered them as follows:

> When a country has long possessed a large production and a large net income to make savings from, and when, therefore, the means have long existed of making great annual addition to capital . . . if the new capital [is] duly shared among many varieties of employment, it [will] raise up a demand for its own produce. . . . What is not merely difficult, but impossible is to employ this capital without submitting to a *rapid reduction in the rate of profit*.[4]

The term "profit" as employed by Mill included interest as well as profit in the present-day sense.

Mill's conclusion rests upon one of the most widely accepted principles of economics: the principle of *diminishing returns*, generalized and applied to varying combinations of land, labor, and capital. The principle of diminishing returns thus generalized is sometimes referred to as the "principle of *proportionality*." Application of this principle shows that real wage rates tend to rise in relation to rates of return to capital in a competitive society where the available supply of capital increases faster than the labor supply. If there is "oversaving" in the United States in the sense that the long-term trend of wage rates must rise and that of interest rates must fall—a much disputed issue—Mill's analysis suggests that the necessary changes may be brought about through free enterprise and competition without resort to collectivism.

ALFRED MARSHALL

Marshall expounded the so-called "principle of substitution," which starts with the actions of particular businessmen and leads to a generalization pertaining to factor combinations in the whole of a free-enterprise economic system.

> At the beginning of his undertaking, and at every successive stage, the alert business man strives to so modify his arrangements as to obtain better re-

[4] MILL, *op. cit.*, Bk. IV, Chap. 4.

sults with a given expenditure. In other words, he ceaselessly applies the principle of substitution. . . . Thus it is that the alert business man . . . pushes the investment of capital in each several direction until what appears in his judgement to be the outer limit, or margin of profitableness is reached; that is, until there seems to him no good reason for thinking that the gains resulting from any further investment in that particular direction would compensate him for his outlay.[5]

This type of reasoning led Marshall to more generalized conclusions such as the following:

1. In a progressive society, rates of real wages may either increase or decline in relation to payments per unit for the use of capital as supplies of labor and capital undergo relative changes. If wages increase in relation to costs per unit for the use of capital equipment, industrialists will associate relatively more capital with the available supply of labor. As a result, industrial cost structures may be subjected to rearrangement.

2. If because of errors in judgment, changes in demand, and other such influences, some industries are overbuilt in relation to others, prices of goods produced by the overbuilt industries will tend to decline and marginal increments of the production factors employed by them will be shunted elsewhere.

APPLICATION OF MILL-MARSHALL ANALYSIS

Some observers believe that relations among rates of growth of labor and capital and the size of available peacetime markets are such as to call for reduction in rates of return to capital[6] and increase in real wages in the United States. The argument is to the effect that a change in the pattern of income distribution in the United States in favor of low-income consumers was necessary to revival in domestic business activity and an increase in foreign trade in the 1930's. There is no way of knowing with certainty whether this interpretation of the maladjustment in the United States in the 1930's was correct or incorrect. Nor is there any way of knowing with certainty whether correction of postwar maladjustments that lie ahead will necessarily involve a general reduction in rates of return to capital and a general increase in real wages.

[5] MARSHALL, ALFRED, *Principles of Economics*, 7th ed., pp. 355, 356, 359, Macmillan & Co., Ltd., London, 1916. Quoted by permission of the publishers.

[6] Lower rates of return (interest, dividends, etc.) on capital assets at current valuations, or reductions both of valuation in assets and in amounts of interest and dividends realized on them.

If the economic system were perfectly flexible, adjustments in wages and rates of return to capital necessary to sustained peacetime business expansion would occur without widespread business depression. But modern economic systems are not highly flexible. They tend to accumulate various kinds of resistances to the free and easy operation of competitive forces. Misplaced investments in buildings, machines, and other fixed equipment are not easily transferred from one use to another. Acquired human skills for which demand has declined are not always transferable from one job to another. Monopolistic practices on the part of business concerns obstruct price changes, and labor-union activities obstruct changes in wage rates. When the self-stabilizing forces of a competitive economic system must overcome rigidities of this kind, cost structure adjustments necessary to sustained full employment are not easily made.

No one can possibly know with certainty exactly what cost structure changes will be necessary to sustained peacetime industrial expansion after the Second World War. If full knowledge were possible concerning types and magnitudes of change in prices, wages, capital values, interest rates, etc., that must occur, economic planning might well replace competitive trial and error. But knowledge is lacking; without it, recourse to trial and error must be had. The economic readjustment process will be one of trial and error whether it is government-directed or motivated by competitive forces in a free-enterprise economic system.

A theory, popular in England a century ago, to the effect that Great Britain had reached a condition of industrial maturity with which free enterprise and competition could not cope proved to be erroneous. A similar theory, popular in the United States in the 1930's and almost certain to reappear in the United States in the next depression, may prove to be equally erroneous. During the century extending from 1840 to 1939, Great Britain's domestic production, her per capita wealth and income, and her foreign trade increased enormously. Likewise, the United States, under a system of free enterprise and competition, may experience large increases in production, trade, per capita wealth, and income during the decades that lie ahead. Internal economic adjustments necessary to expansion in domestic production and foreign trade in Great Britain a hundred years ago involved, primarily, shifts in labor and capital from relatively high-cost import industries [7]

[7] The term "import industries" as used in this context refers to relatively high-cost, protected, domestic industries that could not stand the free competition of competitive foreign goods without far-reaching adjustments relative to other industries in which Great Britain enjoyed a comparative advantage.

to relatively low-cost export industries. Somewhat similar adjustments may be called for in the United States. Some of this type of internal adjustment may have to be made in periods of business depression—depression of greater or less severity depending upon the character of national government action taken to cushion the shocks and facilitate the changes.

Since Mill's and Marshall's time, the detailed processes of competitive adjustment in periods of business depression have been subjected to searching analysis by business-cycle economists: such men as Wesley C. Mitchell, Gottfried Haberler, and Joseph A. Schumpeter. The depression aspects of competitive self-stabilization have acquired particular significance in recent years because of the extreme severity of the business depression of the 1930's and confusion concerning governmental policy measures necessary to cope with it. New Deal experiments in the United States, Germany's experience under the Bruening regime and what followed, together with theories expounded by Keynesians in England, have raised serious doubts concerning the effectiveness of recuperative competitive processes in a modern industrial system, once it is caught in a downward spiral of depression. Some of these misgivings may be expelled by an analysis of lower turning-point processes of business cycles. If competition with government aid cannot bring about adjustments necessary to competitive revival from depression in a free-enterprise economic system, critics of the system probably are correct in their judgment that it cannot survive. Inasmuch as both the possibility of domestic economic prosperity in a free-enterprise system and the future of foreign trade among nations with free-enterprise economic systems turn on this issue, it warrants painstaking analysis.

PROCESSES OF COMPETITIVE SELF-STABILIZATION IN PERIODS OF DEPRESSION

Contributions by Mitchell.[8] In his analysis of business cycles, Professor Mitchell traced the processes of downward revisions in prime and supplementary costs during the depression phase of a business cycle. He found that depression brings shrinkage in volume of orders and accompanying decline in selling prices. Wholesale prices fall faster than retail prices, and prices of raw materials fall faster than those of manufactured goods. The general decline in prices of goods brings, in time, reductions in expenses of production. If the

[8] MITCHELL, WESLEY C., *Business Cycles*, pp. 562–569, University of California Press, Berkeley, Calif., 1913.

business depression is severe, wage rates are reduced, but on the whole, wage-rate reductions are less in percentage than price reductions. In periods of severe depression, when selling prices decline materially, some firms—because of poor equipment, disadvantageous location, or inefficient management—are forced out of business. The income of such firms may not cover their prime costs. Stronger concerns curtail production by allowing the least efficient parts of their plants to become idle; they may continue to operate with an income that little more than covers prime costs. Concerns that cannot meet rent charges, interest payments on bonds, and other such obligations, may be forced by their creditors to appoint a receiver who manages the business in their interest. If the concern has large sums invested in land, buildings, machinery, and other equipment that cannot be advantageously disposed of, a financial reorganization may be necessary as a result of which common shareholders lose all of their equities, preferred shareholders exchange their shares for common stocks, and bondholders concede a reduction in the nominal value of their principal. This process of liquidation continues, according to Mitchell, until expenses of production are less than selling prices, and increased sales volume at the lower depression prices is profitable. When owners of weak business enterprises are being squeezed out and forced to sell their holdings and when corporate reorganizations are in progress, opportunities for new investors to buy into old enterprises are numerous. As these opportunities become less numerous, more of the persons who have capital and who seek business openings build for themselves. Thus, when the liquidation process has been sufficient in degree and extent, business activity expands in both old and new industries. The longer the period during which new construction is checked by expenses that are high in relation to selling prices, the greater tends to be the accumulation of technical improvements that serve as an inducement for the establishment of new firms. Thus the gradual growth of demand for consumer and producer goods stimulates investment of new capital and, in time, unemployed workers are taken back into industry.

Mitchell's analysis supports the classical thesis to the effect that competitive forces act in such a manner as to reestablish equilibrium or near-equilibrium conditions after deep depression. His analysis indicates, however, that business depression has implications more serious from the point of view of social well-being and political stability than was implied by the classical economists. Mitchell's analysis indicates that business depression in a free-enterprise system is a recurrent phase of continuous economic change in place of being a rare diver-

gence from a customary condition of equilibrium as classical theory seemed to imply.

Haberler's Analysis. In 1930 the Assembly of the League of Nations adopted a resolution to the effect that an attempt be made to coordinate the analytical work that it had been doing on the problem of recurrent periods of economic depression. In compliance with this resolution, Dr. Gottfried von Haberler[9] was assigned the task of examining existing theories of business cycles with a view to ascertaining what they had in common. If one recalls Mill's thesis concerning the tendency of profits toward a minimum, he may be surprised at Haberler's conclusion to the effect that demand for investment funds, at times when prices are falling and are expected to fall farther, may be so low that no interest rate short of a negative figure will lead to a revival of investing and consequent increase in effective demand for goods. Whereas Mill was concerned with long-run equilibrium analysis, Haberler is concerned with a short-run cyclical problem. He found that the cyclical process of contraction tended in time to lose its strength and to create a condition that was responsive to expansionary forces. Supplies of labor and other production factors tend to become increasingly elastic as prices, production, and employment decline. A result is that some sections of industry can expand production, if there is cause, without initiating an immediate increase in costs elsewhere. Likewise the elasticity of money and credit supply is eventually restored. Deposit currency is destroyed during the early phases of depression but, in time, the processes of forced liquidation and shrinkage in credit superstructure come to an end and money hoards in various forms begin to accumulate.[10] With supplies of production factors and potential credit supply highly elastic, all that is needed to start cumulative expansion is business confidence and revival of investment.

When credit contraction has run its course, when prices have ceased to fall,[11] and when costs have been reduced by amounts that justify

[9] HABERLER, GOTTFRIED VON, *Prosperity and Depression*, new rev. and enlarged ed., pp. 377–406, League of Nations, Geneva, 1939.

[10] Hoarding in this sense means that some people hold increasing proportions of their real income and wealth in the liquid form of money and that reserve ratios of banks increase.

[11] Haberler concedes the idea that prices might conceivably continue to fall indefinitely. However, he points out these facts: (1) After a time, hoards of liquid funds accumulate progressively as prices fall. (2) The purchasing power of these hoards of liquid funds also increases progressively as prices fall. In time, Haberler thinks, people will stop adding to their hoards because their de-

profits expectancy from increased output at prevailing prices, business confidence returns. Under these circumstances, replacement demand for industrial equipment which has suffered physical deterioration, and installations of equipment in new undertakings, will be sufficient to initiate flows of new capital into industry. Thus business depression generates conditions necessary to revival. In short, Haberler finds that prolonged business depression creates a condition of cumulative liquidity of potential investment funds and brings about reductions in costs. As a result, business confidence is restored, streams of investment swell, employment and pay rolls increase, and depression gives way to business expansion.

Schumpeter's Analysis. Schumpeter with intricate and rigorous logic analyzes the processes of business depression and, like Mitchell and Haberler, comes to the conclusion that the forces of destruction give way, in time, to forces of business expansion. Professor Schumpeter[12] recognizes the fact that a so-called "downward spiral" may continue until the economic system is in deep depression. Price breaks, bankruptcies, and shutdowns induce similar events. The failure of one concern may cause the failure of other concerns. Each addition to unemployment may cause more unemployment. Individual contractions in output breed contractions all around. For a time contraction feeds upon itself. The total deterioration, according to Schumpeter, is due to the fact that contraction feeds upon itself, plus the fact that it is fed from the outside. The failure of one concern may, for example, cause the failure of other concerns, but not the failure of every concern to which it happens to be indebted. Each addition to unemployment may cause more unemployment, but the rate of increase is regressive. In short, the effect of each induced contraction tends to peter out and, therefore, the aggregate of all depression-induced contraction tends to peter out rather than to accumulate indefinitely. This conclusion is illustrated by the case of a manufacturer who closes his plant and throws his workers out of employment. A grocer, patronized by the workers who became unemployed, may be forced

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sires for liquidity are satiated. (3) When costs have been so reduced that general business expansion will bring profits with it, some business leaders do not hesitate to take the risks of expanding their output and plant capacity even though prices in general are falling, because the person who delays too long will fail to reap the full reward of preparedness for profit making when contraction finally gives way to expansion.

[12] SCHUMPETER, JOSEPH A., *Business Cycles*, Vol. I, pp. 150–155, McGraw-Hill Book Company, Inc., New York, 1939.

out of business because the workers have lost their source of income. This grocer's market is not entirely annihilated, with a consequent cumulative effect. When he disappears, there is some space available for expansion on the part of his competitors. This conclusion holds unless the unemployed workers are his only customers and have no savings or relief funds of any kind to support existence.

Thus, according to Schumpeter, the case for competitive self-stabilization at the bottom of deep depression in a modern economy is strong, for at least three reasons:

1. The depressive process stops of itself, short of universal starvation. This conclusion is based on such observable facts as the following: (1) total income fluctuates less than total value product, (2) expenditures for consumers' goods fluctuate less than the total of wages plus salaries.[13]

2. Once cumulative deterioration has stopped, in a dynamic economic system, expansion must start. Cramped lower level equilibrium could occur, according to Schumpeter, only if every business concern and every business leader were frozen by earlier misadventure into a state of near inertia from which no one dared to move. The probability that such a state of affairs should occur in all industries and throughout the whole system is indistinguishable from complete inaction and is not in keeping with the nature of human beings.

3. The accumulation of unapplied innovation possibilities during depression is a powerful incentive to expansion based on prospective future earnings, discernible at the low point of depression by alert businessmen. For all these reasons, the point at which contraction stops is a point of disequilibrium in a dynamic competitive society, a disequilibrium point from which the system will move toward full recovery.

Keynes' Conception.[14] Keynes suggests that the duration of the business cycle is due mainly to the way in which the "marginal efficiency of capital fluctuates." [15] During the period of cyclical contraction the reduction in marginal efficiency of capital may be so great

[13] Expenditures for consumers' goods fluctuate less than the total of wages plus salaries for the reason that persons with accumulated wealth and reserves of buying power do not permit themselves to suffer from want of consumer goods so long as they possess large bank balances or small savings.

[14] KEYNES, JOHN MAYNARD, *The General Theory of Employment, Interest and Money*, Chap. 22, Harcourt, Brace & Company, Inc., New York, 1936.

[15] By marginal efficiency of capital he means the relation between the prospective yield of an additional unit of a particular type of capital and the cost of producing that unit. *Ibid.*, p. 135.

that no practical reduction in the rate of interest may be sufficient to stop the contraction and initiate recovery. After a time, when current costs of production have declined, when stocks of goods have been depleted, when more or less durable capital has worn out or become obsolescent and obvious scarcities appear, profit expectations of businessmen become less pessimistic and, in time, sufficiently optimistic to cause an increase in the marginal efficiency of capital. This increase in marginal efficiency of capital induces investment in excess of disinvestment and initiates recovery. Keynes accepts the idea of some recovery from extreme depression but questions the likelihood of full recovery and the classical assumption that equilibrium or near equilibrium is more characteristic of free-enterprise systems than is serious disequilibrium.

Summary. The analyses by Mitchell, Haberler, Schumpeter, and Keynes indicate reasons why downward spirals of business depression do not continue indefinitely and why, after a time, depression gives way to expansion. Depression brings declines in selling prices of goods and declines in production costs. Production costs include raw materials, labor, and overhead items. Raw materials prices fall faster than wages, and wages fall earlier than salaries and other items of overhead expense. In a free-enterprise, imperfectly competitive economy, losses of producing concerns are minimized at that level of output where marginal cost is equal to marginal revenue. At a subnormal level of output, hoarding may occur in the sense that depreciation reserves and other withdrawals of values from fixed investments are not spent for replacement of capital equipment. Given certain unrealistic assumptions, this process of hoarding might, theoretically, continue until all economic values represented by investments in capital equipment were exhausted. If, however, the political framework of the free-enterprise system does not give way under the depression strains of unemployment and business losses, incentives for expansion will appear long before any such theoretically ultimate end of the liquidation process is reached. These opportunities for the making of remunerative investments appear when the private-debt structure has been pared down to manageable proportions, and total unit costs of production of representative firms have declined until they are less than unit prices for which goods can be sold. At this stage in the depression supplies of labor and raw materials are elastic in the sense that increased demand does not immediately initiate increases in their unit costs; interest rates are low, and increased volume of production tends to reduce total unit costs because overhead costs per unit de-

cline as volume of production increases. At the bottom of the depression, stocks of goods are low, machinery is worn and some of it needs replacement; unexploited technological improvements have accumulated, and new products have been conceived; banks and individual investors are in a highly liquid state, and investment funds are available for both the financing of new enterprises and the expansion of old ones. Profitable opportunities for investment in new enterprises will depend largely upon the number and character of inventions, new products, and improvements ready for exploitation. In the 1890's, for example, the internal-combustion engine, suitable fuels, and electric apparatus had been developed to a point where visions of a horseless-carriage age could initiate a great, new automobile industry in the United States. What the future may hold in the way of new industries and what the dates of their birth may be, only the future can tell. For this reason, it is not possible to foresee the nature and extent of future opportunities for investment in new industries. It is possible, however, to illustrate how competitive processes give rise to renewed investment in old industries after a period of business depression.

INCOME DISTRIBUTION IMPLICATIONS OF BUSINESS DEPRESSION

Classical and neoclassical theory of distribution focuses attention upon adjustments of wage rates, interest rates, and other rates in relation to marginal productivity of workers, of capital, and of other production factors. In a period of business expansion capitalization of business assets based upon current and prospective earnings may be greater than is justified by actual future earnings. Excessive capitalization of business assets tends to discourage new investments from going into old concerns. A concern having fixed equipment that has depreciated in earning capacity, and hence in value, may have bonds outstanding that represent claims to future earnings in excess of reasonable earnings expectancy for the firm. If so, new investors will be inclined to withhold loans of venture capital to this concern until some of the old claims to its future earnings have been legally destroyed. The reason for this unwillingness to put new funds into the old company before its capital structure is reorganized is obvious. So long as old bonds are outstanding, their interest claims must be paid in full before capital stockholders can realize any dividends. Such a concern might borrow by issuing securities with claims that take priority over those of the old bonds. If, however, the business is venturesome in its nature, the type of investor to which it must appeal for large funds is not the bond or mortgage buyer, who desires security

and is willing to accept a low yield, but the investor who desires an opportunity to earn profits and is willing to take the necessary risks. For similar reasons, an old concern that has a capital structure consisting entirely of common stocks may experience difficulty in attracting venture capital prior to a reorganization of its capital structure. Assume, for example, that the capital structure of a small manufacturing company consists of $100,000 in the form of 1,000 shares of common stock, each with a par value of $100, and that no dividends are being earned on this stock. Assume also that an additional $25,000 in the form of venture capital, to be used for the purchase of materials and new machines, will increase the earnings prospects of the company from zero to $6,000 a year, which is less than 5 per cent on an investment of $125,000. This rate of return is not enough to attract venture capital. If old stockholders will accept a financial reorganization that reduces their equity by 75 per cent (to the equivalent of 1,000 common shares of $25 par value or to 250 of the outstanding 1,000 shares), venture capital may be attracted to the company. If the expected earnings of $6,000 a year are realized, $3,000 in dividends may go to the old stockholders and the new investors may receive $3,000 in dividends on their $25,000 of venture capital, *i.e.*, 12 per cent on the investment. Conceivably the additional $25,000 might have been secured by the company through the issuance of bonds or preferred stocks. Bonds and preferred stocks, however, are not types of investments that ordinarily attract venture capital. Furthermore, if the company's anticipated net earnings of $6,000 a year, with the new machines, is contingent upon a change in company policy, the new investors may demand voting rights in order to ensure initiation and execution of the new policies. There are various legal devices to which such a company might resort for the purpose of raising new capital, but none of them can be effective in a case of this kind unless the old owners can be induced, legally, to recognize a reduction in their claims to future earnings, a shrinkage in value that has already been registered in the market for the old securities.

Extreme depression and liquidation of many weak firms may be necessary to bring about a change in national income flows in keeping with Mill's conception of a tendency of profits to decline to a minimum rate in a mature economy. Changes in the pattern of annual income distribution, as between wage earners and those classes in society whose income is largely in the form of interest and dividends on investments, depend upon relationships between a number of variables as follows: (1) number of wage earners employed, (2) average number

of hours, days, or weeks for which workers are paid, (3) average wage rate, and (4) the aggregate value of assets owned by interest and dividend recipients and the average rates of interest and dividends received by them. Aggregate wage-earner income may increase as a result of greater numbers of workers being employed, as a result of an increase in the average number of hours worked per year per worker, as a result of an increase in the wage rate, or as a result of some combination of changes in all three factors. Likewise the aggregate income of interest and dividend receivers may change as a result of rate changes, increase or decrease in the value of assets owned, or some combination of these factors. As a result of severe depression capital values may be destroyed to such an extent that aggregate income in the form of interest and dividends after depression is less than before even though interest and dividend rates on the postdepression values are no less than predepression rates. In a wealthy country where marginal productivity of capital tended to decline because of large savings, rates of interest and dividends on new investments might also tend to decline. In this event destruction of claims to earnings of old investments might have to occur before new investors would be willing to put their capital in going concerns. Since numbers of workers, rates of interest, hours worked, wage rates, dividend rates, and the legal value of capital assets, one and all may be modified as a result of business depression, there is logical reason to assume that the self-stabilization machinery can function to bring about full recovery from depression even if full recovery is dependent upon a shunting to wage earners of a larger percentage of the postdepression national income than the percentage that they received of the predepression national income. This kind of change in the pattern of income distribution does not appear to have occurred in nineteenth-century Great Britain, but there is nothing in the logic of competitive economic theory to prevent such a change in the patterns of income distribution in twentieth-century United States if such a change is necessary to full employment of valuable production factors.

When, in a period of business depression, raw materials prices, labor costs, and finally overhead costs—consisting of salaries, depreciation, interest charges, etc.—have been pared down to a point where increased production gives promise of future earnings on new investments sufficient to attract investors, hoarded investment funds flow into established concerns and new enterprises. There is no lack of low-income consumer buying power for the increased output of consumer goods at this stage of the cycle, because more workers are being

employed at real wage rates greater than those of the predepression period. This condition prevails in a dynamic economy with increasing productivity per worker because retail prices fall more than wage rates during depression.

Prior to the 1930's revival from deep depressions in the United States appears to have been influenced in a number of cases largely by the rise of new industries or the expansion of comparatively new ones. Even if new industries should exercise less influence in the future than they have in the past, there is no reason—theoretically at least—why business activity cannot recover fully from deep depression more largely as a result of new investment in long-established concerns. In this case, the depression might be extraordinarily deep; recovery might be long delayed, and the political framework of the free-enterprise system might be endangered. Under such circumstances governmental action to facilitate readjustment and to cushion the shocks of unemployment and financial collapse may be necessary.

A free-enterprise system is a profit-and-loss system—a system of trial and error. Errors cannot be avoided so long as estimates of the future are imperfect. Losses are painful. Establishments and fixed investments in the United States are large. Responsibility for decisions is divided. Allocations of goods among wage earners, salaried officials, and investors (with varying claims priorities) are determined by competition. Absorption of losses under these circumstances is a slow process involving, at times, cumbersome legal procedures.

CONCLUSIONS CONCERNING THE INTERNATIONAL IMPLICATIONS OF CYCLICAL FLUCTUATIONS

A dynamic international trading economy calls for shifts in a country's labor and capital into their most productive uses in accordance with the principles of international division of labor. In a competitive economic system, the allocation of productive resources to their various uses is directed by price competition. Prices tend to fall in industries from which productive resources are moved. Because of economic rigidities and frictions, a fall of prices in one section of a national economy tends to spread to all sections. As a result, major rearrangements of a national economic system for more effective utilization of productive resources, in accordance with the principle of comparative advantage, may be accompanied by business depression. Full utilization of valuable production resources, after a period of business depression sets in, is not achieved until after the lower turning point of the cycle has been passed.

During the contraction phase of the business cycle in a country with a large volume of international trade, the entire international trading mechanism is subjected to severe strain. The volume of world trade shrinks; gains from territorial specialization are more or less offset by losses incident to idle production factors; accumulation of gold reserves does not result in prompt expansion in credit and price increases; and the competition of foreign goods becomes extremely irritating to domestic producers. One of the most serious problems faced by democratic nations in attempts to establish a system of international economic cooperation is the confusion that arises in periods of severe and widespread business depression. Minority groups in every country press for legislation that will protect their private interests more or less regardless of the effect of such legislation upon national and world economy. The Hawley-Smoot Tariff Act, the Agricultural Adjustment Act, the National Industrial Recovery Act, and the Gold Reserve Act[16] passed by Congress in the 1930's are examples. Numerous other examples may be found in the policies of other countries during this period.

If the United States is to succeed in its present policy course of leading democratic nations into a system of international economic cooperation, implemented by such institutions as the International Bank for Reconstruction and Development, the International Monetary Fund, and the proposed International Trade Organization, domestic economic policy must be made to conform with international economic policy. Conflicts between national and international economic policies are among the most difficult problems of the present generation.

[16] This act permitted the President on Jan. 31, 1934, to reduce the gold content of the dollar from 25 8/10 to 15 5/21 grains of gold nine-tenths fine. The Treasury gold purchase price was thus raised from $20.67 an ounce to $35 an ounce.

CHAPTER XVI

FULL-EMPLOYMENT POLICY

After the First World War an attempt was made to reestablish competitive international trade within the framework of the free gold standard and stable international exchange rates. The system collapsed during the world-wide depression of the 1930's. During the decade preceding the beginning of the Second World War nationalism was intensified and little progress was made in the direction of finding solutions to deep-seated maladjustment problems, national and international. One result of the interwar experience was a growing hostility toward limitations imposed by the international gold-standard mechanism upon internal full-employment policies. A conception that nations must choose between stable internal prices and stable foreign exchange rates made itself felt at the meetings of the Preparatory Commission of the World Monetary and Economic Conference in 1932–1933 in Geneva and again at the United Nations Monetary and Financial Conference at Bretton Woods, New Hampshire, in 1944.

England's experience with a deflationary policy between 1925 and 1931, the experience of France with a deflationary policy between 1927 and the middle 1930's, United States deflationary experience between 1929 and 1933, and the deflationary experiences of other countries during the interwar period, cast doubt upon the effectiveness of the competitive self-stabilization mechanism for coping with maladjustment problems of present-day magnitude. Economists are fearful that deep depression in the United States and elsewhere may so undermine economic stability and international economic cooperation as to shatter the framework of world peace machinery laboriously constructed after the Second World War. In view of the large proportion that economic activity in the United States is of world economic activity and of the central position occupied by this country in world finance, two divergent points of view concerning international economic policy are of particular importance. One points to the conclusion that deep depression must be avoided in the United States. The other warns smaller countries of the importance of being prepared to

cut their economic moorings to the United States in case this country should again be caught in a downward spiral of deflation comparable with that of 1929 to 1933. The first line of reasoning focuses attention upon the problem of devising a "full-employment" policy for the United States; the second suggests the possibility of shielding internal economic systems of other countries from the impact of economic disturbances beyond their borders.

FULL-EMPLOYMENT IDEAS

In 1944 and 1945 when widespread consideration was being given to pending problems of postwar reconversion, "full employment" was an issue met at every turn. In Washington many advocates of many full-employment policies could be heard vociferously arguing the merits of a variety of full-employment measures. In the United States, the interest in full-employment policies was not confined to Washington administrators and government economists. It was reflected in the pages of magazines and newspapers all over the country, and Congress in 1946 passed a full-employment act.[1] Buried in this act is an assumption that sustained full employment may be dependent upon government spending. The act instructs the President to submit each year to Congress a national "production and employment" budget comprising estimates of aggregate expenditures by consumers, business, and government during the ensuing year. If the estimated aggregate of expenditures is judged insufficient to provide full employment, the President is to propose ways and means of inducing larger expenditures. If, in the judgment of the President, estimates of private expenditure plus state and local government expenditures, plus projected Federal government expenditures, are insufficient to provide full employment, he is to recommend a Federal government spending program sufficient to ensure full employment.[2] Deficit government spending occupied a prominent place in New Deal experiments in the United States for the elimination of unemployment in the 1930's. Likewise the theory of deficit government spending occupied a prominent place in policy measures advocated in the United States during the Second World War to ensure postwar full employment.

England's experience with sustained unemployment during the interwar period gave rise to a school of economic thought—the Key-

[1] Employment Act of 1946.

[2] The meaning of the term "full employment" was subject to searching analysis by proponents and opponents of the legislation, and no concensus was reached as to the precise meaning of the term.

nesian—which had far-reaching influence in the direction of undermining confidence in the whole body of self-stabilizing, competitive economic theory. One of Keynes' basic theorems is that the economic system "seems capable of remaining in a chronic condition of subnormal activity for a considerable period without any marked tendency either toward recovery or toward complete collapse. Moreover, the evidence indicates that full, or even approximately full employment is of rare and short-lived occurrence." [3] According to followers of Keynes a principal economic problem at the present time is that of obtaining and maintaining full employment. Representatives of this school of thought argue to the effect that free-enterprise economic systems shortly will be faced with chronic, in place of recurrent, economic stagnation unless heroic full-employment measures are adopted by government agencies. Among the more popular measures recommended for achievement and maintenance of full employment are mildly inflationary measures involving deficit-financed government spending in periods of slack business activity.

An examination, by an American scholar, of deficit spending policy to prevent unemployment is to be found in Hansen's *Fiscal Policy and Business Cycles*.[4] Hansen penetrates the subject more deeply than many other advocates of the use of government spending power as an instrument for the mitigation of unemployment. He uses the term "fiscal policy" which implies consideration of government income as well as government outgo, and the phrase "business cycles" which suggests the application of corrective measures in the expansion phase of the cycle as well as in its contraction and depression phases.

ECONOMIC INSTABILITY

Economic instability during the past hundred years or more has been characterized by fluctuations in employment and production. Statistical and theoretical analyses of economic fluctuations support the conclusion that cyclical movements of production and employment occur in the sense that cumulative expansion gives way to contraction and the processes of contraction prepare the way for a renewal of cumulative expansion. Optimum levels of production and employment have risen to higher and ever higher plateaus with improvements in technique, growth in population, and accumulation of

[3] KEYNES, JOHN MAYNARD, *The General Theory of Employment, Interest and Money*, pp. 249–250, Harcourt, Brace & Company, Inc., New York, 1936.

[4] HANSEN, ALVIN H., *Fiscal Policy and Business Cycles*, W. W. Norton & Company, Inc., New York, 1941.

capital during the past century, but no measurable or observable tendency for cyclical fluctuations to disappear or to become less violent has appeared.

A close approach to complete elimination of cyclical fluctuations in economic activity appears to be out of the range of probability so long as the main elements of free enterprise are retained. One becomes more convinced of this conclusion, the more conversant he becomes with the voluminous literature of business cycles and the more insight he gains into the operation of strategic economic forces that contribute to business fluctuations in a free-enterprise economy. Minimization of the violence of cyclical fluctuations in a free-enterprise economy and alleviation of personal suffering incident to unemployment are probably within the range of attainment. Government measures to attain these ends need not be in conflict with international trade policies, but care will be necessary in the selection of such measures if conflict with international trade policy is to be avoided.

One type of measure that might lessen business fluctuations at home without adverse international effects is the control of domestic credit, *viz.*, moderation of consumer credit extension for the purchase of houses, automobiles, furniture, and other durable goods in periods of business expansion; moderation of long-term credit extension for production and installation of capital equipment in periods of business expansion; moderation of commercial bank credit extension for the accumulation of large inventories in periods of business expansion. In short, some limitation of the extremes of domestic credit extension in the upward phase of a business cycle might contribute to some reduction in the amplitude of fluctuation in the contraction phase. Control of credit expansion may prove to be feasible from a purely economic point of view; its feasibility from a political point of view is less likely but, at least, is within the range of possibility.

Another approach to business cycle mitigation—an approach which has constructive possibilities and which has received much attention in recent years—is through control of the production volume of capital goods. The timing of public works in a manner to minimize public works production in the expansion phase of the cycle and to maximize them in its contraction phase exercises direct control over a large segment of the output of capital goods for domestic use. This is a particularly effective type of control since fluctuations in capital goods production are subject to the so-called "principle of acceleration." Such government economic policy might be executed without seriously conflicting with international trade policy.

A more generalized approach to the problem of mitigating cyclical fluctuations—an approach which involves many elements of government planning, including those of credit control and public works budgeting, and which has a large following in the United States—is referred to in business cycle literature as *compensatory fiscal policy.* Theories of compensatory fiscal policy include such considerations as government spending to ensure full employment in periods of private business contraction, deficit financing, management of the national debt, and tax policy.

Mitchell's analyses of business cycles[5] and other studies, both factual and theoretical, indicate conclusively that if any one large country, in a community of free-enterprise trading nations, is subjected to severe business depression, the other countries do not escape adverse effects. It is highly probable that unless the larger countries with far-flung trading connections, particularly the United States, can maintain a higher degree of internal stability than they have experienced in the past, a drift toward greater degrees of domestic market protection is more likely in the years ahead than a drift toward greater degrees of international trade freedom.

DOMESTIC EMPLOYMENT STABILITY AND FLUCTUATING EXCHANGE RATES

Some current proposals for protecting national economies from foreign economic fluctuations are concerned with manipulations of foreign exchange rates.[6] It is suggested that, when relative stability of domestic employment has been attained, disturbances that might result from international payments can be minimized through fluctuating foreign exchange rates.

Experience with unstable foreign exchange rates during the interwar period suggests that—in the absence of retaliatory measures abroad—temporary reemployment advantages can be gained through foreign exchange depreciation in any one or a limited number of countries in periods of mass unemployment. A first advantage is that exports of the depreciating country may be placed, temporarily, in a more favorable competitive position in foreign markets. For example,

[5] MITCHELL, WESLEY C., *Business Cycles: the Problem and Its Setting,* National Bureau of Economic Research, Inc., New York, 1927. BURNS, ARTHUR F., and WESLEY C. MITCHELL, *Measuring Business Cycles,* National Bureau of Economic Research, Inc., New York, 1946.

[6] BALLAINE, W. C., *The Problem of Stable Exchange Rates,* School of Business Administration, University of Oregon, Eugene, Ore., 1945.

prior to Great Britain's divorcement of the pound sterling from gold in 1931, certain types of British and United States files sold at competitive prices in Cuba. In 1930 a Cuban peso was worth approximately one United States dollar and approximately 4.86 Cuban pesos exchanged for one pound sterling. In 1932 a Cuban peso was worth approximately one United States dollar and approximately 3.50 Cuban pesos exchanged for one pound sterling. The relationship between pound and dollar prices of British and United States files changed comparatively little during this period. Consequently, in 1932, 3.50 Cuban pesos would buy more British than United States files. A second advantage to a country that depreciates its currency in a period of depression is that an initial effect of depreciation is curtailment of imports. To illustrate, 1,000 pounds sterling bought fewer United States automobiles in 1932 than in 1930 because the 1,000 pounds sterling exchanged for approximately $4,866 in 1930 and for only about $3,500 in 1932, whereas dollar prices of automobiles during this period declined less than 15 per cent. In so far as domestic prices in the exchange-depreciating country increase in proportion to the amount of exchange depreciation, or in so far as retaliatory measures abroad offset the effect of merchandise dumping through exchange depreciation, the re-employment advantages of the exchange-depreciating country tend to disappear. If, however, the depreciating country has idle production factors and if its exports are not a large part of total imports of countries that buy its goods, the offsetting effects of internal price increases or of foreign country retaliation are not likely to occur immediately. Where currency depreciation does increase the depreciating country's exports and reduce its imports, the initial effect is to increase employment.

During the 1930's many countries experienced exchange rate depreciation. Between 1929 and 1939 the foreign exchange of practically every country in the world that participated in foreign trade was either depreciated or subjected to control. Deflation was a primary cause of exchange depreciation during this period. Nations whose principal exports were raw materials such as wool, wheat, or coffee, found themselves in balance-of-payments difficulties after 1929 because prices of the goods they sold abroad declined more than prices of goods they purchased abroad. Australia, Argentina, and Brazil, for example, depended upon proceeds from raw-materials export for foreign exchange with which to purchase manufactured goods abroad and to pay fixed charges on their foreign debts. Following losses in foreign sales due to the decline in prices of their principal exports, demand of these

countries for foreign exchange far exceeded supply; gold reserves were exhausted and the external value of their currencies fell.

The exchange experience of Great Britain, the United States, and a number of other highly industrialized countries during the interwar period was discussed in Chap. XIV of the present volume. The drying up of United States foreign loans in the late 1920's and Great Britain's political inability to deflate her internal economy sufficiently to maintain the gold standard after it had been reestablished contributed to exchange instability in many European countries during the entire interwar period, and at no time during this period were the internal economies of the principal trading countries adjusted to a firm foundation of international equilibrium.[7]

During the Second World War, as during the First World War, currencies were inflated in many countries. Production of agricultural staples increased in some of the great agricultural exporting nations to counteract contraction of production in war-devastated areas. Domestic political and economic systems were disrupted, and a postwar attempt was made to bridge the gap between extreme wartime instability and reconstruction stability with foreign loans. Far-reaching internal economic readjustments will be called for in many countries if the world is again to experience an era of relatively free international trade, stable foreign exchange rates, high levels of business activity, and high employment levels, interrupted by periods of depression and unemployment no more severe than those of the century prior to the First World War. Confidence in the virtues of free-enterprise economics and the effectiveness of competitive self-stabilization processes has been undermined at many points; deflation is unpopular, and the idea that stability of foreign exchange rates is an obstacle to the successful implementation of domestic full-employment policies is widespread. Under these circumstances countries that are in position to advocate the wisdom of exchange rate stability may have to reconcile themselves to not a little adjustment and readjustment of international exchange rates. It is doubtful if international agreements calling for stable exchanges at predetermined rates and with no opportunity for readjustments in rates could survive for long. This conclusion does not imply, however, that attempts to stabilize international exchange rates by agreement within areas that will reduce future adjustments to a minimum are not well worth the effort and cost involved.

[7] See HANSEN, ALVIN H., *Economic Stabilization in an Unbalanced World*, Harcourt, Brace & Company, Inc., New York, 1932.

If all countries in an international trading community except one maintained foreign exchange rate stability, permitting the one country to shield its domestic market by letting its foreign exchange rate move without limit in response to conditions of supply and demand, this favored country might thus minimize domestic unemployment. If every country in the community of trading nations attempted to pursue a policy of stabilizing domestic employment by letting foreign exchange rates fluctuate without limit, the result would probably be a succession of protective measures leading step by step toward national economic self-sufficiency in each of the nations. Let us assume, for example, a trading community of only two countries: country A and country B. Let us assume further that for one reason or another depression starts in country B. B buys less goods and services from A. A's purchases from B, for a time, may increase or continue little changed. A's exchange may depreciate. The initial effect may be to check A's imports and increase her exports. Deflation in B is thus intensified. If B is having difficulty in maintaining internal prices, a next move may be erection of trade barriers to shield B's market against the competition of A's exports. A in turn may retaliate by erecting barriers against imports from B. The result is economic warfare, not economic cooperation.

ADVANTAGES OF EXCHANGE STABILITY

Exchange stability encourages merchandise trade and foreign loans, contributes to international good will, discourages retaliatory trade restrictions, tends to regularize terms of trade and to maximize aggregate production.

Uncertainty with regard to possible exchange rate fluctuations, of large magnitude, tends to discourage merchandise trade by imposing an exchange risk upon either the exporter or the importer. Assume, for example, that a United States firm exports to a British firm machinery amounting in value to $4,000 or £1,000 at the time when the quotation is made and accepted. If the sales contract calls for payment in sterling, 60 days from date of invoice, the exporter may receive $4,000 or more or less for the merchandise, depending upon sterling-dollar exchange fluctuations during the 60-day credit period. If, during the period, the sterling-dollar rate drops from $4 to $3.50 per pound sterling, the exporter gets only $3,500 for his goods, in place of the $4,000 that he expected when the goods were sold. If on the other hand the terms of sale call for payment in dollars 60 days from date of invoice, the British importer might find that a $4,000 check pur-

chased in London at the end of the credit period cost him approximately £1,143 in place of the £1,000 that he had initially calculated the goods to cost.

Exchange uncertainty tends to discourage long-term foreign investments even more than it discourages merchandise trade, because the interval between contract and collection is longer in the former case. The holder of a £1,000 bond maturing 10 years from time of purchase might find that the dollar-sterling exchange rate had depreciated 50 per cent, 70 per cent, or some other amount in the 10-year interval. If the dollar-sterling exchange rate at time of purchase were $4 per pound sterling and only $2 per pound sterling at maturity date, the bond buyer would realize only $2,000 (plus interest) for a bond that had cost him $4,000.

A third objection to exchange depreciation is the possibility of foreign government retaliation. Financial losses or unemployment that can be traced to foreign government action (as may be the case when exchange is depreciated) may create antagonism manifested in retaliatory government policy. An example is reduced imports and increased exports of a foreign country with depreciated exchange, leading to retaliatory imposition of protective tariffs in a country suffering from unemployment. The fact that exchange depreciation can be used as an offensive weapon in economic dealings, and the further fact that there is no easily comprehended distinction between offensive exchange depreciation and depreciation for other reasons, opens the door to international ill will.

Finally, the country that gains export advantages by exchange depreciation loses terms of trade advantages. Export advantages, due to foreign exchange depreciation that is not accompanied by equivalent price increases, are, in effect, gained by selling goods abroad at prices below those which similar goods sell for in the domestic market. In short, the country is engaging in merchandise dumping. Furthermore, imports cost more in terms of the depreciating country's currency than they cost before depreciation. The net effect is that the exchange-depreciating country trades more exports in physical volume for less imports in physical volume. Internal deflation with stable exchange rates might likewise result in less favorable terms of trade, but in this case terms of trade are a function of internal and external costs, whereas in the case of exchange depreciation, changes in the terms of trade may be accidental quantities that need not reflect advantages of geographical specialization.

Under a system of stable international exchange rates, labor and

capital in each country are guided into industries where the comparative advantage is greatest. Relative price changes and wage rate changes guide labor and capital into comparatively low-cost industries and out of comparatively high-cost industries. Depreciation of foreign exchange rates may minimize shifts of labor and capital in the depreciating country and cause greater shifts than are necessary elsewhere. The objections are of two kinds: (1) Interindustry shifts of labor and capital incident to exchange rate depreciation are not necessarily in the direction of least cost industries. (2) Part of the burden of internal economic adjustment necessary to international equilibrium may be shifted from the exchange-depreciating country to countries that maintain exchange rate stability. An international struggle to shift a burden of economic responsibility from one country to another is not conducive to international amity.

UNSOLVED PROBLEMS

As national political units are now constituted and as population and industry are now distributed, international trade is essential to maintenance of existing or higher living standards in all countries. The existing international trading system and international trade theory rest upon assumptions of economic flexibility, in every country, necessary to internal economic equilibrium and to international equilibrium.[8] If, in attempts to maintain national full employment, particular nations reduce internal economic flexibility to a point where international price equilibrium with stable exchange rates is not possible, foreign exchange rates may be subjected to wide fluctuations. A condition of simultaneous exchange rate fluctuations in all trading countries is not an offset to internal economic adjustments necessary to international equilibrium. Unless domestic economic flexibility is possible, international economic equilibrium is not possible in a dynamic system of world trade. In past periods of world economic instability, internal economic changes necessary to domestic and international equilibrium have been forced by the processes of business depression, operating within a system of stable foreign exchanges. If competitive self-stabilization is no longer possible in free-enterprise systems, a workable substitute for this part of the competitive system must be found if free enterprise and harmonious world trade are to continue. One

[8] The term "international equilibrium" as used in this passage implies (1) small fluctuations in national price levels, (2) small variations in foreign exchange rates, and (3) nearly full employment of all valuable production factors in the trading countries.

of the gravest threats to international economic cooperation and world peace is political breakdown of the domestic self-stabilization mechanism in free-enterprise economies.

A corollary problem is the absence of a philosophical or theoretical basis for harmonious trade between totalitarian and free-enterprise countries. In the U.S.S.R., for example, government policy could conform to a system of stabilized foreign exchange rates and at the same time encourage the dumping of Russian goods abroad. Merchandise dumping is sale of goods abroad at lower prices than similar goods sell for in the domestic market. Continuous, regularized dumping might be to the advantage of the importing country; sporadic dumping on a large scale may cause serious economic instability in the importing country or aggravate instability already present. Large corporations in free-enterprise economies can and do dump goods abroad at prices below those charged for similar goods in the domestic market. The disruptive effect of private dumping upon domestic economies abroad is similar in kind to that of government dumping but not so great in possible magnitude.

At present, the only theoretical guide to harmonious international economic cooperation is the theoretical end result that competition might produce if it were free. Herein lies an important reason for understanding free-enterprise competitive philosophy. If the end results of competition are those toward which a large part of society desires to move and if they are clearly conceived, some progress in this direction may be achieved, in a world of mixed economies, through international agreement. An immediate problem is avoidance, on the one hand, of national economic policies that are in conflict with international economic commitments and avoidance, on the other hand, of international economic commitments that cannot be honored because of pending domestic economic policy. If, for example, the United States government is committed to the granting of foreign loans for reconstruction abroad and reduction of trade barriers and if, because of domestic unemployment, trade barriers should be increased and foreign loans discontinued, neither the domestic nor the foreign economic policy would be likely to succeed. If Great Britain undertakes to implement world peace by supporting a policy of stable foreign exchange rates and is then forced by internal political pressure to depreciate the pound sterling, her contribution to economic cooperation and world peace may prove to be negative. If the U.S.S.R. should resort to large-scale merchandise dumping for the purpose of undermin-

ing domestic economic stability in some foreign country, fear of the Russian motive and antagonism for the Russian system might lead to retaliatory measures. Such measures are better described by the phrase "international economic warfare" than by "international economic cooperation."

CHAPTER XVII

ECONOMIC NATIONALISM—HAMILTON, LIST

In the nineteenth century Great Britain was the leading proponent of an international free-trade policy. The United States, Germany, and many other countries followed protectionist policies at that time notwithstanding the eloquence and logic of British oratory and the persuasive qualities of British economic literature. As in the nineteenth century, so also in what remains of the twentieth century, there is little likelihood that all nations will adopt free-trade policies. Protectionist policies have a much larger following throughout the world at present than free-trade policies. Protectionism is a live issue and in all likelihood will continue so. In addition to economic-instability incentives for protectionism, such as those cited in Chap. XVI, infant-industry incentives are present in many industrially backward regions —incentives similar to those which were conspicuous in the United States and Germany in the nineteenth century.

PROTECTIONISM TO PROMOTE NATIONAL INDUSTRIAL DEVELOPMENT

Nineteenth-century protectionism followed in detail neither the pattern of earlier mercantilism nor that of contemporaneous free trade. Like mercantilism in England, the protectionism of nineteenth-century Germany and the United States fostered a strengthening of the sinews of national unity. Like British free trade it fostered the development of a power-machinery economy. Having attained political stability and economic unity under the mercantile system, Great Britain was in position to devote her best energies to improvement of her economic machine at a time when Germany and the United States were still occupied with problems of attaining political solidarity. With the introduction of steam power in British factories and the cheapening of carrying costs through the use of steam transportation early in the nineteenth century, Great Britain's trading horizon was enlarged. At this juncture Ricardo and later Mill came forward to supplement Smith's laissez-faire philosophy and to enlarge upon the advantages of division of labor as applied particularly to world trade. Great Britain

stood to gain immense wealth through international trade, exchanging as she did her fuel resources and her advanced technical skills embodied in manufactured goods for raw materials of the sparsely settled West and for fineries produced by cheap labor in the East. So it was that the classical system of international free trade came into being. It is well to emphasize the fact that nineteenth-century free-trade theory came from a set of political and economic circumstances peculiar to Great Britain. Circumstances, policies, and doctrines in America and Europe (particularly Germany) during the nineteenth century were different from those of Great Britain. Alexander Hamilton and Friedrich List rendered for the United States and for Germany services in the nature of nineteenth-century policy formulation similar in some respects to the services rendered by Smith and Ricardo in England. Economic policy in nineteenth-century France took a middle course. France enjoyed greater political solidarity than Germany and was economically more self-sufficient than Great Britain. A compromise policy was the logical outcome of French circumstances, political and economic. At times during the nineteenth century France leaned toward British free trade; at other times she pursued more nearly the ideals of American and German protectionism. American and German protectionist policies are selected for illustrative purposes because they are better suited than those of other European countries for drawing sharp contrasts between Continental and American protectionism and British free trade.

HAMILTONIAN NATIONALISM

Alexander Hamilton (1757–1804) was the first Secretary of the United States Treasury. In a report on manufactures submitted to the House of Representatives in 1791 he formulated a body of arguments that were to have a profound influence upon this country's national commercial policy. The United States at that time comprised approximately 900,000 square miles and supported a population of about 4,000,000 people—some 4½ persons per square mile. The country was young industrially, and its parts were loosely bound together politically. Hamilton was faced with a problem of economic statesmanship essentially different from that with which Adam Smith had dealt in Great Britain; different also from that with which Ricardo was soon to deal. Great Britain in the 1790's comprised an area of 94,000 square miles upon which was concentrated a population of some 16,000,000 people—170 persons per square mile. As already stated, production techniques were more advanced in Great Britain than in

any other nation; the British banking system was centralized and comparatively stable; Britain's national defenses were adequate for the times and she was faced with no serious problems of political decentralization that threatened to separate the nation into numerous politically sovereign units. Hamilton's first problem in the United States was to foster political cohesion of the 13 American states into a strong Federal body.

Two features of Hamilton's report on manufactures are of particular significance: (1) Being a statesman capable of glimpsing his country's destiny, he voiced a policy of national protectionism for the purpose of making the 13 states economically more interdependent among themselves and less dependent upon foreign nations. (2) He recognized more clearly, possibly, than any of his contemporaries the possible future importance of the use of nonhuman energy in manufacturing pursuits. He called particular attention to

> circumstances . . . that materially diminish everywhere the effects of a scarcity of hands [among them] the vast extension given by late improvements to the employment of machines, which, substituting the agency of fire and water, has prodigiously lessened the necessity of manual labor.[1]

Hamilton's reasoning started with the hypothesis that development of manufacturing in the United States would promote national unity, foster production, and promote the accumulation of national wealth. Next an assumption was made to the effect that manufacturing in the United States would not grow, under conditions of free trade, so rapidly as it could be encouraged to grow by restricting the sale of foreign manufactures in the home market and by encouraging the development of domestic manufacturing enterprises in other ways. Among expedients available for use in the promotion of domestic manufacturing enterprise the following were cited:

1. Protecting duties, or duties on those foreign articles which are the rivals of the domestic ones intended to be encouraged.
2. Prohibitions of rival articles or duties equivalent to prohibitions.
3. Prohibitions of the exportation of materials of manufactures.
4. Pecuniary bounties.
5. Premiums.
6. The exemption of the materials of manufacture from duty.
7. Drawbacks of the duties which are imposed on the materials of manufacture.

[1] Report on Manufactures submitted to the House of Representatives in 1791.

Hamilton had, apparently, carefully read and thoughtfully considered Adam Smith's *Wealth of Nations* before committing himself to a policy of national protection for the United States. The advantages of division of labor and of trade so clearly expounded by Smith were recognized. In fact extension of division of labor in the United States was one of Hamilton's arguments for the encouragement of manufacturing.

> . . . the principal circumstances from which it may be inferred that manufacturing establishments not only occasion a positive augmentation of the produce and revenue of the society, but that they contribute essentially to rendering them greater than they could possibly be without such establishments . . . are:—
>
> 1. The division of labor.
> 2. An extension of the use of machinery.
> 3. Additional employment of classes of the community not ordinarily engaged in business.
> 4. The promotion of immigration from foreign countries.
> 5. The furnishing of greater scope for the diversity of talents and dispositions which discriminate men from each other.
> 6. The affording of a more ample and various field of enterprise.
> 7. The creating in some instances of a new and securing in all of a more certain and steady demand for the products of the soil.[2]

It was only in regard to international free trade that Hamilton discarded Smith's doctrines. With regard to international free trade Hamilton explained that Smith's doctrine was a theory of universal free trade which chanced to favor Great Britain's ends. He contended that restrictions upon the free importation of manufacture were not so necessary in Great Britain as in the United States and that restrictions upon the free importation of crude produce would deprive British industrialists of their greatest gains from international commerce.

Having pronounced himself in favor of protection, Hamilton set himself to argue the point. Amplifications of his original seven reasons for the encouragement of manufacturers [2] embraced a number of protectionist arguments that have been in use over and over during the period of a century and a half since Hamilton's time. One contention was that tariff-fostered industries would draw skilled technicians from Europe and thus promote immigration into the United States of a class of persons needed for maximum development of the young nation. Another of Hamilton's arguments for protection was that pro-

[2] *Ibid.*

motion of manufacturing industries by tariffs would encourage in the United States division of labor, invention of machinery, and other benefits inherent in Adam Smith's free-trade system. A third argument was that tariff-fostered manufacturing industries would encourage fuller utilization of the country's labor by affording employment for women, children, and persons otherwise idle either from bias of temper, habit, infirmity of body, or some other cause. A somewhat similar argument called attention to a diversity of latent talents and dispositions that manufacturing afforded opportunities for exercising. In fact, Hamilton had a whole series of arguments that were based upon the central theme of manufactures affording a diversity of opportunities and thus calling workers into action. Some workers might be called into action during idle and otherwise wasted periods; others might be stimulated in the employment of latent human talents that without manufacturing would remain dormant and unproductive. The objections of farmers to tariff protection for manufactures was met with the so-called "home-markets" argument.

> The creating in some instances of a new, and securing in all a more certain and steady demand for the surplus produce of the soil . . . is a principal means by which the establishment of manufactures contributes to an augmentation of the produce or revenue of a country and has an immediate and direct relation to the prosperity of agriculture.[3]

This conclusion rested both upon the difficulty of selling farm produce in tariff-protected foreign markets, and upon the belief that foreign markets were more uncertain and less stable than the domestic market. In this connection Hamilton suggested also the economics of diversified agriculture which a home market would promote.

> It cannot be denied that the interests even of agriculture may be advanced more by having such of the lands of a State as are occupied under good cultivation than by having a greater quantity occupied under a much inferior cultivation.[3]

Finally Hamilton met boldly one of the most convincing arguments advanced for free trade, *viz.*, the argument that manufacturing would develop if a country's natural advantages warranted, even under conditions of free commerce.

> Against the solidarity of this hypothesis, in the full latitude of the terms, very cogent reasons may be offered. These have relation to the strong influency of habit. . . . Experience teaches that men are often so much gov-

[3] *Ibid.*

erned by what they are accustomed to see and practice; that the simplest and most obvious improvements in the most ordinary occupations are adopted with hesitation, reluctance and by slow gradations. The spontaneous transition to new pursuits in a community long habituated to different ones may be expected to be attended with proportionably greater difficulty.[4]

A corollary argument was that unless new pursuits were encouraged and fostered by protection much of the country's latent natural resources would lie dormant as had been the case when the land was occupied by aboriginal Indians.

In evaluating Hamilton's ideas it is well to remember that he was a practical statesman faced with the necessity of solving immediate political issues. It is well also to remember that the problems of the struggling American republic of the 1790's were quite different from those of the United States of the 1940's—a nation highly industrialized, wealthy, and powerful in world diplomacy.

LIST'S PHILOSOPHY OF PROTECTIONISM

After Hamilton came List (1789–1846), an equally able exponent of protectionism. Friedrich List was born at Reutlingen in Württemberg in 1789. At the age of fourteen he entered his father's tannery. Finding tanning a most distasteful trade, young List left his father's business to become a clerk in the Württemberg bureaucracy. Later he was made professor at Tübingen, from which post he was discharged because of political activities that were distasteful to the Württemberg government. After leaving Tübingen University, List's fortunes went from bad to worse until he found himself in jail—a political prisoner. His next move was to America. After his arrival in the United States in 1825 List's ill fortunes changed. Within the short space of five years he amassed a moderate fortune in the coal business of Pennsylvania and gained national political recognition through advocacy of protective tariffs. A political appointment as European representative of the United States government enabled him to return to Europe in 1830.

Faced with economic realities in Germany and in the United States that were similar in many respects, List's economic doctrines were formulated with these two countries primarily in mind.[5] That tariff policies should be made to fit the needs of countries in different stages of economic development was a theme that ran like a silver thread

[4] *Ibid.*

[5] See List, Friedrich, *Das Nationale System der Politischen Ökonomie,* (1841) or one of the English or American editions.

through all List's reasoning on the subject. He recognized four stages of industrial development in countries endowed with resources necessary to the attainment of the highest grade of wealth and power. The first stage was one of barbarism. In the second stage improved agricultural methods adopted from more advanced nations were to be fostered by a free-trade policy. In the third stage manufactures, fisheries, navigation, and foreign trade were to be fostered by means of commercial restrictions. For the fourth and last stage, when the country had reached a high state of wealth and power, List recommended gradual transition to a free-trade policy. He conceded the fact that countries tended to evolve from one stage to another even though handicapped by free competition with more mature and stronger rival countries. But why wait for the slow process of industrial evolution to take its natural course if the process may be accelerated by judicious commercial policy, he argued. Is there any more reason for a people to wait for industries to develop in backward regions as a result of freely competitive forces than for the forester to wait on the wind to bear the seeds of trees to waste moorlands?

Conditions in Germany during List's Generation. List began his study of economic and political conditions in Germany early in the nineteenth century. Political consolidation of the German Empire under William of Prussia did not occur until 1871. At the beginning of the nineteenth century the territory which we think of as modern Germany was separated into many politically sovereign states; on the economic side feudalism persisted in quite an objectionable form. In Prussia, for example, as late as 1805 a large part of the population were serfs, some of whom lived in a condition of almost absolute slavery. In addition to the peasant class, which included the serfs, there were nobles and citizens. Every man's place in society was determined at birth by the status of his family. These social rigidities, together with the wretched condition of internal communication in Germany and the numerous tariffs and other trade restrictions among the several states, prevented early nineteenth-century Germany from developing industry and trade as rapidly as they were being developed in France and in Great Britain. Political and economic solidarity had not been attained during the mercantile period in Germany as it had in Great Britain and to a less extent in France.

List was a reformer. He wished to see the German states united politically; he desired to see internal tariffs and other internal trade restrictions obliterated and a tariff wall built around the German states to shield young manufacturing industries in Germany against

British competition. List was not so much an early prophet of these developments as he was a part of them. It is true that political unity in the German Empire was not attained until after List's death. However, when he was only seventeen years of age (1806) an edict was ordered to free the serfs in Prussia, and in 1811 another edict provided for the setting off of portions of land representing the property rights of peasants. Tradesmen, too, were being freed from the burdens of guild restrictions and apprenticeship about this time. The *Zollverein*, or customs union, among the German states had its beginning in 1818, and by the year 1834 most of the German states were included in it. Inasmuch as the *Zollverein* (the support of which put List into prison and later drove him into exile) was in a sense a system of free trade among sovereign states, one can understand why List drew a distinction between what he conceived to be a free-trade policy for Germany and the British commercial policy, which he termed "cosmopolitan" free trade.

NATIONALISM AND INDUSTRIALIZATION THE GOAL OF BOTH HAMILTON AND LIST

Need of a political system formulated for the promotion of nationalism stands out in bold relief in the writings of both Hamilton and List. During the lives of these men, the United States and Germany were less prosperous than Great Britain. The United Kingdom was, in fact, the wealthiest and most powerful nation in the world during the last quarter of the eighteenth century and the first three-quarters of the nineteenth century. The United Kingdom was therefore envied by other nations and the secrets of her power and wealth were sought by competitors. The secret of British wealth and power appeared to rest in her possession of efficient manufactures. It is not surprising, therefore, that Hamilton and List should have desired that manufacturing be promoted in America and in Germany. These two men (trained in economics and experienced in politics) formulated policies for the promotion of political solidarity and manufacturing efficiency. The political solidarity theme was in part a product of the times and in part a heritage from mercantilism. The protectionist theme appears to have been influenced by desire to emulate the United Kingdom in the development of manufactures. Early nineteenth-century protectionism in Germany and in the United States of America thus rested upon two pillars: the one was a desire for national self-sufficiency, national safety, and political perpetuity; the other was a desire for development of manufacturing systems to promote national wealth.

List and Hamilton had visions of vast wealth that could be produced by employment, through manufacturing, of natural resources lying dormant in Germany and in the United States. Both advocated protectionist policies to hasten the development of manufacturing and a balanced national economy. Hamilton advocated protection to encourage the development of young industries in an industrially backward country; List did likewise, but went a step further in advocating the discontinuance of protection when the young industries had matured.

Although the Hamilton-List brand of protectionism and the earlier mercantile doctrines were alike in that one essential objective common to both was national political and economic solidarity, the doctrines were different in a number of essential respects. Whereas mercantilism emphasized foreign commerce, favorable trade balance, and accumulation of precious metals, Hamilton and List gave less attention to these considerations and placed much greater emphasis upon full employment of a nation's dormant resources through the development of manufacturing and internal commerce. At this point one has a fleeting glimpse of a bent that the introduction of power machinery in Great Britain gave to political philosophy all over the world. When the wealth-creating significance of power machinery began to be realized, many countries, one after another, began to take natural-resource inventories and to formulate policies to encourage manufacturing. List did not believe that all countries were suited to manufacturing pursuits. His thought was that countries with natural resources and climate suited to the development of manufacturing were the ones to develop manufacturing industries. Other countries, particularly those lying in the tropics, might well confine their energies to primary production.

The idea that all nations are not equally well suited to all occupations is an essential part of British free-trade doctrine as well as that of List. This conception of natural difference between regions from a point of view of their best adaptability to different types of industry has been strengthened in recent decades by the findings of mineral surveys and analysis of apparent tendencies for heavy industries to center about coal- and iron-producing regions. List's reasoning to the effect that torrid regions were unsuited for manufacturing is still recognized to be of some importance but of much less importance than it was once believed to be.

One is impressed by the fact that the Hamilton-List protectionist policies were fostered with an eye to the best interests of particular na-

tions. But what of that? The same may be said for the Ricardo-Mill doctrines. The free-trade doctrines of Mill are capable of broader interpretation than the protectionist doctrines of List, partly because Mill's Great Britain was more advanced both economically and politically than List's Germany and partly because Mill was more of a scholar than List and less a creature of misfortune in a turbulent stream of political conflict. Inasmuch as the present-day world is made up of countries in many stages of industrial evolution, political unification, and national responsibility, it may be well in evaluating trade restriction tendencies in various countries to keep both types of reasoning in mind.

CHAPTER XVIII

CUSTOMS TARIFFS

Seldom, if ever, has any nation been entirely free of measures that exercise some regulative effect upon its external commerce. Examples of trade regulations are customs tariffs, merchandise quotas, embargoes, subsidies, and foreign exchange controls. Prior to the 1930's, customs tariffs were the most widely used of these measures. Evaluation of government regulations over international trade involves two types of consideration. The first concerns the possibility of attaining certain ends by the use of trade-restrictive devices. The second deals with the evaluation of the desirability of these ends. Whether or not a tariff or other measure is likely to raise domestic prices or stimulate a specific industry are questions of the first type, the answers to which may be obtained by scientific or semiscientific methods. The question of the desirability of bringing about these or other ends is less capable of objective treatment. An end that may be highly desirable for one group or community at a particular time may be objectionable from the point of view of some other interest. The following discussion is concerned primarily with the probable results of customs tariffs rather than with the rightness or wrongness of these results.

EFFECTS OF CUSTOMS TARIFFS ON PRICES

Trade restrictions ordinarily make their effects felt through the medium of prices. Both the effects of particular trade-restrictive measures upon the prices of particular goods and their indirect effects upon the multitude of prices that are interdependent parts of the whole price system are important. An import tariff on wool may raise prices of men's suits, women's coats, underwear, sweaters, golf hose, blankets, and rugs. The wages of workers employed in industries that produce the aforementioned goods may be altered, and their purchases modified. Demand for industrial goods used in wool manufacturing may be altered. It is impossible, even theoretically, to trace all the myriad of indirect effects of a trade-restrictive measure in a price system that is assumed to be freely competitive. The fact that the price system of no country is freely competitive further complicates an already too com-

plicated problem. Who can be sure of the correctness of any detailed analysis of causes and effects of price changes in a country where monopoly, partial monopoly, and free competition are mingled and confused? In spite of these difficulties, trade-restrictive measures are applied and evaluated largely on a basis of assumptions as to the manner in which they alter prices. If we are to attempt any evaluation of such measures, we are obliged to state at least a few generalizations concerning the relationship between trade restrictions and prices. The generalizations to follow have stood the tests of usage and theoretical analysis for a long time. The tendencies suggested are believed to be sufficiently accurate to serve as a basis of judgment.[1]

In order to analyze the primary effects of trade restrictions on prices it is necessary to consider the relationship between such restrictions and costs of production. Import tariffs tend to retard territorial specialization by countries. Gains that arise from territorial specialization in the form of increased efficiency and lower cost are well known. In the United States, for example, raw cotton could not be produced in New England with as little expenditure as is required for its production in South Carolina or Mississippi or Texas. Coal cannot be mined so easily where mine shafts are deep and seams thin as where mine shafts are shallow and seams are thick. More labor is required to take ore for a ton of iron from the ground where the iron content of ore runs only 20 or 30 per cent than is required where the iron content of ore is 60 or 70 per cent and is easy to get at. So it is with industries all over the world: labor is more productive in the aggregate, if put to its best use in each locality. Trade makes territorial specialization possible without restricting diversity of consumption in the different regions. Trade barriers tend either to restrict diversity of consumption or to reduce the efficiency of labor by forcing its employment in industries poorly suited to particular regions where a diversity of goods

[1] Other treatments of the subject are to be found in the following references:

TAUSSIG, F. W., *Some Aspects of the Tariff,* Chap. I, Harvard University Press, Cambridge, Mass., 1915.

PIGOU, A. C., *Protective and Preferential Import Duties,* 1935 ed. (series of reprints of source works on political economy, No. 2), pp. 94*ff.*, London School of Economics, 1935.

WRIGHT, PHILIP G., *Sugar in Relation to the Tariff,* McGraw-Hill Book Company, Inc., New York, 1924.

SCHULTZ, H., "Correct and Incorrect Methods of Determining the Effectiveness of the Tariff," *Journal of Farm Economics,* 1935, pp. 625*ff.*

MARSHALL, ALFRED, "Memorandum on the Fiscal Policy of International Trade," *Official Papers by Alfred Marshall,* Macmillan & Co., Ltd., London, 1926.

is demanded for consumption. Industries that are least efficient in a region or country are high-cost industries. They are import industries if trade between countries is not restricted. Industries that are most efficient cannot grow so large if trade is restricted as they might grow under conditions of free trade because tariff barriers tend to reduce the size of export markets.

The placing of an import tariff tends to raise prices of dutiable imported goods in the importing country. It tends also to reduce the amount and total value of such imports and to increase prices of alternative domestic goods. The magnitude of price increases in the protected market in relation to the magnitude of the tariff rate cannot be precisely determined. In the relatively rare case of an imported good that is completely controlled by a foreign monopolist, the imposition of a tariff might bring about no price increase. The monopolist might find it more to his advantage to absorb the tax than to suffer the loss of sales that would follow from an increase in price. A possible case at the other extreme might be the imposition of a prohibitive tariff on a commodity that had been freely imported because conditions in the importing country were distinctly unfavorable for its home production. In such a case the price might be raised by the full amount of the tax. Some important factors that determine the amount by which tariffs raise prices are the elasticity of the demand for the commodity, the nature of its cost curve, the elasticity of its supply, and the extent to which its price may have been above a freely competitive level when the tariff was imposed.

When an import tariff is placed upon a commodity that was not being imported anyway, it will not affect its price. Sometimes such tariffs are placed on goods that are continuously exported. If the goods are sold under competitive conditions, their prices will be determined in a world market and will not be changed by the imposition of an import tariff in an exporting country. In case such goods are produced at home under monopolistic or semimonopolistic conditions, an import tariff might enable the home producer to sell abroad at a price lower than the domestic price. The tariff would prevent the return of the dumped goods and thus help to keep the home market prices above the foreign market prices. In the case of commodities sold abroad under freely competitive conditions an import duty will not affect home prices in even this indirect fashion. Sometimes commodities are not imported because of embargoes or already existing high tariffs. Under such conditions an increase in the tariff rate will have no effect on the price.

As already stated, import tariffs tend to reduce the aggregate value of the tariff-imposing country's merchandise imports. An indirect effect that is likely to occur is reduction in the value of the tariff-imposing country's aggregate exports through the operation of payments balance mechanism. How are prices of the country's merchandise exports affected if the aggregate value of exports is thus reduced? This question cannot be answered in general terms. There is no way of knowing which of a country's exports will be lessened by reason of the imposition of import duties. Suppose, for example, that the United States were to impose such heavy duties on the importation of certain French products that their importation practically ceased. It is highly probable that Frenchmen would then be unable to continue the purchase of certain American products, which would result in the diminution of our exports of those products. It seems reasonable to suppose that this decrease in demand for American products might result in a lower price. Before coming to final conclusions, however, consideration must be given to many factors such as the nature of the cost curves, elasticity of demand, and size of world market for the goods in question in relation to the volume of exports of such goods by the tariff-imposing country.

Trade restrictions other than tariffs may also bring about price changes in the countries concerned. Exact determination of the amount and nature of such price changes can be made, if at all, only by detailed analyses of specific situations. A few general tendencies are evident. Merchandise quotas, foreign exchange restrictions, and other measures that limit imports tend to affect prices in much the same manner as they are affected by import tariffs. Measures that directly restrict exports (export quotas and export tariffs, for example) tend to raise prices in foreign markets. Export bounties tend to lower prices in foreign markets; they may or may not raise domestic prices, depending upon whether the commodity is produced under conditions of increasing or decreasing costs and the character of its demand. Monopoly dumping ordinarily tends to reduce foreign prices of the dumped goods; their domestic prices may be maintained or even increased.

MEANING OF THE TERMS "PROTECTIVE" AND "FREE-TRADE" POLICIES

In general, the nation that maintains a system of trade restrictions for the purpose of shielding a large portion of its domestic industry from the competition of foreign goods is described as a country with a protective policy. The nation which does not maintain a system of

trade restrictions sufficient to protect domestic industries and which does not pay export subsidies or manipulate foreign exchange rates for the purpose of favoring domestic industries is commonly referred to as a free-trade country. At present no important industrial nation in the world maintains a free-trade policy. Great Britain's external trading system during the last half of the nineteenth century came nearer to being on a free-trade basis than that of any other important nation at the time or since.

BRIEF SURVEY OF CUSTOMS TARIFF SYSTEMS PRIOR TO THE FIRST WORLD WAR

Great Britain. A low-tariff policy prevailed in the United Kingdom from about the middle of the nineteenth century to the beginning of the First World War. British free-trade doctrine was expounded in Chaps. VIII, X, and XI of the present volume. It will suffice to recall here the removal of the corn laws between 1840 and 1860 and the vigorous advocacy by the British of world-wide removal of trade barriers on the grounds that free trade would promote a system of territorial division of labor which in turn would tend to maximize industrial efficiency in every nation that participated therein. Since the First World War the United Kingdom, like every other independent state, has resorted to the expediency of increasing the number and severity of her trade restrictions.

France. For a time after 1860 French tariff policy followed that of Great Britain [2] but after about a decade of low tariffs between the 1860's and 1870's French sentiment returned strongly to protection. By 1877 the demand for protection was so vociferous that a commission was appointed to analyze the reasons for decay of French trade. The commission reported that in a number of trades production costs could not be brought down to the level of British competition and recommended compensatory duties. Among the industries for which protection was urged were the iron industry and agriculture, which was faced with the competition of low-cost wheat from America. Few

[2] In 1860 a treaty was negotiated between France and England (Chevalier on the French side and Cobden on the English side) providing for reduction of duties on English goods imported by France to 30 per cent as a maximum until 1864 and 24 per cent thereafter. Other measures reducing trade restrictions followed. Tariffs on coal and raw materials were removed between 1860 and 1863; agricultural protection was done away with between 1861 and 1863. In 1861 duties were lowered on ships constructed abroad; already in 1860 all preferences given to French ships over foreign ships had been abolished.

important upward revisions in the tariff were made immediately. However, tariff sentiment continued to grow until 1892, when the Méline Tariff Act was passed placing high duties both on agricultural and industrial goods. The tendency to revise tariffs upward has continued since that time.

Russia. Prior to the Bolshevik revolution, the people of Russia had been subjected for hundreds of years to the joint influence of western Europe and the Orient. Before 1700 Russia was more largely Asiatic; after 1700 she gradually became Europeanized. Peter the Great is said to have forced Russia to look west instead of east. With her large area, lacking in transportation facilities, and her Asiatic traditions, Russia failed to progress industrially during the nineteenth century as rapidly as did Great Britain, Germany, or France. Throughout the whole period from 1800 to 1914 Russia maintained a system of trade restrictions. The national policy was a mixture of mercantilism, to bring in the bullion needed in the evolution of a money economy in the early decades of the nineteenth century, with protection to secure revenue and to shield infant industries. As in Germany and France there was some relaxation of import tariff duties in Russia for a period of two decades or more after 1850, with reversion to more rigorous protection before the end of the century and maintenance of a protective policy until the First World War and the Russian Revolution.

Italy. Italy's tariff policy prior to the First World War was essentially one of internal free trade to promote national solidarity and import tariffs on manufactured goods to foster development of manufacturing industries at home. As late as the 1860's the Italian peninsula had been divided into a number of independent states separated one from another by customs barriers. In the north, Austria exercised a controlling influence. In the south were papal states and other independent kingdoms. Political unification of Italy and internal free commerce followed the war between Prussia and Austria in 1866. After her unification, Italy's external commerce increased but, unlike Germany and Great Britain, she had no rich coal and iron mines around which to build a system of low-cost power-machinery manufacturing. In 1913 Italy's production of pig iron was only 426,000 tons as compared with 10,260,000 tons in Great Britain, 19,000,000 tons in Germany and 5,126,000 tons in France.[3] Likewise Italy's textile industry was smaller than that of France, Germany, or Great

[3] *Commerce Yearbook of the United States*, 1929, U. S. Department of Commerce, Vol. II, p. 729. The figures are for prewar territories.

Britain. Because of a dearth of fuel and fabricating materials such manufacturing as Italy had was built upon a foundation of low-wage labor. For many decades Italy has had a protective tariff system but in the absence of basic resources she has not succeeded in stimulating development of industries capable of raising standards of living of the Italian people to a par with living standards of the French, German, or British.

Japan. Prior to the First World War Japan had not enjoyed tariff autonomy for a sufficient period of time to enable her to formulate a clearly defined tariff policy. The treaty of 1858 with the United States limited Japanese import duties to a low rate: 5 per cent ad valorem was the typical figure. During the next half century treaty agreements were modified from time to time. In 1894 a treaty was concluded with Great Britain which gave Japan the right to fix her own import duties. Similar treaties with other powers followed. Complete tariff autonomy was not obtained until 1911.

United States. The external commerce and the tariff history of the United States are examined in Chap. XXV of the present volume. At this point we need give only a few summary statements to indicate dominant tendencies in the United States for comparison with prewar tariff tendencies in Europe. Following in general the precepts of Hamilton and List, the United States erected a system of tariff protection for manufacturing early in the nineteenth century. Starting at the end of the eighteenth century as one of the world's principal sources of supply of raw cotton, tobacco, timber, foodstuffs, and other raw materials and an importer of European manufactures, this country adopted improved European methods, borrowed capital from Europe, and built large domestic manufacturing industries. Tariffs for revenue were imposed in 1790 by the first Congress. The removal of the embargoes incident to the Napoleonic Wars in Europe was followed by increasing shipments of European goods to this country. In the face of these increasing imports United States tariffs were substantially increased in 1816. Although there have been marked variations in individual tariff acts, protective tariff rates in this country have been maintained.

Canada and Australia. Protection of the home market in Canada followed the shift to a free-trade policy in Great Britain in the 1840's and loss to Canada of heavy preferences for her raw materials in markets of the United Kingdom. The Dominion of Canada came into being in 1867. Political leaders in Canada in the 1860's dreamed of a

nation independent industrially, and the national policy became highly protectionist. Political and financial forces worked in Canada in Sir John A. Macdonald's day similar to those which had worked in the United States in the time of Alexander Hamilton. Liberal parties later came into power in Canada on free-trade platforms, but the difficulties and political dangers of extreme tariff reduction were great. Consequently, the First World War found the Canadians with a protective tariff system comprising rates not so high as those of the United States, but effective, nevertheless, in accelerating transition of the young nation from a predominantly agricultural to a predominantly manufacturing state.[4]

Australia, like the United States, Canada, and many other young nations, made use of protective tariffs to foster nationalism and to accelerate the growth of manufacturing. Australia's separate states became in 1900 a commonwealth with a federal parliament composed of representatives from the state parliaments. The constitution provided for a federal tariff system with rebates to the states of three-fourths of the revenue. Many of the colonial tariffs had been protective, and protectionists clamored for a self-contained, self-supporting, nicely balanced, industrial nation. The first Federal tariff in 1902 was a disappointment to many of the old guard because it was a compromise between the ideals of tariffs for revenue and tariffs for protection. However, protectionism fed upon itself and grew. Before the outbreak of the First World War the rates of the 1902 tariff had been nearly doubled and the free list had been reduced.[5]

Germany. In Chap. XVII reference was made to the *Zollverein* and to the development of Friedrich List's doctrine of national protection. During the 1850's and the 1860's the *Zollverein's* tariff policy was influenced by British and French tariff treaties; this was a period of downward tariff trends all over Europe. Germany, like most of the other Continental countries, was swept in the direction of international free trade by a movement which started in England and was strengthened by general recognition of the advantages of free internal commerce. In 1873 Germany had no primarily protective agricultural tariffs; all her export duties inherited from the mercantile period had been abolished; in fact, excepting small duties on textiles, Germany had nominal revenue tariffs only in 1873. Before the decade had come

[4] BEVERIDGE, ALBERT J., "Canada's Tariff Policy," *American Review of Reviews*, June, 1911.

[5] For a discussion of Australian tariff history, see Edward Shann, *An Economic History of Australia*, Cambridge University Press, London, 1930.

to a close, however, the free-trade tendency was definitely reversed. During the last two decades of the nineteenth century List's doctrine of internal free trade and external protection prevailed in the German Empire. In Germany, as in France, the difficulty of meeting the low-cost competition of British manufactures and American grain strengthened a rising protectionist group. Tariffs, both on manufactured goods and on agricultural products, were increased from time to time between 1873 and 1900. The years 1900 to 1913 marked a period of expansion in German commerce; tariff policy in Germany at this time appeared to be in a transition state. This subject is discussed further in the section to follow.

THE AGRARIAN VERSUS MANUFACTURING STATE CONTROVERSY

In Great Britain and Germany the shift from a predominantly agricultural state to a predominantly manufacturing state was marked by policies that had far-reaching effects upon world economy. The British corn-law controversy of the 1840's, Britain's acceptance of a free-trade policy, and world-wide expansion of British commerce during the last half of the nineteenth century have already been discussed.[6] The agrarian vs. manufacturing state controversy in Germany at the beginning of the twentieth century was in many respects a repetition of the corn-law controversy in Great Britain half a century earlier. The issues raised in the British corn-law controversy and the German agrarian vs. manufacturing state controversy are of particular significance because the United States is faced with somewhat similar issues.

By the beginning of the twentieth century the German iron and steel industry and related industries were in position to compete successfully in foreign markets. Certain of these groups swung over to a free-trade point of view. The English controversy that had occurred half to three-quarters of a century earlier was reenacted in twentieth-century Germany in many of its more important aspects. German manufacturers could not, however, invade the world's markets for manufactured goods with as little opposition as the British had experienced because the British were already there. Political arguments in Germany centering about tariff policy suggest the gravity of the struggle between British and German manufacturers that was pending at the beginning of the twentieth century. One party in Germany feared the consequences of a trade war with Great Britain; another major party advocated a policy of vigorous external expansion

[6] Chaps. IX, X, and XI.

at all costs. The controversy was popularly referred to as the question of an "agrarian vs. manufacturing state." Was an economic system to be developed in Germany that would require ever-expanding markets for manufactured goods and was a constantly increasing portion of the country's needs for foodstuffs and raw materials to be obtained from less densely populated foreign countries or was Germany to remain essentially self-sufficient? Adolf Wagner,[7] an opponent of the so-called "manufacturing state," hesitated to sanction a low-tariff policy for encouraging exports of manufactures and imports of foodstuffs and fabricating materials, for four reasons:

1. He argued that the change in national life incident to free trade would be too precipitately, too immoderately carried out for a wholesome development of German national life. He foresaw a too-rapid increase in population, a too-rapid shift of rural folk to urban communities, a crowding together of agglomerations of people in industrial and mining regions, an undermining of the health and vigor of the population, and a destruction of certain higher social values in ruthless pursuit of material gain.

2. He feared shortage and intermittent supply of foreign-produced foodstuffs and possible embarrassment for a dependent Germany in time of war.

3. Wagner feared that ruthless competition for markets on the part of Germany, Great Britain, France, United States, and possibly other nations would lead to an unwholesome type of imperialism in industrially backward regions and possibly to war between the industrialized nations.

4. He professed to foresee a day when Asiatics with their cheap labor and imported Western methods would be able to undersell Western manufacturers in the world's markets for manufactured goods and thus would create confusion in all the highly industrialized nations of Europe that were dependent upon foreign markets. Wagner was a forerunner of twentieth-century "economic planners." His recommendations were that Germany should sacrifice, if necessary, some part of the immediate economic gains which the "cheap recipe of *laissez faire*" might provide, in order to ensure a greater measure of future economic stability, national security, and peace.

Among the stanch advocates of the so-called manufacturing state

[7] WAGNER, ADOLF, *Agrar- und Industriestaat*, 2d ed., G. Fischer, Jena, 1902. See TAUSSIG, F. W., *Selected Readings in International Trade and Tariff Problems*, Ginn & Company, Boston, 1921, for translated passages.

was one Lujo Brentano.[8] He attributed the transition in Germany from the predominantly agricultural state to the predominantly manufacturing state to operation of the law of diminishing returns. A growing population in Germany, he argued, could be supplied with German-produced foodstuffs only at greater expense than hitherto, whereas manufacturing, being more dependent than agriculture upon large accumulations of man-made capital, could better accommodate a growing population. Brentano was not fearful of the dangers to national security and well-being that might lurk in the path of a predominantly industrial state. Preventive measures, he argued, such as protective labor legislation, housing reform, and other safeguards of personal hygiene, could take care of the physical health of the nation's population. Fears of inadequacy of the supply of foreign-produced foodstuffs he believed to be irrational illusions because the sources of supply would be numerous and diversified. Exclusion of certain German manufactures from foreign markets by tariffs and domestic competition was recognized as a possibility but not one to be seriously concerned about so long as German industrial organization remained mobile and flexible. Brentano did not question the agrarian argument that free trade and external expansion might lead to a ruthless policy resulting in conflicts among nations in the interests of securing markets. But, he queried, should that be a deterrent, now that the German nation, which had been handicapped by political disunity during the parceling out of the world in the nineteenth and earlier centuries, was in position to profit by the political power for which she had yearned for a century? The answer was to the effect that faintheartedness should not deter Germany from taking her place in the sun because "We Germans fear God—and nothing else." Brentano then went on to show that an industrialized nation with a large population and mechanical contrivances was much stronger from a military point of view than a predominantly agrarian state.

The industrialists gained their ends in the agrarian vs. manufacturing state controversy to the extent that agricultural tariffs were not increased, and manufacturing continued its rapid development between 1900 and 1914. Principles embodied in the tariff act of 1902 were exemption of raw materials not produced in Germany and maintenance of moderate protection for agriculture and manufacturing. The 1902 tariff act refused, on the one hand, to sacrifice agriculture by re-

[8] BRENTANO, LUJO, *Die Schrecken des überwiegenden Industriestaats*, Berlin, 1901. See TAUSSIG, *op. cit.*, for translation of selected passages.

moving the agricultural duties and, on the other hand, to build up agriculture at the expense of manufacturing by raising the agricultural tariffs. It was definitely a compromise.

EVALUATION OF ARGUMENTS FOR CUSTOMS TARIFFS

Tariffs for Revenue. Revenue duties are for the primary purpose of providing income to defray state expenses. They represent a particular type of taxation. If the goods subject to an import duty cannot be produced at home or if home production bears a tax comparable with the import duty, revenue tariffs do not discriminate in favor of home industry. The import tariff system that affords a maximum of state revenue is incompatible with a system of import tariffs for the primary purpose of protecting home industry. Maximum protection of home industry is afforded by tariffs high enough to exclude foreign goods. In this case no revenue is collected on imports because there are no imports. Arguments in favor of import tariffs for purposes of raising state revenue involve the whole theory of taxation and public finance. An evaluation of taxation theory will not be attempted in this volume. We may in passing, however, call attention to the fact that income and inheritance taxes have become an increasingly important source of state income during recent decades. Whereas revenue derived from import duties was a principal source of state income in many countries a century ago, today revenue from import duties constitutes a relatively small proportion of the aggregate state income of the great industrial and commercial nations of the world.

Tariffs to Accelerate Introduction of Improved Methods of Production. Superior efficiency of one country over another in a particular branch of production may arise only from having an earlier start. As an industry grows, skill and experience are acquired in it. A country which has this skill and experience yet to acquire, and which in other respects is well suited to a particular industry's development, may find tariff protection to be a convenient means of initiating the industry and of fostering its early growth. Alexander Hamilton, in his *Report on Manufactures,* and Friedrich List, in his *National System of Political Economy,* developed what is commonly known as the "infant-industry argument" for protective tariffs. Basically the idea of these two men was to use tariffs for the purpose of accelerating the development of improved methods of production in industrially backward countries. The subject has been discussed at length in Chap. XVII of the present volume. List's idea was that infant-industry tariffs should be imposed only for a temporary period and that they should

be removed when the protected industries had had ample opportunity to overcome the disadvantage of a late start in the employment of improved methods. The logic of the infant-industry argument is accepted by many free-trade economists: John Stuart Mill[9] and F. W. Taussig,[10] for example. The principal objections to an infant-industry tariff are (1) it is very difficult to know in particular cases which of the potentially low-cost industries will not develop rapidly without protection and (2) infant-industry tariffs once established are very difficult to get rid of. Under protection, weak concerns develop along with strong concerns. Weak concerns that could not exist without protective tariffs oppose tariff removal. Strong concerns that enjoy wide margins of profit because of the tariffs are also opposed to their removal. Many students of the subject take a position that if and when subsidization of infant industries is necessary, a direct subsidy is preferable to an indirect tariff subsidy. Direct subsidization may be preferable to indirect tariff subsidization in a wealthy country with a strong central government and adequate sources of state revenue, while it would be impracticable elsewhere.

Tariffs as a Means of Improving a Country's Terms of Trade. Tariffs have sometimes been advocated as a means of improving a country's terms of trade, *i.e.*, increasing the prices of its exports in relation to the prices of its imports. This would enable a country to buy a larger quantity of foreign goods with its exports than had been possible before the terms of trade were improved. The effect of an import duty upon the terms of trade of the country that imposes it depends upon whether domestic consumers of imported goods or foreign producers of such goods ultimately bear the burden of the tax. This is a question of the incidence of an indirect tax, a question which in most cases cannot be answered unequivocally. It is generally believed, however, that in most cases some or all of the tax is borne by the domestic consumer of the imported product. Under such conditions it is obvious that a tariff could not improve a country's terms of trade. In some cases, no doubt, foreign producers bear all or a large portion of an import tax burden. This is likely to be true if the foreign producer enjoys a monopoly profit from sales of the product taxed. It may be true also if the product is produced under conditions of decreasing costs and the producer has access to no other market that will

[9] MILL, J. S., *Principles of Political Economy,* Ashley ed., p. 922.

[10] TAUSSIG, F. W., *Some Aspects of the Tariff Question,* Chap. II, Harvard University Press, Cambridge, 1915, and *Free Trade, the Tariff and Reciprocity,* pp. 16*ff.*, The Macmillan Company, New York, 1927.

absorb the taxed portion of his output unless prices are reduced by an amount substantially more than the tax. Even in cases where foreign producers bear the full burden of import tariffs on particular commodities, the ultimate effect upon the tariff-imposing country's terms of trade, when all articles of import and export are taken into account, is indeterminate. The fact that the foreign producers bear the burden of the tax may, for example, cause them to purchase less goods from exporters of the tax-imposing country, causing a substantial decline in the prices of such goods and thus reducing the net advantage to the tariff-imposing country. In general a policy of tariff imposition for the purpose of improving terms of trade is extremely hazardous in final effect.

Bargaining Tariffs. Bargaining or retaliatory tariffs are based on the idea that a free-trade country is in a weak bargaining position from the point of view of international tariff adjustments, because it has no concessions to offer. In general, students of tariff history take the position that the country with high tariffs may initiate a general movement toward lower tariffs by reducing its own (as illustrated in the middle of the last century, when Great Britain shifted from a protectionist policy to a free-trade policy) but that a retaliatory raising of tariffs tends to cause tariffs in all countries to be raised.

Tariffs to Equalize Production Costs. The notion underlying *tariffs to equalize production costs* is that of enabling domestic producers to compete on even terms with foreign producers. The theory is to determine money costs of producing a commodity at home and abroad and to adjust tariff rates in such manner as to prevent the foreign good from entering the domestic market for sale at prices less than domestic costs of producing it. The equalization-of-costs conception of tariff making bristles with difficulties. In the first place, costs of producing particular goods at home and abroad are difficult to secure accurately and on a comparable basis. Neither domestic nor foreign concerns give their cost data freely; accounting methods of different firms are frequently dissimilar in important respects; and cost of production calculations for particular items in nearly all cases are subject to arbitrary apportionment of overhead expenses. In the second place, costs of production vary considerably as between different domestic companies. Shall cost figures employed for tariff making be those of low-cost firms, high-cost firms, or firms with intermediate costs? If the last, how are such firms to be selected? Even if accurate costs could be secured, the theory would not work satisfactorily because it is fundamentally unsound. International trade is primarily a result of dif-

ferences in money costs of producing goods at home and abroad.[11] If this difference is equalized by tariffs, international trade will disappear. In spite of these and other difficulties involved in using differences in costs of production as a scientific basis for tariff making, cost data serve a great many practical uses in the expedient construction of tariff schedules. They indicate roughly whether a particular schedule of rates is likely to act as an embargo. They indicate roughly the extent of liquidation that might follow removal of particular tariff schedules, and they suggest the extent to which particular rates and schedules serve to foster monopoly profits. Comparative money-cost-of-production data, such as they are, serve to assist legislators to a more realistic sense of proportions in tariff matters than would prevail in the absence of cost calculations.

Tariffs to Prevent Unemployment and an Undermining of Living Standards. The arguments for tariffs to prevent unemployment and an undermining of living standards may be divided into two groups.

1. There are emergency arguments for tariffs to prevent or diminish the effects of a temporary crisis due to cyclical depression or some such cause as exchange depreciation on the part of a foreign country, or sporadic merchandise dumping[12] on the part of a foreign country. Among the difficulties of employing general tariff measures for emergency purposes are (1) the fact that much of the damage may have occurred before the tariff can be brought into effect and (2) the political difficulty of removing an emergency tariff once it has become effective. The imposition of a tariff to reduce cyclical unemployment does not contribute to a removal of the fundamental causes of maladjustment in world economy. It merely tends to transfer the burden of adjustment from one country to another in so far as it is effective in reducing unemployment in the tariff-imposing country. In view of this fact, imposition of a tariff to reduce unemployment in one country is likely to lead to similar measures in other countries with the result that, in last analysis, no country benefits by the procedure, except possibly for a very short period.

[11] This statement is not in conflict with the idea that marginal money costs of goods in freely trading countries tend toward near equality. The low-cost country may produce a relatively large volume of the goods in question, the high-cost country a relatively small volume, as in the United States-British wheat illustration.

[12] A country dislikes to have goods dumped in its domestic market by foreign producers because of the unsettling effect that the practice has upon domestic business activity. This is particularly true if the dumping is sporadic.

2. There are the arguments for tariffs to prevent a general long-run undermining of wages and living standards in a high-wage country as a result of the competition of low-wage countries. These arguments are refuted by the principle of comparative costs (see Chaps. X and XI of the present volume). However, the principle of comparative costs assumes high degrees of mobility of labor and capital within national boundaries. In point of fact, labor is not highly mobile, and investments in fixed capital equipment are not highly mobile. Because of these facts, there are grounds for maintenance of tariffs already in existence or possibly, in some cases, for the imposition of new tariffs to minimize the confusion incident to transition from one type of industrial structure to another as a result of foreign competition. In such cases, tariffs may serve to ease the transition by prolonging its period. It is very difficult in a democratic state, however, to administer a tariff policy in such a manner as to ease a transition from one type of industrial structure to another without going to extremes of protection designed to prevent the change from occurring.

Tariffs to Shield a National Economy from Disruptive Influences Abroad. No general answer can be given to the question as to whether or not tariffs serve the purpose of shielding a national economy from disruptive influences abroad, thus contributing to an increase in the country's national income. Reasons for lack of a general answer are that circumstances vary from country to country and from time to time and that in any case three unmeasured imponderables are involved: (1) The amount of the gain from free trade and consequent territorial division of labor is unknown. (2) The amount of loss incident to economic instability is not subject to precise measurement. (3) The extent to which tariffs in a particular case might reduce economic instability is an uncertainty. This argument would apply most logically to one-industry countries—Cuba, for example—which have potentialities for the development of other profitable industries. Here the argument is one of industrial diversification, which becomes confused with the Hamilton-List idea of tariffs to accelerate the introduction of improved methods in backward industries. Whether in industrially diversified countries there are greater or less degrees of economic stability incident to protection or nonprotection, short of autarky, is a business-cycle question that has not been answered to the satisfaction of all informed students. The mere fact that countries with protective systems are subject to the ups and downs of the business cycle is no answer to a question that is concerned primarily with causes of cyclical variations.

Tariffs to Stimulate an Inflow of Capital. In recent years the fact that branch foreign plants have been established in countries that have raised their restrictive trade barriers has gained widespread attention. Trade restrictions have been cited as a means of attracting foreign capital to a country. In one sense this phenomenon is nothing more than a shift in a country's *available* (owned and borrowable) means of production from one industry to another. If Italy, for example, is favorably circumstanced from the point of view of enlarging her textile industry and her textile exports, she can borrow capital for that purpose. If instead of enlarging her textile industry she places a tariff on automobiles, thus reducing both imports and exports, the textile industry may not expand so much as it otherwise would expand, and a domestic automobile industry may spring up. The automobile industry may be manned with foreign managers and financed with foreign capital. The initial effect of the tariff may be to increase capital imports. If, as a result, a part of the country's export market for textiles disappears, more or less fixed equipment in the textile industry becomes worthless and useless except as junk.[13] This might nullify the advantage of the capital import.

Tariffs to Foster Industries Deemed Necessary to National Defense. Among the tariff arguments that cannot be evaluated with accuracy against the *maximization of national income* criterion is that for fostering certain industries deemed necessary to national defense. Some industries may appear to be more necessary to national defense than others. Examples are munitions making and production of related chemicals. Tariffs may be levied for the purpose of favoring such industries. The topic is involved and controversial because circumstances of national defense differ from country to country. After

[13] The question of tariffs to stimulate capital imports invariably raises the long-persisting controversy as to whether capital exports do not, in the long run, injure the exporting country. The answer is brief and in three parts: (1) Capital exports to a region of relatively high productive possibilities tend to increase aggregate world production of goods and to enlarge the aggregate world market in which the capital-exporting country shares. If its industrial structure is sufficiently flexible, the capital-exporting country enjoys a gain. (2) If the country that imports the capital in good faith later expropriates it, the country of origin takes a loss. (3) An embargo on capital exports placed by a country whose loans normally exceed its borrowings would tend to reduce the country's aggregate national income and at the same time to divert a larger proportion of the national income to laboring classes. Either rates of return to capital would fall in relation to real wages or the country's savings would shrink or some combination of these two phenomena would occur.

the First World War the United Kingdom applied preferential tariff rates to scientific instruments on the grounds that they were "key-industry" products for which Great Britain had been too dependent upon Germany. The key-industry idea is not a very satisfactory basis for tariff making because almost every industry is more or less essential for national defense. No very clear criteria exist for the selection of industries that are most essential in time of war. Even if a rough-and-ready selection of industries that deserve special assistance on national defense grounds is possible, the question is open as to whether tariff subsidization is the most effective kind of encouragement for them. Possibly direct subsidization through grants-in-aid would serve the desired ends more effectively than indirect tariff subsidization.

Exclusion of Harmful Goods. Nearly every nation excludes certain foreign goods deemed detrimental to its welfare. Diseased livestock and plants, opium and other narcotics, and lascivious literature are examples of goods that are included in this category by some countries. Regulations to exclude undesirable goods may be incorporated in general tariff legislation, or they may be covered by independent and specific acts. In any event, the criterion upon which a judgment for or against such measures is formed is not primarily economic.

CONFUSION OF MOTIVES

Much of the argument and misunderstanding concerning tariff theory and policy arise from a confusion of motives. The primary and fundamental objective of the free-trade argument is maximization of national income in the long run more or less regardless of the division of that income among geographical regions within the nation, among industries, or among population groups[14] within the nation. Some tariff arguments are concerned primarily with maximization of national income, others are concerned primarily with the distribution of the national income whether the aggregate income is greater or less as a result of the imposition of tariffs. Still other tariff arguments are concerned more with noneconomic motives than with economic motives. Motive in some cases is the fundamental difference between free-

[14] The available evidence indicates that free trade, where practiced, has not reduced labor's share of the national income. In so far as free trade has increased the aggregate income, labor has profited by having no less a share of a larger total. This does not mean that certain types of restrictive measures might not enlarge labor's share of the national income—not necessarily so large a national income, however, as might be realized under free-trade conditions.

trade and protectionist points of view and theories. Another difference turns upon the time element. In the agrarian vs. manufacturing state controversy, for example, Wagner argued to the effect that Germany should forego the immediate economic gains of what he believed to be a too-rapid process of industrialization in order to avoid, among other things, the possible necessity of costly rearrangement of the industrial structure of a highly industrialized Germany sometime in the distant future. The merits of the protectionist policy advocated by Wagner cannot be evaluated accurately if the sole criterion is maximization of Germany's national income in the short-run future after 1900. Among the other tariff arguments that turn upon the question of time are those of Hamilton and List and those which advocate tariffs as a means of lessening the difficulties of transition from one state of equilibrium to another.

The real objectives of tariff arguments are sometimes extremely obscure. This statement is particularly true of arguments involving industrial or geographical redistribution of income. No one will contend that tariffs may not in some instances minimize unemployment or increase employment in a particular industry. The free trader's argument is that an increase in employment in one industry, secured by the imposition of tariffs, may result in unemployment in some other industry, with a result that for the country as a whole there is no net increase in employment. Similarly, imposition of a tariff may prevent investment losses in a particular industry as distinct from capital equipment losses for the country as a whole. Growth of foreign competition in a particular industry, or removal of the tariff protection enjoyed by a particular industry, may result in reducing the value of fixed equipment in that industry in particular countries to zero. However, so long as the physical capital remains in use there is no loss of capital equipment to the national economy, but only financial losses to particular investors. The capital continues in use so long as the sales prices of the goods produced exceed cash outlays incident to their production, no account being taken of interest or depreciation charges on the fixed equipment. It is quite natural that investors in a weak industry should organize lobbies for the support of tariffs to forestall personal losses. It is equally clear that their interest is a personal interest as distinct from a general national interest. The interest of the private profit seeker and that of the nation as a whole are not always identical. It is true that, if prices of the products of a particular industry sink low enough, the fixed capital may go out of use and

lie idle. This is a national loss only in so far as it represents misdirection in capital expenditures at some earlier period. The fact that the capital equipment remains unused signifies that it has no value. Disuse of capital equipment that has no value is not a loss from a national point of view. However, the soundness of arguments for tariffs to prevent losses on fixed capital and unemployment in weak industries is complicated by other considerations. One is that certain types of fixed capital which accumulate in an industrial community are public goods that do not enter directly into profit and loss calculations; school buildings, public parks, hospitals, homes, and churches are examples. If wages were completely flexible these things would enter into workers' calculations concerning the desirability of accepting a lower money wage in one locality as an alternative to moving elsewhere in order to secure a higher money wage in a community where public goods were less plentiful. But wages are not completely flexible. Attempts to lower money wages may result in organized opposition more or less regardless of real-wage considerations. Maintenance of tariffs sufficient to keep industries from closing down in old industrial communities during a transition period may therefore prevent real national losses in certain types of public capital. If, after the industries have closed, the workers remain idle in the community, the public capital which still has value may be utilized, but in this case the immobility of labor results in a loss in national manpower. These are some of the reasons why tariffs may serve a useful purpose in prolonging and easing the transition from one type of industrial structure to another.

Inasmuch as there may be many quite different tariff objectives, it is well to define them clearly and to decide which are to serve as yardsticks for evaluating tariff measures. Otherwise there is a danger of wasting time and generating misunderstandings and antagonisms concerning means to quite different assumed ends. If objectives assumed by different persons are not the same, quite naturally the most logical means of achieving the various objectives may differ. Obscure differences, in motives and assumptions, are causes of much of the disagreement concerning tariff questions and, we may add, other economic issues as well. An informed person may accept all the logic of free-trade arguments and still favor protection on grounds other than that of maximizing national income. He may, for example, wish to sacrifice a measure of national income in order to preserve the agricultural classes. Some students of history, politics, and economics hold that the agrarian population forms a loyal and conservative element in the

body politic, an element that should not be destroyed or minimized. Much of the confusion and seeming contradiction and illogic of tariff controversy will disappear if objectives are clearly and frankly stated.

DIFFICULTIES OF REMOVING AN ESTABLISHED TARIFF SYSTEM

Tariff arguments sometimes turn on the question of initiating a tariff system or of strengthening an existing system as distinct from removing a long-established system. The difference is fundamental. The person who would advocate transition from a long-established policy of tariff protection in a highly industrialized nation to a policy of free trade should deduct from his estimates of the gains to be derived from a greater degree of territorial division of labor certain costs of industrial rearrangement. Great industrial centers are populated by many specialized workers, some middle-aged, who cannot break their home ties and change their occupations without extreme personal sacrifice. Such sacrifice is one of the costs of rearrangement incident to extreme tariff reduction in an industrialized country. Other personal and community costs of tariff removal are measured in terms of investments in fixed equipment. An industrial community is provided with an extensive equipment of factories, transportation facilities, banking facilities, communication facilities, water-supply systems, lighting systems, sewerage plants, educational institutions, parks, libraries, hospitals, churches, homes, roads, stores, and storage warehouses. An old industrial community that has come into being behind the shelter of a tariff wall cannot be dismantled quickly or even gradually without loss to capitalists, laborers, professional people, and, in fact, all whose lives are intertwined in a mode of existence that has become institutionalized. In so far as extreme changes in tariff policy cause the dismantling of long-established communities, they impose heavy burdens upon the members of such communities. Furthermore, the dismantled communities are not the only ones to suffer. No industrial region is independent of other parts of a national organism. Railway systems are patterned to serve cities; in fact, all a nation's machinery for merchandise distribution is modeled to fit existing geographical arrangements of cities and towns. The complicated fabric of a modern industrial and commercial country can be rearranged but not without cost—a cost that can be approximated only in the most general terms.

The foregoing considerations are not plausible excuses for raising the walls of a tariff system but, where such walls have long existed,

costs of rearrangement are very practical reasons for long and earnest deliberation prior to radical downward revision of existing tariff schedules.

TARIFF MAKING

Among the strongest arguments against tariffs in general is the fact that, under existing conditions of national autonomy, tariff systems in democratic states tend to become a hodgepodge of expediency measures and favors to special groups who are in position to exert undue political pressure. The practical difficulty of securing, in a democratic state, tariff legislation that conforms with majority interests and of administering such legislation in a statesmanlike manner are familiar to all who have followed the course of tariff hearings in the United States Congress, or the parliamentary debates on tariff issues in England. Interests that pertain to income sources of voters are likely to be more unified than voter interests that pertain to personal consumption. Political pressure is brought to bear upon tariff-making bodies, customarily the legislative branch of a government, by vociferous groups who have special interests and desire special favors, whereas the great body of ultimate consumers, whose interests are widely scattered, tend to be relatively inarticulate in tariff matters. Only where the consumers of a product are large industrial concerns is consumer opposition to an advance in rates likely to be made effective.

The manner in which a tariff law in a democratic nation becomes a hodgepodge of concessions to pressure groups may be illustrated by tariff-making procedure in the United States. In this country a tariff act originates with the Committee on Ways and Means of the House of Representatives. A long series of hearings is held. Every interested group is permitted to send representatives to plead its cause and submit briefs. Naturally, those groups who stand to gain or lose most by a change in rates are most willing to incur expense in the making of a strong case. Before the tariff bill goes to the floor of the House for a final vote, House members from various sections of the nation attempt to compromise their differences and gain their individual ends by sacrificing lesser interests, measured in potential numbers of votes at the next election. Sometimes one representative can attain his ends by agreeing to vote in a manner favorable to other representatives in exchange for their favorable votes on his major issue. A representative from Montana, a representative from Massachusetts, and a representative from Louisiana may, for example, agree to vote for increases in rates on copper, cotton manufactures, and sugar. The Massachusetts representative may be opposed to increases in rates on copper and

sugar but must get his cotton-goods tariff at all costs if he is not to be defeated at the next election. This kind of procedure is sometimes referred to as "logrolling." A separate tariff bill originates in the Finance Committee of the Senate. Senate hearings are held and senatorial logrolling proceeds until a Senate bill is passed on the floor. The House and Senate bills then go to a Conference Committee composed of members of both House and Senate. By a process of further compromising a joint bill finally passes both House and Senate and is ready for the President's signature. If he should veto the bill, it must go back to Congress and pass both House and Senate by a two-thirds majority vote, or still more compromising is likely to follow. When political parties change, the complexion of Congress also tends to change. Inasmuch as parties to some extent split on geographical lines, tariff making becomes a tug of war between sectional and industrial groups each seeking its own self-interest. The larger welfare of the nation as an integral unit is likely to be lost from sight in the scuffle.

What is true in respect to weaknesses of tariff making and tariff administration in the United States is also true in greater or less degrees in other democratic nations, like France and Great Britain. Even dictators of the Russian type are by no means free of the influence of pressure groups in the formulation and administration of tariff policies. Although planned ends and aims may be more consistently pursued, the effects of tariff policies in dictatorially ruled nations may be even less to the interest of majority groups than those in democratic nations. In short, modern tariff procedure appears to be influenced more by self-interests of minority groups than by conceptions of the long-time interests of national majorities. In tariff making, the abstract ideal, "greatest good for the greatest numbers of people in the nation," is likely to be a lost cause, and the possibility of harmful effects of tariffs upon foreign countries is likely to be given little or no consideration.

CHAPTER XIX

TRADE RESTRICTIONS BETWEEN THE FIRST AND SECOND WORLD WARS

The customs tariff is not the only device employed to manipulate economic transactions between countries. Customs tariffs were reinforced with a variety of other protective devices between the First and Second World Wars. During this period economic nationalism was carried to extremes. In attempts to protect domestic economies from the shocks of postwar change and the ravages of world-wide depression many countries resorted to drastic expediencies. Types of expediency measures resorted to in different countries were products of stresses and strains peculiar to the imposing country. In general these measures may be classified as follows: (1) currency depreciation, (2) foreign exchange controls, and (3) manipulation of merchandise movements by the use of import tariffs, import and export quotas, and subsidies.

GREAT BRITAIN

During the interwar period Great Britain made use of all the foregoing devices in mild form and to a limited extent. Customs tariff measures imposed by her during the First World War to raise revenue, to check expenditures on luxury articles, to save shipping space, and for other emergency reasons, became distinctly protective after the war and definitely preferential in favor of Commonwealth Nations. In addition, other trade regulatory measures were employed. A price-equalizing subsidy for British coal exports was introduced after cartelization of the British coal mining industry in 1930. A sugar act provided bounties for British manufacturers who processed home-grown beets. Home-grown wheat was also subsidized. Import quotas were placed on meat, dairy products, and a number of other foodstuffs. Foreign exchange restrictions were put into effect in Great Britain in 1931 and 1932 to counteract flights of capital; a number of exchange clearing agreements were entered into by the British in the 1930's and, as already explained,[1] the pound sterling was divorced

[1] Chapter XIV of the present volume.

from gold in 1931. All these measures acted in the direction of protecting Britain's domestic economy.

In addition the United Kingdom participated with the Dominions of the British Empire, beginning in 1932, in an Empire preference system, which was initiated by the Ottawa agreements.[2] The purpose of the Ottawa agreements as expressed in the resolutions of the conference was extension of the mutual trade of the nations of the British Commonwealth by means of reciprocal preferential tariffs. The conclusion of the agreements was regarded by the conference (as expressed in its resolutions) as being a step which in the future should lead to further progress in the same direction and to the utilization of protective duties for the purpose of ensuring development of the resources and industries of the Empire on sound economic lines. Each commonwealth government was left to determine its particular policy in dealing with intercommonwealth preferences and most-favored-nation clauses in commercial treaties with foreign powers, but it was generally understood that treaty obligations would be so adjusted as to avoid interference with mutual preferences that governments of the Commonwealth might decide to accord to each other. In the opinion of the conference the object of industrial and commercial cooperation among the Commonwealth of Nations, should be, not to arrest industrialization of the less industrialized regions, but to direct and facilitate its course, thus to secure the best division of industrial activities among the several parts of the Commonwealth and the ordered economic development of each part.

Having arrived at statements of Empire policy in general terms such as those indicated in the foregoing paragraph, the United Kingdom proceeded to draw up agreements with Canada, Australia, New Zealand, Union of South Africa, Newfoundland, India, and Southern Rhodesia. Certain provisions of the agreement with Canada are suggestive of the general tenor of negotiations between the United Kingdom and the Dominions. The United Kingdom-Canadian agreement called, on the one hand, for entrance into the United Kingdom, duty free (subject to certain provisions), of goods consigned from any part of the British Empire and grown, produced, or manufactured in Canada, and maintenance of tariffs against such goods coming from foreign countries. The agreement called, on the other hand, for elimination or reduction of customs duties on a long list of goods (particularly manu-

[2] *Imperial Economic Conference at Ottawa, 1932,* Summary of Proceedings and Copies of Trade Agreements, His Majesty's Stationery Office, London, 1932.

factures) moving from the United Kingdom to Canada, maintenance of a minimum preferential in favor of United Kingdom goods, and Canadian protection against United Kingdom goods, only if the industries represented were reasonably assured of sound opportunities for success in Canada. The general purpose of the various agreements appears to have been freer trade among the countries of the British Empire, and maintenance of existing or higher schedules of customs duties against goods originating in countries foreign to the Empire. The imperial preference feature of Great Britain's interwar tariff policy may prove to be very important, both economically and politically, in future international relations, because it points rather toward a unification of the Empire than toward hasty dissolution of it. One is inclined at this point to recall the Hamilton-List philosophy of internal free trade and external protection for the double purpose of fostering political solidarity and accelerating industrialization. A basic dissimilarity between the British Empire policy and the Hamilton-List philosophy would seem to turn on the latter objective, *viz.*, rapid industrialization. It is difficult to read into the Ottawa Agreements Act a major objective in the way of more rapid industrialization of the British Empire to overcome disadvantages resulting from a general backwardness of the whole Empire area in adopting revolutionary improvements in industrial technique, already acquired by competitors. However, the idea of political and economic solidarity for purposes of preserving Empire or national unity (as the case may be) is a basic feature of the Hamilton-List doctrine and an important feature of the British Empire policy as evidenced by the Ottawa agreements.

Neoclassical British economists who examined economic conditions in the United Kingdom in the 1930's held that little could be gained and much might be lost by resort to protective measures.[3] The argument followed lines of doctrine developed by Ricardo, Mill, and Marshall.[4] It held that the pertinent facts, although different from those of the middle nineteenth century when free trade was adopted as the British policy, did not justify reversion to a protective system. Conditions relevant to tariff policy in Great Britain were recognized to be different from those which prevailed in the nineteenth century in at least four fundamental respects:

1. Great Britain no longer was believed to be in a semimonopolistic

[3] For a nontechnical treatment of the subject see Sir William Beveridge, *et al.*, *Tariffs: The Case Examined,* Longmans, Green & Co., Inc., London, 1932. See also recent works of A. C. Pigou and T. E. Gregory.

[4] Alfred Marshall, 1842–1924.

position in the sale of manufactures in world markets. Other nations had come abreast of the British in the employment of power machinery.

2. Economic nationalism was believed to be crowding British goods out of some of the most profitable foreign markets.

3. State interference with business freedom in the British Isles, growth of large-scale management organizations, and spread of a labor movement were believed to have introduced greater degrees of rigidity into British economy than were present when the laissez-faire system was in the heyday of its best achievements.

4. Extreme instability in monetary systems all over the world was cited. This question was raised: May not these facts justify reversion to a protective policy in Great Britain? The majority of English neoclassical economists said "No." Having reexamined the doctrines of Adam Smith, Ricardo, Mill, and Marshall they pronounced the doctrines sound and applicable, in many of their essential features, to twentieth-century circumstances in Great Britain.

The British economists argued as follows. Great Britain was more densely populated than any other nation with an equally high average income. Self-sufficiency, even if possible, would undermine the foundations upon which the nation's greatness was built, *viz.*, the exchange of English coal and English ingenuity, embodied in manufactured goods, for foodstuffs and fabricating materials. If national prosperity could not be maintained under this system—to which the industrial life of the nation was geared—per capita prosperity must inevitably recede or population decline. The neoclassicists subjected the arguments put forth in favor of trade restrictions to the rigorous logic of their close-knit system of economic doctrines and found the arguments unsound.

1. One argument was to the effect that protection would reduce unemployment incident to the decline of old and weak industries. During a period of liquidation of old industries that have dropped below the comparative cost line, protective tariffs, said the neoclassicists, may increase employment in certain industries that produce goods for domestic consumption. But restriction of imports will increase the loss in weak-industry exports. There is no assurance that the tariff-induced increase in employment in import industries will any more than compensate for additional tariff-induced unemployment in export industries. Furthermore, the effects of trade-restrictive measures cannot be anticipated with sufficient accuracy to justify their use in attempts to facilitate planned withdrawals of labor from weak industries.

The new workers employed in protected industries may be fewer in numbers and different in personnel from those discharged from export industries. Last but not least, the neoclassicists called attention to the fact that emergency duties are difficult to get rid of; they tend to accumulate and become an enduring shelter for vested interests.

2. A second argument for protection as an instrument for increasing national and international economic stability was concerned primarily with considerations of monetary instability. In Great Britain's case, wage rigidities and other rigidities in the economic system prevented sufficiently rapid deflation and liquidation to permit the country to remain on the gold standard, after the pound sterling had been tied to gold in 1925 at its prewar gold value. Although the pound was still on a gold basis, advocates of protection stressed a need for regulating Great Britain's merchandise trade balance in order to prevent gold from being drained from the country in such amounts as to force a departure from the gold standard. The neoclassicists recognized the validity of this argument for protection prior to divorcement of the pound from gold but not afterward.

3. A third reason advanced by protectionists for extending Great Britain's system of trade restrictions was the need of fostering key industries that were believed to be essential to national defense. The neoclassical economists presented two opposing arguments: (1) They took the position that, if particular key industries needed to be subsidized for purposes of national defense, the most effective and least costly means of achieving the desired end was through direct subsidization in place of indirect subsidization. (2) All industries were cited as being necessary to national defense in a modern war. Great Britain, they argued, could not strengthen her position in all directions through the instrumentality of trade restriction, because protection for all industries would tend to reduce national productivity in the aggregate.

4. Tariffs to foster mass-production economies was a fourth argument presented for British protection. John Stuart Mill and many neoclassical economists had granted a certain degree of validity to List's doctrine of scientific protectionism for the promotion of new industries in industrially young nations. Great Britain, however, was not industrially young. She had long been an exporter of capital to industrially backward regions. If, argued the neoclassicists, there are opportunities for mass-production economies in Great Britain, which British industrialists had been too decadent to see, more effective business leadership and not protection was the need. Protection, in an industrially mature nation, tends to perpetuate the inefficiencies

of extreme conservatism; it does not contribute to the development of those qualities of initiative, courage, and business leadership necessary for success in highly competitive markets. Furthermore, if subsidization were necessary to initiate mass-production economies, direct subsidization was believed to be better for this purpose than indirect subsidization through the instrumentality of protective tariffs.

5. A fifth argument for protection proposed that duties be used as bargaining weapons with which to beat down trade restrictions imposed by foreign countries. The neoclassical economists took the position that retaliatory measures were more likely to cause a general increase in trade restrictions throughout the world than a reduction in the number and severity of trade restrictions abroad. Furthermore, they held that all the advantages which a policy of free trade possessed over one of protection did not depend upon its being reciprocal.

6. A sixth argument suggested that protective measures be used to minimize the evils of dumping. The neoclassical economists argued to the effect that a permanent protective tariff system would not prevent sporadic dumping and that the harm resulting from such dumping was done before specific preventive tariff legislation and machinery could be brought into action. Systematic, monopoly dumping and state-aided dumping could best be dealt with, they thought, through the instrumentalities of international conventions.

7. A seventh argument for British trade restriction was to the effect that protection was necessary to a system of imperial preferences for promotion of Empire self-sufficiency and Empire free trade. The neoclassical economists did not believe that Empire free trade was a practical objective inasmuch as all the Dominions had protective tariff systems and inasmuch as the tendency was to build up these systems, rather than to tear them down. Without substantial reduction in the number and severity of the trade restrictions that guarded Dominion home markets against manufactures, the United Kingdom, they thought, stood to lose more by a policy of Empire preference than she could reasonably hope to gain from it. The loss in question was believed to be of two kinds: (1) Any system of Empire preference that was beneficial to the Dominions would increase costs of foodstuffs and fabricating materials imported by the United Kingdom. (2) Tariffs against foodstuffs and fabricating materials coming from non-Empire countries would reduce exports of British manufactures to those countries. The loss in exports of manufactured goods to non-Empire countries could not be offset by increased exports of manufactures to the Dominions unless they substantially reduced their

trade barriers. The neoclassical economists believed that removal of Dominion restrictions against United Kingdom manufactures was not politically feasible.

8. Need of additional state revenues was an eighth reason advanced by politically minded Britons in favor of protection. The neoclassical answer was brief and concise. Great Britain had had tariffs for revenue for a long time. A tariff that is effectively protective is not one that yields a maximum of revenue, because, to be protective, it must exclude some portion of goods that would be imported under a less restrictive system. This conclusion did not necessarily imply that some modification of existing rates and schedules might not augment existing tariff revenues. It merely implied that, generally, protective tariff legislation did not maximize import tariff revenues.

9. The ninth claim put forth by British protectionists was to the effect that duties shielded domestic workers from low-wage competition of foreign countries. The neoclassicists stated that this argument need not be analyzed because its analysis was an exposition of the principle of comparative costs, a principle that had been expounded at length in British economic literature.

It was difficult, if not impossible, to punch holes in the logic of the argument for continuation of Great Britain's free-trade policy in the 1930's; it is equally difficult at present. Protective legislation, however, is not always guided by economic logic. Many of the virtues of a free-trade policy are long-run virtues; whereas immediate discontent on the part of large bodies of voters may be the controlling influence in legislative halls. Possibly it was the realization of this fact that led some eminent British economists to break away from classical canons during the 1930's.[5]

GERMANY

German economy was in a state of confusion after the First World War to which hyperinflation in the early 1920's contributed. In 1923 the mark was temporarily stabilized[6] and in 1924 came the Dawes plan. Huge foreign loans were made to Germany during the period 1924–1929. These loans augmented her foreign debt, postponed solution of the transfer problem inherent in the rising volume of debt service payments to which the country was committed, and stimulated

[5] J. M. Keynes was an outstanding example.

[6] The mark was temporarily stabilized in 1923 by a process of retiring the old currency at a near-zero value and introducing a new rentenmark currency. See Chap. XIV of the present volume.

rationalization[7] of the mining-manufacturing system. By the time foreign lending to Germany had begun to dry up in the late 1920's, the country's mining-manufacturing system had been reequipped for efficient production of manufactures for foreign markets that did not exist. A result of this situation was debt default by Germany and an attempt to reorient her recently *rationalized* industrial and commercial superstructure in the direction of national self-sufficiency. These developments were accelerated by a financial panic in Germany in 1931 and the introduction of protective foreign exchange controls.

Restrictive foreign exchange controls consist of limitations imposed by governmental decree upon private purchase and sale of foreign currencies. A government may thus regulate the foreign transactions of its citizens because purchase and sale of exchange are necessary to all foreign transactions that are negotiated with money or bank credit. An example of foreign exchange restriction is the prevention of withdrawals of bank balances held by residents of foreign countries. The restriction may take the form of a transfer prohibition affecting specific accounts, or it may develop into a system of "blocked" exchanges. A blocked exchange system permits or requires domestic debtors to make payments on foreign obligations with domestic currency into "blocked" accounts. These blocked accounts cannot be taken out of the country without a government permit. The debtor has legally discharged his foreign obligation by paying domestic currency to a domestic bank. The creditor has the problem of getting blocked funds out of the debtor's country. If exchange losses occur, the creditor bears them. Blocked exchanges logically give rise to exchange clearing agreements. Such agreements provide that each participating country shall require its importers and other debtors on foreign account to make payments into blocked funds. All withdrawals from these funds must cancel counterclaims against the other party to the clearing agreement. The fixing of the exchange rate that prevails under a system of exchange clearing is determined by a formula specified in the agreement. Under such a system a country can ensure that its merchandise exports are balanced by merchandise imports or that part of the foreign exchange arising from merchandise exports is used for the discharge of specified nonmerchandise obligations.

Germany made extensive use of foreign exchange controls during the 1930's. At the time of the financial crisis in 1931 outstanding short-

[7] By "rationalization" is meant a retooling and reorganization for more efficient operation.

and medium-term loans to Germany aggregated billions of reichsmarks. In addition long-term capital loans on which Germany was obligated for annual service charges ran into the billions of reichsmarks.[8] These obligations constituted a potential menace to German exchange inasmuch as foreign creditors, in the face of uncertainty, would be anxious to dispose of their holdings and get the proceeds out of Germany. When the German banks were reopened after the panic that came with the closing of the Darmstädter- und Nationalbank in July, 1931, withdrawals of foreign deposits were prohibited. A foreign exchange embargo was thus put into effect.

As time passed, arrangements were made to permit a limited volume of foreign transactions. Standstill agreements affecting short- and medium-term credits were negotiated; limited amounts of exchange were allotted for imports, and provisions were made concerning recurrent payments arising out of long-term investments. In general, claims to blocked credits might be transferred from person to person outside of Germany or used for the purchase of securities in Germany or for the purchase of German goods to be consumed in the country. The amount of funds that might be transferred from Germany to some other country, even at great discount, was rigidly limited. A large proportion of exports was reserved for the purchase of imports. Estimates indicate that in 1935 four-fifths of Germany's exports involved exchange clearing agreements or barter transactions of one kind or another. Some 30 to 40 exchange clearing agreements had come into effect by 1935. They applied to countries that customarily bought more from Germany than they sold to her—particularly European countries and certain South American countries. The importers of a country involved in a clearing agreement paid for German imports into a domestic pool. Exporters in turn drew their remittances from the pool. Balances remaining in the pool were applied to service charges on German debt to the country in question. It was to Germany's interest so to regulate her foreign trade, geographically, as to minimize the size of these exchange clearance balances.

Countries that customarily sold more goods to Germany than they bought from her were in a less favorable position than the clearing-agreement countries. Much of the trade between Germany and countries that customarily sold more to her than they bought from her was put on a barter basis to avoid accumulation of additional uncol-

[8] HARRIS, C. R. S., *Germany's Foreign Indebtedness*, pp. 17, 18, Oxford University Press, New York, 1935.

lectible balances in Germany. In one type of barter transaction the German importer placed a sum of marks in a German bank to the credit of the foreign exporter. The foreign exporter could use these marks in the purchase of German goods for import to his country. Another type of barter transaction permitted the foreign exporter to Germany to sell the marks to another party in his country who, in turn, could purchase German goods for import into the country in question. In either case the values of import and export transactions were balanced. Triangular trade involving goods originating in a third country ordinarily was not permitted under the barter agreement.

Inasmuch as an active trade balance was Germany's principal means of making payments on her foreign debt, a balancing of her merchandise trade with every country, individually, tended to put her in a strong bargaining position from the point of view of writing down or canceling foreign debts. This kind of policy, shrewdly administered, gave Germany command over necessary foreign raw materials, in the 1930's, without necessitating dependence upon foreign creditors for such goods. This policy quite logically was accompanied by a control of imports designed to favor commodities deemed most necessary to the national economy.[9] The policy was accompanied also by export subsidy payments to facilitate maintenance of the necessary minimum of merchandise imports.

FRANCE

Unlike Germany, France was a creditor nation after the First World War. Nevertheless, France had payments balance problems and foreign exchange problems. League of Nations estimates indicate that French imports of goods in 1933, for example, amounted to 9,000 million francs more than her exports. Of this total, 4,300 million francs' worth of merchandise imports were paid for with services—shipping,

[9] Lists were issued, designating goods that might not be exported and other goods that might not be imported under a system of *aski* or barter transactions applying to countries that sold Germany more goods than they bought from her.

Exportation of goods deemed most essential to the German national economy was prohibited. Importation of goods deemed most essential to Germany's national economy was encouraged; importation of other goods was either prohibited or discouraged. Among the devices for discouraging the importation of the less essential types of goods was a requirement that barter transactions involving importation of such goods must be on a 3 to 1 basis; *i.e.*, the foreigner must purchase 3 marks' worth of German goods for each mark's worth of goods that he sold to Germany, the additional 2 marks' worth of German goods to be paid for with foreign exchange which Germany might use in the purchase of necessities.

banking, and communication services, entertainment of tourists, etc. Net interest and dividends owed by foreigners to Frenchmen canceled another 1,750 million of the 9,000 million francs owed on net imports. The balance was 2,950 million francs (9,000 less 4,300 less 1,750). A net balance of 2,000 million francs in gold was sent to foreign countries in 1933; this left an unpaid balance of 950 million francs' worth of merchandise imports. Presumably payment was made by the transfer of French-owned securities to foreigners.[10]

The orthodox solution to this kind of payments balance difficulty is a reduction of domestic costs and prices sufficient to increase merchandise exports and reduce merchandise imports. An alternative to internal cost and price reductions is some kind of expediency trade-restrictive measure. One type of temporary solution to such a problem is divorcement of the country's currency from its gold base. This was the policy followed by Great Britain in 1931. Another type of expediency measure that may be resorted to in such a situation is restriction of merchandise imports by the use of customs tariffs, import quotas or foreign exchange controls, and the subsidization of merchandise exports. France and other gold-bloc countries [11] attempted to buttress their currencies against the effects of unfavorable payments balances by placing tariff and quota restrictions against merchandise imports.[12]

After 1930 the trend of French tariff policy was in the direction of greater protection. The protective tariff system of France was supplemented by import quotas in 1931 and subsequent years. The quota system [13] was first put into action in France by decree of the Ministry of Agriculture, May 5, 1931. The decree in question required importers to secure licenses for fertilizers. On July 10, 1931, a similar practice was applied to coal imports. In these instances, no

[10] SOURCE: League of Nations, *Balance of Payments, 1933,* pp. 82*ff.*, Geneva, 1934.

[11] As originally constituted after the failure of the London Economic Conference in 1933, the gold bloc had five members: France, Italy, Holland, Switzerland, and Belgium, with a somewhat uncertain adhesion of Poland. These countries maintained gold-standard monetary systems. See Chap. XIV of the present volume.

[12] All told some 30 or more countries established quota systems to restrict imports between 1931 and 1939. This device was not confined to gold-bloc countries.

[13] For a discussion of French quotas, see F. A. Haight, *French Import Quotas; A New Instrument of Commercial Policy,* P. S. King & Staples, Ltd., London, 1935.

announcement was made as to the total volume of goods to be admitted. The first quota regulation fixing a definite quantity of imports appeared July 17, 1931. It limited imports of flax to 50,000 metric tons for a period of one year. By the end of 1931, import quotas had been placed on dairy produce, cheese, butter, sugar, meal, wine, fish, cattle, wood, and a number of other commodities. The quota system started with agricultural commodities that were not subject to treaty agreements to the same extent as manufactured goods but soon spread to manufactures. In the 10 months following July, 1931, 61 decrees providing for quota restrictions were handed down. They covered more than 1,100 items of the tariff schedule, or about one-seventh of the entire schedule. The list of articles subjected to quota continued to increase. In 1936 it comprised more than 3,000 items.

Import quotas may be unilateral (imposed by an importing country without consultation with exporting countries) or they may take the form of bilateral agreements or treaties.[14] Bilateral quotas provide for negotiations with the foreign governments or private foreign interests affected, before the quota system is established. An advantage of this type of quota is that exporters may be induced to take responsibility for not exceeding their allotments.

From the point of view of the origins of goods, import quotas are of various kinds. The globular quota applies to all countries alike. Under the globular system, anyone may import and any country may send any amount of the goods affected until the quota is filled. Another type of quota allots fixed amounts of imports to various exporting countries in accordance with trade statistics of previous years. A third type of quota system involves import licenses. Under this system, imports are prorated both to exporting countries and to domestic importing firms on a basis of statistics of previous trade. All the foregoing types of quotas were put into use in France during the 1930's.

During this period, France resorted to the use of clearing agreements also. Such agreements were made with a number of countries.[15] Inasmuch as the agreements tended to direct or to suspend transfers of foreign exchange, they served to direct or to suspend merchandise trade and thus became an integral part of the system employed by the French government for controlling the country's export-import trade.

[14] Multilateral agreements or treaties may also have quota provisions.

[15] Bulgaria, Chile, Ecuador, Estonia, Germany, Greece, Hungary, Latvia, Rumania, Turkey, and Yugoslavia.

RUSSIA

Systems of foreign exchange control were important parts of the foreign trade policies of capitalist countries during the interwar period. Foreign exchange control likewise was an important element in the foreign trade policy of the U.S.S.R.[16] In the U.S.S.R., foreign trade is a state monopoly, which is not limited to merchandise transactions; it applies to all pecuniary transactions between the U.S.S.R. and citizens of other countries. State officials arbitrarily determine what the external purchasing power of the ruble shall be by defining a ruble for external transactions as equivalent to so much gold. This action does not affect internal prices because gold is not a free-market good in the U.S.S.R., and paper rubles for internal use are not freely convertible into gold. When U.S.S.R. officials decide that certain goods should be exported, gold prices of the goods are adjusted until they move into export trade. The internal economy of the U.S.S.R. is not paralyzed in consequence of extremely low prices for export goods because its operation is not governed by profit margins as is the case of capitalist economies. In short, the value of the ruble for external transactions is fixed by giving it an arbitrary gold value for external uses. The amounts and kinds of goods to be exported are determined by a planning board on a statistical basis. These goods, in predetermined amounts, are moved into export channels by arbitrarily adjusting their prices in such manner as to make them attractive to foreign buyers. The aggregate gold value of imports of goods and services is limited by the aggregate gold value of exports of goods and services unless the country borrows abroad. The classes of goods imported are determined by state officials, as are the classes of goods to be exported.

All the available information on the subject points to the conclusion that a primary goal of the governing authorities of the Soviet Union has been rapid industrialization. Brutzkus,[17] a critic of Soviet planned economy, wrote as follows:

> In Russia we see the grafting on to the economic system of a large scale heavy industry. . . . Russia is a great continental country. It was an agricultural country.

[16] See HUBBARD, L. E., *Soviet Money and Finance*, Macmillan & Co., Ltd., London, 1936.

[17] BRUTZKUS, BORIS, *Economic Planning in Soviet Russia*, p. 313, George Routledge & Sons, Ltd., London, 1935.

Mikhaylov,[18] an enthusiastic advocate of the Soviet system, wrote as follows:

Industrial centers of world-wide importance have sprung up in the deserts of yesterday. . . . The mighty processes of harnessing the natural forces have begun. . . . As a result of the active pursuance of the policy of industrialization under Stalin's leadership, the U.S.S.R. from being an agricultural country, has become an industrial and economically independent country. In order to reach this goal the Communist Party had to overcome great difficulties not the least of which was the introduction into the country of technique which had never been known before.

Hoover,[19] an American observer, had the following to say:

The Soviet Union is importing large-scale machinery from abroad and at the same time is importing technical aid in the form of foreign engineers who are skilled in the installation and utilization of this machinery. The Soviet Union, which has lagged behind the Western world in industrial development, is therefore able to obtain a very large percentage increase (in production) due to the opportunity of profiting by machinery and technique developed in capitalist countries.

Haensel,[20] formerly professor in the University of Moscow, expressed his idea of Soviet policy pertaining to industrialization as follows:

The watchword of the Soviet Government is *maximum industrialization* of the country.

This theme *industrialization* runs through much of the economic literature of and about the U.S.S.R. The details of foreign trading policy measures instituted by Soviet governing authority for the purpose of accelerating the process of industrialization have not been analyzed and explained. However, the few generalizations that are readily available from current sources of information suggest that trade-restrictive measures were employed in the U.S.S.R., much as trade-restrictive measures of one kind or another were employed at earlier dates to accelerate the process of industrialization in the United States and Germany.

In spite of the centralized control of her foreign trade, the U.S.S.R.

[18] MIKHAYLOV, N., *Soviet Geography*, p. 49, Methuen & Co., Ltd., London, 1935. By permission of the publisher.

[19] HOOVER, CALVIN B., *The Economic Life of Soviet Russia*, p. 45, The Macmillan Company, New York, 1931. By permission of the publisher.

[20] HAENSEL, PAUL, *The Economic Policy of Soviet Russia*, p. 83, P. S. King & Staples, Ltd., London, 1930.

is not free from protective tariffs and other trade-restrictive devices common to capitalist countries. One might ask why tariffs are necessary if the state controls all foreign trade. It has been suggested that tariffs are necessary to control goods being brought to the country in private luggage and coming as gifts, and for the purpose of making purchases of foreign goods less attractive to persons charged with the responsibility of operating state enterprises. The interests of an operator of an individual enterprise and those of the central authorities, who are thinking in terms of the whole national economy, are not, apparently, always the same. In short, import tariffs, prohibitions on the export of U.S.S.R. currency, allotments of exchange quotas to socialized enterprises, allotments of purchase licenses, and other trade-restrictive devices found in capitalistic nations are employed in the U.S.S.R. for the purpose of facilitating the administration of the state-controlled foreign trade monopoly.

Officials charged with administration of the Soviet Union's foreign trade monopoly estimate the value of prospective exports, and the amount of imports is regulated accordingly. During the interwar period import preference appears to have been given to machinery and equipment, particularly for state industry. On the export side, the policy appears to have been to maximize sales abroad as much as was consistent with centralized planning for rapid industrialization. In general, the trade-restrictive system of the Soviet has been used to facilitate the process of industrialization of a country rich in natural resources, sparsely populated, and backward industrially.[21]

CONCLUSIONS

Many countries made use of foreign exchange controls, export and import quotas, and industry or product subsidies during the interwar

[21] "In the autumn of 1927, . . . Stalin pointed out, that for the workers, the abolition of the monopoly of foreign trade would mean a refusal to industrialize the country, to build new factories and plants and to enlarge the old ones. That would mean an inundation of the U.S.S.R. with goods from capitalist countries, a decrease in industry because of its relative weakness, an increase of unemployment, a decline in the standard of living of the masses, a weakening of the economic and political position. . . .

"The Soviet Union has adopted the policy of strictly limiting the import of consumers' goods and increasing the import of machines and raw materials. In the course of the building up of the first Five-Year Plan, imports to the U.S.S.R. were entirely subjected to the requirements of the construction going on in the country; the main article of import was equipment for the newly built factories." YANSON, J. D., *Foreign Trade in the U.S.S.R.*, pp. 24, 26, Victor Gollancz, Ltd., London, 1934. By permission of Victor Gollancz.

period, in addition to extension of protective customs tariff systems. An unchanging system of import tariffs may reduce the degree of international specialization in production and may restrict the volume of international trade. Such a system is not so conducive to accumulation of competitive protection, however, as were the exchange controls, merchandise quotas, subsidies, and other devices employed to direct and restrict international trade during the 1930's. The drift toward economic nationalism in the 1930's and the circumstances associated with this development gave rise to a clamour on the part of some nations for additional territorial possessions. An industrial nation needs coal, petroleum, iron, copper, alloy metals, cotton, wool, rubber, wood, foodstuffs, and a great many other raw materials. No modern nation is self-sufficient in raw materials. With the existing state of technological development no nation can be self-sufficient in raw materials necessary to highly efficient operation of all lines of modern industry unless it controls the greater part of the earth's surface. Prior to the Second World War the aggregate production of raw materials in all the colonial possessions of Great Britain, France, Belgium, Netherlands, Japan, Italy, Portugal, and Spain (mandates included) was sufficient to supply but a small proportion of the raw-material needs of a modern industrial nation. The colonies in question produced less than 1 per cent of the world's annual output of coal, 3½ per cent of the iron ore, 2½ per cent of the cotton, less than 4 per cent of the petroleum, only 2½ per cent of the wool, and about 6 or 7 per cent of the gold.[22] The U.S.S.R. and the United States are the two countries most nearly self-sufficient in raw materials. Both are dependent upon outside sources of supply for many commodities which either cannot be produced domestically or which can be produced elsewhere much more cheaply. Access to markets all over the world gives access to raw materials and makes possible sale of home-produced goods for foreign exchange required for the purchase of foreign raw materials. Trade-restrictive practices of the types characteristic of the 1930's tend to cut nations off from supplies of sorely needed, foreign raw materials, to reduce the quantum of world production of goods, to create international antagonisms, and to "add fuel to fires" that contribute to disruption of world peace.

[22] Royal Institute of International Affairs, "Raw Materials and Colonies," *Information Department Papers 18*, London, 1936.

CHAPTER XX

INTERNATIONAL CARTELS

A type of trade restriction which had an important impact upon world economy in the interwar period and which is likely to be among the serious impediments to competitive self-stabilization in years ahead is the international cartel. An international cartel may be defined in general terms as an arrangement between business organizations of two or more nations for the purpose of regulating competition in the production and sale of an international commodity or a related group of international goods. International cartels are sometimes formed with government participation. If cartel organizations should be extended as a result of interwar and wartime experience, a large part of world trade might be removed permanently from direct effects of competitive regulation. This possibility is one of the reasons for the increasing importance of the subject. Cartels are not in exactly the same category as customs tariffs, foreign exchange controls, and similar trade restrictions that follow political boundaries. Cartels attempt to regulate the volume of world production of particular goods, to allocate markets for these goods, and to promote international trade in them within a monopolistic framework of price control. A cartel is likely to be more concerned with regularization of production of a particular kind of goods in all producing countries and with allocation of the output in such a manner as to stabilize price than it is with sheltering producers in a particular political area from outside competition.

One important kind of international cartel, the commodity agreement cartel, has grown out of conditions of serious unbalance in raw-materials markets. Formation of the rubber cartel in the 1920's, for example, grew out of a situation where more crude rubber could be produced than could be absorbed in the world market at prices that producers considered "fair." British rubber producers exercised sufficient political influence to secure government assistance in the establishment of a production curtailment program. In cases where falling world prices adversely affect the interests of politically influential groups in particular nations, arguments for government aid in "adjusting supply to demand" and providing for "orderly distribution and

price stabilization" may be very persuasive. Particularly is this the case when world economy is in the grip of serious and long-sustained economic depression and the numbers of workers adversely affected by declining prices are large. Demand for "rationalization" of production and distribution in particular industries may tend to become a politically irresistible force in some countries in periods of serious maladjustment. Production-restriction practices on the part of raw-materials-producing countries are likely to lead to retaliatory measures on the part of raw-materials-consuming countries. They are not conducive to harmonious international economic relations.

Other forms of international cartels involve patent and process exchange agreements between firms in different countries. Still others are concerned primarily with arrangements for the marketing of manufactured or semimanufactured goods, arrangements involving the allocation of sales quotas by trade territories or by classes of customers, and the blacklisting of noncooperative competitors by distributive outlets; arrangements with regard to prices, terms of credit, discounts, rebates, quality of goods offered, use of trademarks, etc.

Monopolistic practices in domestic markets are among the rigidities that prevent the effective operation of competitive self-stabilization forces in the direction of economic balance necessary to sustain a high level of business activity. The cartel is a form of monopoly operating in the international market. There is no trustworthy measure of the extent to which domestic monopolistic practices warp the domestic economy into a pattern out of line with the theoretical end results of free competition. Likewise there is no trustworthy measure of the extent to which cartels and other international trade-restrictive practices warp the international economy into a pattern that does not conform with comparative-cost theory. It is a generally recognized fact, however, that activities of some cartels tend to reduce production, to raise prices in particular segments of industry, and thus to create rigidities that resist price and cost changes necessary to equilibrium in the economic system as a whole.

The cartel type of trade-restrictive agreement is illegal as between firms engaged in domestic trade in the United States. Under the Webb-Pomerene law United States firms may organize associations for joint promotion and joint conduct of foreign trade. The law prohibits these associations from restraining export trade of any domestic competitor or acting in a manner to enhance or depress prices or otherwise restrain trade in the United States. The possible extent of legal participation of Webb-Pomerene export associations in the activities of for-

eign cartels is less clearly defined than limitations to action that restrains competition in the domestic market of the United States.

The attitudes of many other countries, as expressed in legislation prior to the Second World War, are not so clearly antimonopoly as that of the United States.[1] Canada, Brazil, Argentina, and Mexico have antimonopoly statutes somewhat similar to those of the United States. Other countries (Great Britain, for example) have never passed legislation specifically to prevent trade-restrictive arrangements among domestic firms. In still other countries (France and Norway, for example) court decisions have established the legality of restrictive cartel arrangements in the domestic market. In Germany, prior to the Second World War, cartels were compulsory. Examples of compulsory cartelization can be found in Germany as early as 1910.[2] Under the Nazis, compulsory cartelization was general, the cartel being made to serve them in the capacity of a quasi-government agency.

International trade-restrictive practices of cartels during the interwar period were almost as multifarious as domestic trade-restrictive practices associated with the term "imperfect competition" in domestic economy. If a sufficient majority of United Nations powers accept the theoretical end results of competition as a guide in the formulation of international economic policy, some kind of regulatory policy may be developed to ensure that a modicum of competition is preserved in industries most susceptible to cartelization. As in the case of import tariffs and foreign exchange restrictions, aggregate gains and losses to the public involved in cartel activities cannot be measured accurately nor can the inequalities of impact of cartel restraints upon different countries be assessed with accuracy. This circumstance complicates the problem of control through an international body. Furthermore, the trade-restrictive activities of cartels are so heterogeneous and the ultimate effects so imponderable as to defy the formulation of uncomplicated control procedures. In general, international agreement regarding the extent of permissible cartel activities is preferable to unregulated activities of private cartels.[3]

[1] See REYNOLDS, LLOYD G., *The Control of Competition in Canada*, Harvard University Press, Cambridge, Mass., 1940, and Temporary National Economic Monograph, No. 40, *Regulation of Economic Activities in Foreign Countries*, U. S. Government Printing Office, Washington, D. C., 1941.

[2] For an example see STOCKING, G. W., *The Potash Industry*, Richard R. Smith, New York, 1931.

[3] See, for example, MASON, EDWARD S., *Controlling World Trade*, McGraw-Hill Book Company, Inc., New York, 1946.

EXAMPLES OF TRADE-RESTRICTIVE ACTIVITIES OF CARTELS

Among the important products subject in greater or less degrees to cartel arrangements during the interwar period were the following: electrical machinery, surgical instruments, chemicals, explosives, fertilizers, paper, pharmaceuticals, dyestuffs, aluminum, tin, copper, magnesium, beryllium, steel, pig iron, scrap iron, petroleum, rubber, pulp, sugar, coffee, meat, and tea. A few specific examples will illustrate characteristic types of international cartel activities.

Sugar. Beet sugar is produced behind protective tariff walls in Europe, the United States, and, to a lesser extent, in Canada, Australia, and other temperate regions. Beet sugar competes with cane sugar produced for export in Cuba, Java, India, and other tropical or semitropical areas. During the interwar period cane-sugar prices in exporting countries were very erratic. Average unit values,[4] in the producing country, of cane sugar imported into the United States fluctuated as follows: calendar year 1919, 5.6 cents per pound; 1920, 12.6 cents; 1921, 3.9 cents; 1929, 2.1 cents; 1932, 1.6 cents; 1936, 2.7 cents; 1940, 1.9 cents. A number of unsuccessful attempts were made during the 1920's to establish cooperative agreements among sugar exporters. In 1931 the so-called "Chadbourne Agreement" brought sugar interests in Cuba, Java, Peru, Belgium, Hungary, Poland, Czechoslovakia, and Germany into an agreement providing for gradual disposal of surplus stocks over a 5-year period, restriction of current production, and establishment of export quotas. Inasmuch as consuming countries with protected markets increased sugar production by more than enough to offset the reduced output of countries participating in the Chadbourne cartel, the plan did not succeed in stabilizing the raw-sugar industry. The Chadbourne Agreements were discontinued in 1935.

Another attempt to regulate the sugar industry was made in 1937. Under League of Nations auspices an international agreement was signed in May, 1937, by governments of the principal sugar-producing and -consuming countries.[5] Under this arrangement sugar-exporting

[4] SOURCE: *Statistical Abstract of the United States*, 1943, p. 410. These averages were obtained by dividing the total value of United States imports of cane sugar by the total quantity of cane sugar imported. Movements equally erratic and similar in direction occurred in wholesale prices of uniform grades of cane sugar in New York City.

[5] Included in the last were exporting countries such as Cuba and the Netherlands and importing countries such as the United States and the United Kingdom.

countries accepted export quotas and sugar-importing countries agreed to give serious consideration to proposals for encouraging greater consumption of imported sugar. The Second World War broke out before the success or failure of the agreement was fully demonstrated.

Rubber. Natural rubber is derived from the sap of rubber trees. New plantings of rubber trees do not begin to yield rubber in commercial quantities for several years. For this reason rubber-producing capacity is not easily adjusted to demand. Prior to the Second World War the production of natural crude rubber was concentrated in a few middle eastern countries, such as, Netherlands Indies, Ceylon, Malaya, and India. Investments in rubber plantations in these areas were controlled largely by European countries.

Rubber trees, native to Brazil, were transplanted in Ceylon and Malaya early in the nineteenth century. Plantation rubber came on the market in large and increasing quantities after about 1910. Crude rubber values declined from over $1 a pound in 1911 to less than 20 cents a pound in the early 1920's. During the 1920's the British, with large rubber plantation holdings in Malaya, attempted to increase rubber prices by taxing exports, thus to curtail production.[6] Owing to lack of cooperation on the part of Dutch interests and expansion of production in noncontrolled areas, Great Britain's unilateral export restriction plan broke down before the end of the twenties. Crude rubber values rose from an annual average of less than 20 cents a pound in 1922 to an annual average of around 50 cents in 1925. After 1925 crude rubber values declined until they reached an annual average of less than 4 cents a pound in 1932.[7]

In 1934 another scheme for restricting crude rubber exports became effective. It included rubber-producing areas in French Indo-China, Ceylon, the Malay States, the Straits Settlements, North Borneo, Brunei and Sarawak, Burma, and Siam, and involved agreements between the governments of France, United Kingdom, India, Netherlands, and Siam. The agreements provided for output and export restrictions through assignment of export quotas and imposition of

[6] Under the so-called "Stevenson plan."

[7] *Statistical Abstract of the United States,* 1943, p. 410. The figures cited in this paragraph are unit values of crude rubber imports into the United States: total value of imports divided by total quantity imported. Prices are different for different grades of rubber, and relative quantities of the various grades imported into the United States are not necessarily uniform from year to year. The figures cited reflect, in general, price movements of crude rubber and costs per unit to the United States, the leading rubber-consuming country.

export duties if quotas were exceeded. Prior to the beginning of the Second World War average annual unit values of United States imports of crude rubber increased from about 10 cents a pound in 1934 to about 19 cents in 1937. The underlying relationship of private trade associations to the rubber-restriction plan of 1934 implies cartel characteristics even though the official structure was intergovernmental.

During the Second World War, Axis Powers first, and the opposing Allied Powers later, were cut off from Middle Eastern rubber supplies. In consequence the capacity for a large output of synthetic rubber was installed in the United States and elsewhere. Prior to the war synthetic rubber plants capable of competing seriously with natural rubber were not in existence although the chemistry of synthetic rubber production was in an advanced stage of development. Small amounts of it were put on the market in the 1930's by duPont de Nemours and Company and Dow Chemical Company in the United States and by I. G. Farben in Germany. Prior to the Second World War negotiations pertaining to exchange of synthetic rubber patents, patent licensing, etc., occurred between I. G. Farben and companies in the United States,[8] but large production capacity for synthetic rubber was not installed in the United States until after the war began. In view of uncertainties concerning relative costs of synthetic and natural rubber, of large investments in both branches of the industry, and of national defense considerations, predictions of the direction that future international cartel developments in the crude rubber industry may take are extremely hazardous. It is safe to predict, however, that, in view of the history of the industry and of the complicated problems involved in its profitable development, some kind of international cartel arrangement will be attempted; possibly different kinds of cartel arrangements will be tried if early attempts to put the industry on a highly profitable basis of operation are not successful.

Like the international sugar cartel and, in fact, like most of the other international cartels that have come into existence at one time or another during recent decades, the rubber cartels involved plans for restricting sales and stabilizing rubber prices.

Incandescent Electric Lamps. Technological progress in the development of incandescent electric-light bulbs has been rapid during the past half century as a result of research in the United States and in

[8] STOCKING, GEORGE W., and MYRON W. WATKINS, *Cartels in Action*, p. 91, The Twentieth Century Fund, Inc., New York, 1946.

foreign countries. The General Electric Company of the United States, the Siemen (A. G. Friedrich) Company of Germany, the Phillips Gloelampenfabreken (N. V.) Company of Holland, and other concerns are reported to have been bound by agreements apportioning world markets among the respective companies prior to the Second World War.[9] A convention for the development of the international electric lamp industry was established before the First World War and re-established in 1924.[10] This convention is reported to have been composed of more than 30 member countries. The provisions of the cartel are reported to have called for compulsory exchange of technological experience and patents for licensing purposes. Limitations were not placed on total output of electric bulbs by members, but exports were limited by the allocation of sales areas and by export quotas. A special standardization committee of experts was charged with the responsibility of standardizing types of lamps and simplification of manufacturing processes.[11]

Standardization of product and exchange of technical knowledge are prerequisites to maximization of economies of mass production. Few economists will deny the fact that some of the activities of international cartels contribute to product improvement and to economies of production and marketing. In addition to wider use of technical knowledge, which cartels may foster, and to product standardization, the statistical activities of cartels may contribute to wider and more complete knowledge of market conditions. Such knowledge can lead to marketing economies: minimization of stocks, for example, and production of quantities of goods best suited to market demand. A problem for which no satisfactory solution has to date been found is how to preserve the production and marketing economies of producer collaboration without subjecting consumers to the disadvantages of excessive trade restrictions and the economic system to excessive rigidities that seriously interfere with processes of competitive self-stabilization.

Sugar, rubber, and incandescent electric lamps are but three examples of many products that have been subject, at one time or another, to "regulative" arrangements through international collabora-

[9] BERGE, WENDELL, *Cartels: Challenge to a Free World,* p. 237, Public Affairs Press, Washington, D. C., 1944.

[10] BENNI, A. S., *Review of the Economic Aspects of Several International Industrial Agreements,* League of Nations, Geneva, 1930.

[11] See *Incandescent Electric Lamps,* U. S. Tariff Commission, Washington, D. C., 1939.

tion of producing organizations, marketing organizations, or a combination of producing and marketing organizations. Hexner [12] lists more than 400 individual products and more than 300 companies that have been involved in greater or less degrees in international cartel arrangements of one kind or another during recent decades. Other publications pertaining to international cartels are numerous, and the number of such publications is increasing rapidly. The examples cited in the present chapter were selected at random for the purpose of illustrating the character of international cartel arrangements and of suggesting important types of cartel activities.

CONCLUSIONS

Many of the international cartels that have been formed from time to time and have been more or less successful for limited periods have engaged in monopolistic practices. Monopoly affects price through limitation of supply. Monopoly price is determined by the interaction of unobstructed demand with restricted supply. The success of attempts to monopolize a commodity depends largely upon (1) absence or greater cost of substitute commodities, (2) consumer reactions which restriction of output and its effect on price may stimulate, (3) the monopolists' ability effectively to control supply, and (4) shrewdness in adjusting supply at a point that yields a maximum of net revenue. Existence of substitutes for many goods and difficulty of maintaining continuous international control of supply limit to some extent the monopolistic dangers of international cartels. Experience to date indicates, however, that international cartels can be a source of international friction.

If a working majority of the United Nations support policies oriented in the direction of competitive regulation of economic activity, monopolistic practices of international cartels will be in conflict with United Nations policies. Under these circumstances international efforts to regulate the activities of cartels are likely to be a continuing and important part of international trade machinery. A conclusion to the effect that international regulation of cartel activities will be a complicated and difficult procedure is suggested by experience in the United States with domestic trusts. For more than half a century domestic policy has been antimonopoly. Antimonopoly laws in the United States have been administered with greater or less degrees of vigor

[12] HEXNER, ERWIN, and ADELAIDE WALTERS, *International Cartels*, University of North Carolina Press, Chapel Hill, N. C., 1945.

in different administrations. Regardless, however, of philosophic preferences and legislated acts, unpurged imperfections and unregulated monopolistic elements are common characteristics of the free-enterprise competitive system in this country. The theorist's conception of perfect competition is an abstraction, useful as a directional guide but never intended to be descriptive of existing competitive conditions. The United States government from time to time has attempted to eliminate monopolistic practices that were objectionable to vocal majorities or to influential minorities, but it would be an exaggeration to conclude that enforcement of antimonopoly legislation in the United States has been highly successful. International competition is likely to be subject to even more imperfections than exist in domestic markets in free-enterprise countries. Knowledge pertaining to foreign markets is likely to be even less complete than knowledge pertaining to domestic markets, and international political considerations are likely to be more potent in foreign trade than in domestic trade. During the interwar period cartel activities increased in number and scope. Similar developments are likely to occur in the years ahead. Since the end of the Second World War cartel activities in relation to world trade policy have been subjected to searching scrutiny and to more or less adverse publicity.

Examples of types of cartel activities that may be subjected to persistent demand for international control of one kind or another follow.

1. Destruction of "surpluses" of particular kinds of goods for the purpose of maintaining or increasing their prices.
2. Establishment of export quotas and production-curtailment plans applying to particular kinds of goods for the purpose of maintaining or raising their prices.
3. Sporadic dumping in foreign markets.
4. International exchange of patents and technological process information.

The selection of kinds of controls that the United Nations may effectively impose upon international cartels is a subject for continuous deliberation and debate. If the collective will is sufficiently strong, there need be little doubt that some kind of reasonably effective control measures can be devised. The hard core of the cartel difficulty is to be found in the fact that the will to regulate is not likely to be persistently strong. In periods of business depression mass opposition to "cutthroat" competition can be stirred up by clever propaganda. Losses incident to competitive curtailment of output of particular types of

goods that, relatively, are in excess supply are unlikely to be uniform in all countries, and the opposition to imposition of such losses may prove to be stronger than the international will to impose competitive conditions.

The traditional position of the United States in respect to antimonoply measures does not necessarily point to the conclusion that this country will avoid participation in international cartel activities, regulated or otherwise. Vigorous objections may be raised in the United States against production curtailment of such United States imports as tin and coffee while at the same time measures are being taken to limit world production of wheat and cotton or to dump export surpluses of these commodities in foreign markets. In short, imports of some raw materials militate against restrictive commodity agreements in the United States, whereas this country's domestic agricultural policy is not in conformity with principles of competitive regulation of output. Contradiction exists between what appears to be the broader economic and political interests of the United States in postwar organization of world trade and this country's domestic policy with respect to agricultural exports. Contradictions may also arise with respect to rubber, copper, aluminum, nitrates, and certain other nonagricultural raw materials and manufactured goods for which large production capacity was developed in the United States during the Second World War. Examination of the magnitudes of war-created and war-perpetuated industrial maladjustments suggests the conclusion that practical politics will dictate compromise with the theoretical principles of international competition as production deficits are overcome in the devastated areas of Europe and Asia.

If a working majority of the United Nations does not support cartel regulatory measures, particular nations that are adversely affected by monopolistic activities of cartels are likely from time to time to take unilateral steps to counteract such activities. In the pursuit of unilateral policies against monopolistic cartel practices some nations will be in stronger positions than others. The position of the United States in this respect is likely to be relatively strong. The domestic market of this country is large. A comparatively small part of this country's total trade is foreign trade. The volume of absolutely essential imports that this country must have for industrial efficiency is relatively small. The United States is technologically progressive and is in a strong position relative to international exchange of technological information. The United States international creditor position tends to provide a plentiful supply of foreign exchange for the

purchase of necessary raw-materials imports. In periods of world-wide business depression United States terms of international trade are not likely to be impaired because this country imports relatively more crude materials than she exports, and prices of crude materials tend to decline in depression periods more than prices of manufactured goods. On the one hand the fact that the United States is a large consumer of raw materials is a temptation to foreign producers of sugar, coffee, tin, for example, to curtail production and raise the price. On the other hand, this country's importance as a consumer and her large influence in international affairs adds weight to the possible effectiveness of retaliatory measures. Among the objections to production curtailment and price stabilization practices on the part of international cartels is the probability that retaliatory self-sufficiency measures may be resorted to in countries that import the goods controlled. Retaliatory protective measures are not conducive to international good will. Furthermore, there is no assurance that losses in production efficiency incident to retaliatory measures may not more than offset any possible gains to be derived from production "stabilization" activities of cartels.

To date such evidence as is available concerning the economic effects of international cartels seems to point in the direction of the following conclusions.

1. The possibility of profits for particular industries and particular concerns from trade-restrictive practices of one kind or another is among the more important reasons for the formation of international cartels.

2. Trade-restrictive practices of international cartels are conducive to other forms of international trade restrictions, all of which are in conflict with the foundation principles of international territorial division of labor.

3. Competition is not perfect; it has never been perfect in modern economic systems and is not likely to approach perfection during the life histories of existing national states. Persons charged with the responsibilities of making and administering national and international economic policies must deal with situations that are imperfectly competitive. The decision is not one of some cartelization or no cartelization; it is rather one of more cartelization or less cartelization.

4. Less cartelization is more nearly consistent with foundation principles of international economic cooperation than is more cartelization.

5. The economic solution of problems of chronic overproduction in particular industries lies in the direction of production expansion elsewhere and provision of alternative employment opportunities for production resources. Correctives along the lines of greater world production and trade, increased demand for available production resources, and transference of production resources to industries of short supply have not come about automatically to fill in the economic vacuum created by the production-restriction policies of international cartels.

CHAPTER XXI

COMMERCIAL TREATIES

As world economy is now organized, nations are interdependent. Each must incur losses and inconveniences of one kind or another in order to enjoy the gains of world-wide territorial division of labor. Furthermore, there is no rule easy to apply and absolutely just whereby the aggregate burden of necessary sacrifices may be apportioned among the several nations concerned. In view of these circumstances international economic diplomacy that takes the form of commercial treaties and other voluntary agreements has very important functions to perform. Commercial treaties help to minimize the destructive effects abroad of particular national policies on the one hand, and to enlarge the opportunities for foreign trade on the other.

SCOPE AND CONTENT OF COMMERCIAL TREATIES AND AGREEMENTS

Many subjects come within the scope of commercial treaties and agreements. Among them are (1) considerations pertaining to consular services, (2) considerations pertaining to the rights of foreigners, (3) transport considerations, (4) trade-restrictive measures, and (5) foreign exchanges. This chapter confines itself largely to a consideration of commercial treaties and agreements in relation to the last two groups of subjects: trade-restrictive measures and foreign exchanges. Treaties may be either bilateral or multilateral. Bilateral treaties involve only two countries; multilateral treaties involve more than two. Agreements also may be either bilateral or multilateral. In general, agreements are less formal than treaties, less permanent, and less subject to the dictates of precedent.[1]

Trade-restrictive considerations have long been dealt with through

[1] For detailed discussions of trade treaties see B. H. Williams, *The Economic Foreign Policy of the United States,* McGraw-Hill Book Company, Inc., New York, 1929, and *American Diplomacy,* McGraw-Hill Book Company, Inc., New York, 1936; W. S. Culbertson, *International Economic Policies,* D. Appleton-Century Company, Inc., New York, 1925, and *Reciprocity,* McGraw-Hill Book Company, Inc., New York, 1937.

both treaties and agreements. The content of commercial treaties concerning trade-restrictive measures is suggested by the *parity clause*, the *reciprocity clause*, and the *most-favored-nation clause*. The parity clause provides that treatment given to the citizens and goods of a particular state shall not be worse than that given to the treaty-making state's own citizens and goods. Treatment stipulated by a parity clause is sometimes referred to as "national treatment," treatment equal to that accorded a country's own nationals. A general guarantee of national treatment in the colonies of colonial powers is the open door for commerce. The reciprocity clause provides for special arrangements between two nations whereby the citizens of each obtain advantages or privileges in their trading relations with the other. The nature of advantages or privileges granted under reciprocity clauses is specified in each case. A treaty may provide, for example, for *reciprocal national treatment, reciprocal reductions in specified tariff rates,* or *reciprocal most-favored-nation treatment.*

The Most-favored-nation Clause. One of the most universal features of commercial treaties of recent times is the most-favored-nation clause. It is to the interest of every country to secure, for its outgoing merchandise, terms of entry abroad as favorable as those enjoyed by any competitor exporting country. Treatment equal to the best enjoyed by any competitor country is the objective of a most-favored-nation clause. Such clauses occur in one form or another in a majority of nineteenth- and twentieth-century commercial treaties. Sometimes a most-favored-nation clause achieves its purpose and sometimes it does not; there are always practical questions of legal interpretation. For example, is the clause in a particular treaty *conditional* or *unconditional?* If a most-favored-nation clause is interpreted as being unconditional, minimum rates of entry automatically should be granted to the goods of every contracting party by every other contracting party. If, on the other hand, a most-favored-nation clause is interpreted as being conditional, a *quid pro quo* is called for. The conditional most-favored-nation clause provides that a contracting party shall receive minimum rates of entry on its exports going to other contracting parties only in those cases where it grants concessions equivalent to those granted by the nation that enjoys the minimum rate. Most-favored-nation clauses do not prohibit special reservations. Seldom if ever is there an international commercial treaty without special reservations of one kind or another. The United States, for example, has consistently reserved the right to give Cuba special tariff rates to which the most-favored-nation clause does not

apply. In Great Britain's most-favored-nation treaties a right is reserved to grant preferential duties to countries of the British Empire. In nearly all the treaties and agreements embodying most-favored-nation clauses reservations applying to possible future customs unions are made. A contracting state has the right to insert whatever limitations it wishes into its commercial treaties.

CUSTOMS TARIFF BARGAINING

Treaty forms employed for customs tariff bargaining purposes are conditioned by the type of tariff systems maintained. There are three types of customs tariff systems: single, double, and multiple. The single tariff system imposes equivalent duties upon the goods of all countries to which tariffs apply. Under it all countries take equivalent rates except in so far as some countries may be exempted specifically. The double tariff system distinguishes between maximum and minimum duties. In this case maximum duties apply to countries with which there is no trade treaty or agreement, whereas minimum duties are the lower limits of concessions that may be granted to favored countries. The multiple tariff system provides for discrimination among countries according to points of origin or points of consignment of the goods imported.

Inasmuch as the trade-restrictive policy of a country involves not only customs tariffs but also merchandise quotas, foreign exchange controls, and other trade regulatory devices, and inasmuch as trade policy is nearly always a political party issue, lines of action are seldom continuous and consistent. Particularly has this been true since the First World War. For a long period before that war, Great Britain pursued a fairly consistent policy of free trade and equal treatment of all non-Empire countries with which she traded. The equal treatment feature of the British policy was characterized by a world-wide network of treaties with foreign countries embodying unconditional most-favored-nation clauses. France was typical of those countries which maintained multiple tariff systems and pursued a policy of tariff bargaining prior to the First World War. Since that war virtually every important commercial nation has resorted to trade-regulatory bargaining in one form or another.

In 1934 the United States Congress passed a Trade Agreements Act which provided for the initiation by this country of reciprocal agreements for reduction of international trade barriers. This act was renewed in 1937, 1940, 1943, and again in 1945. A large number of reciprocal trade agreements have been negotiated by the United States

within the legal framework of the act. Tariff rate reductions made under the act involved negotiation of reciprocal rate reductions in other countries and were less subjected to Congressional logrolling than rate changes that had been made in earlier years in general tariff acts. The Trade Agreements Act authorized rate changes to the extent of 50 per cent of previously existing rates in the United States without additional Congressional authorization. A policy of granting unconditional most-favored-nations treatment had been introduced in the Fordney-McCumber Act of 1922, but not altogether successfully because of contradictions in the legislation.[2] This policy was strengthened as a result of the reciprocal trade agreements program. Rate reductions granted to an agreement country under this program were automatically extended to other countries.

OTHER INTERNATIONAL AGREEMENTS

During recent decades, a great many international agreements have been negotiated to cover a variety of commercial and financial considerations. Exchange clearing agreements which came into widespread use during the 1930's are in this category. Countries that had divorced their currencies from gold entered into agreements whereby payments for merchandise imports were to be made into specified domestic banks, and collections for exports were to be drawn from funds thus accumulated in these banks.[3]

Since the beginning of the Second World War a number of attempts have been made to negotiate multilateral trade and monetary agreements in an atmosphere of multinational conferences. The proposed International Trade Organization and the Bretton Woods commitments establishing the International Bank for Reconstruction and Development and the International Monetary Fund are examples.[4] These institutions are instrumentalities of the Economic and Social Council of the United Nations.

One of the purposes of the United Nations as set forth in its charter is to achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character. The Charter stipulates that "various specialized agencies established by intergovernmental agreement and having wide international responsi-

[2] Clauses, for example, providing for penalty duties if the duties in foreign countries were higher than those in the United States even though the offending country might already be pursuing a policy of equality of treatment.

[3] See Chap. XIX of the present volume.

[4] See Chaps. XXIII and XXIV of the present volume.

bilities, as defined in their basic instruments, in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Nations" through agreements entered into with the Economic and Social Council of the United Nations.[5] The Council consists of 18 members of the United Nations elected by the General Assembly. It is authorized to initiate studies and reports with respect to international economic and related matters and to coordinate the activities of specialized agencies concerned with these matters. The process of coordination is through "consultation with and recommendation to such agencies and through recommendations to the General Assembly and to the Members of the United Nations."[6] In addition to the International Monetary Fund and the International Bank for Reconstruction and Development a number of other specialized agencies which have economic functions and which are associated with the United Nations through the coordinating activities of the Economic and Social Council are as follows:[7]

1. The International Labour Organization.
2. The Food and Agricultural Organization of the United Nations.
3. The International Civil Aviation Organization.
4. A number of League of Nations organizations and commissions, such as the Communications and Transit Organization and the Commission for Enquiry for European Union.

CUSTOMS UNIONS

A customs union provides for a common tariff against foreign imports and freer or free trade among the countries participating in the union. An outstanding example of a successful customs union in comparatively recent times is the German Customs Union, which led to the formation of the German Reich after the Franco-Prussian War (1870–1871). Removal of trade barriers between states always gives rise to resistance on the part of protectionist groups. In addition to this obstacle to the success of attempts to form customs unions are other political and administrative problems. Agreement concerning tariff rates must be reached by the participating governments; it is difficult enough to get tariff rate agreement on the part of the conflicting interests of any one government, much less those of two or more

[5] *Charter of the United Nations,* Arts. 1, 57, and 63, U. S. Government Printing Office, Washington, D. C., 1945.

[6] *Ibid.,* Art. 63.

[7] FINER, HERMAN, *The United Nations Economic and Social Council,* p. 23, World Peace Foundation, Boston, 1946.

governments. Much has been heard since the First World War about a possible European customs union. Under prevailing conditions of economic nationalism an all-European customs union is probably as utopian an idea as is that of universal, international free trade. However, it is easily possible that certain small groups comprising a number of European nations with similar political interests and complementary economic systems might succeed in negotiating a customs union, possibly as a first step to an enlargement of political units in Europe. In 1931 a proposal was made for a customs union between Germany and Austria. It provided for the gradual reduction of duties during a period of transition. Gradual reduction of duties as a preliminary to the formation of a complete customs union is a logical step where highly industrialized nations are involved. Such a development raises some interesting questions concerning customs tariff treaty commitments of the uniting countries. If, for example, the initial reduction in duties is interpreted as initiating an incomplete customs union and paving the way for a complete customs union, a third state (according to the way most commercial treaties are drawn) has no right to claim equal treatment by virtue of a most-favored-nation agreement. If, on the other hand, the initial reduction in duties between nations contemplating a customs union is interpreted as being a preferential duty, other states may claim similar treatment by virtue of their most-favored-nation treaties. The difficulties of forming customs unions are many. They are political as well as economic; they involve commitments both among the negotiating powers and between these powers and other nations.

PART IV

RECENT POLICY TENDENCIES

CHAPTER XXII

DISLOCATING INFLUENCES OF THE SECOND WORLD WAR

A great war distorts customary currents of trading among geographical regions, changes customary relationships among the different classes of export and import goods, modifies customary payments balance structures of many countries, and injects other kinds of distortion into the world economic system. In order to achieve economic equilibrium after a great war, price structures and foreign exchanges must undergo readjustment; international capital movements must be channeled into reconstruction areas and later diverted to other parts of the world; expanded war industries must give way to war-starved peace industries. In addition other kinds of economic realignments are necessary—realignments much greater in magnitude than those which economic systems customarily are called upon to make within short periods of time.

CHANGES IN VOLUME AND CHARACTER OF WORLD TRADE

World trade expanded rapidly during the half century prior to the great depression in the 1930's. The physical volume of world trade appears to have been three or four times greater in the late 1920's than it had been in the 1870's.[1] The volume of world trade was seriously disrupted during the great depression in the 1930's; during the war period (1939 to 1945) it was subjected to further distortion. Trade of Germany, Italy, Japan, and other Axis powers with Great Britain, United States, Russia, and other Allied powers stopped dur-

[1] Estimates put the value of world exports and imports at about 13 billion dollars in 1875; 41 billion in 1913; 69 billion in 1929; and 24 billion in 1935. SOURCE: *Encyclopaedia Britannica,* 14th ed., Vol. XXII, pp. 346*ff.*, and *Statistical Yearbook of the League of Nations,* 1937–1938, p. 225.

If the United States wholesale price index (in the absence of an index of prices of world export-import goods) is used as a rough indication of changes in prices of import-export goods the world over, physical volume of world trade appears to have increased by some such magnitudes as the following: base year, 1875, 100 per cent; 1913, 350 per cent; 1929, 430 per cent; 1935, 180 per cent. See also RÖPKE, WILHELM, *International Economic Disintegration,* Chaps. I and II, The Macmillan Company, New York, 1942.

ing the war period. The Axis powers were subjected to devastating destruction. Years will be required to rebuild the destroyed economic systems and to reestablish a volume of trade necessary to a pattern of territorial division of labor conducive to efficient use of production factors in these countries. Not only Axis powers but also Allied powers suffered serious internal destruction of their industrial facilities. England was bombed; France, Holland, Belgium, Norway, Russia, Greece, Poland, Czechoslovakia, and other European countries were invaded, as were also important areas of Allied production in the Orient: Netherlands Indies, Malay States, Philippine Islands, for example.

Submarines and mines destroyed large numbers of merchant ships. Such facilities as were available for ocean transport were conserved for moving troops, supplies for troops, and war industry essentials, leaving a minimum of space for movement of civilian goods. Trade between non-Russian Europe and the Americas was cut off for a time after French capitulation to Germany. Trade between Asia and the West was disrupted by Japan's entry into the war and her capture of Singapore, the Philippines, and the Netherlands East Indies. The United States looked to South America for increased quantities of raw materials. Great Britain and Russia depended upon the United States for greater quantities of manufactures. In the period 1926 to 1930 about 30 per cent of United States imports came from Asia as compared with only about 7 per cent in 1943. The percentage of United States imports coming from South America increased from an average of 14 per cent in 1926 to 1930 to 23 per cent in 1943, whereas the proportion of exports going to South America was reduced from 9 to 3 per cent. United States exports to Great Britain increased as a result of war necessity from about 18 per cent of United States total exports for the average of the period 1926 to 1930 to about 35 per cent in 1943. United States manufacturing facilities were not disrupted by enemy bombs or invasion; Allied manufacturing facilities were damaged. For these reasons and because the United States had large numbers of armed forces stationed abroad, a larger percentage of the value of United States exports was finished manufactures in 1943 than was the case in prewar years.[2] No part of the world escaped the dis-

[2] In 1943 the value of finished manufactures (exclusive of manufactured foodstuffs) constituted 73 per cent of the value of total exports as compared with only 45 per cent in the period 1934 to 1938. SOURCE: *Statistical Abstract of the United States*, 1946.

torting influence of war upon its foreign trade and its production during the war years, 1939 to 1945.

REALIGNMENT OF PRODUCTION FACILITIES

Long after the initial stages of reconversion from war production to peacetime production fundamental maladjustments in production facilities remain. For example, during the war and early postwar years South American countries could not secure manufactured exports from the European continent in prewar amounts. The South American countries and the United States expanded their industries in the direction of supplying this deficit. When, if ever, Europe gets back into production of manufactures for export to South America, excess production for these markets is likely to occur and contraction will be necessary in one place or another. Competitive elimination of excess production capacity of a magnitude equal to that which may develop in this instance puts a strain on the competitive mechanism, which is not easily absorbed. Excessive production capacity for South American markets is but one of many war-created production maladjustments that may not be resolved for years, possibly decades. World production capacity in wheat and other foodstuffs industries may be excessive when Europe gets back into production. The same is true of some mining and refining industries and many manufacturing industries.

DEBT BURDENS AND RECONSTRUCTION LOAN PROBLEMS

Every big war leaves an aftermath of government debts, which are of two kinds: internal and external. External government debt is money owed by the government of one country to governments or individuals or nongovernmental agencies in other countries. Reparations and intergovernmental war debts are in this category. Reparations and war debt burdens incident to the Second World War are likely to be less onerous than those which were saddled upon the international economy after the First World War. Following that war reparations claims totaling more than 30 billion dollars were imposed on Germany. Inter-Allied war debts ranged in magnitude from more than 1 billion dollars owed to France by other parts of continental Europe to about 5 billion dollars owed by continental Europe to Great Britain and about 10 billion dollars owed by Europe (including Great Britain) to the United States. In time, these huge debts were reduced to nominal amounts and paid, or they were canceled by negotiation or default, but not before they had been a continuous source of inter-

national payments confusion for more than a decade. In the Second World War intergovernment financing between the United States and her allies was handled through lend-lease arrangements, and these obligations have been largely discharged.[3] Furthermore, the prospects for peace treaties involving only moderate reparations suggest that no such impossible reparations transfer problem as that of the 1920's and early 1930's will have to be resolved in the 1940's and 1950's. Nevertheless, the war was not fought without an aftermath of international debts. Great Britain, for example, borrowed large sums from India. India came out of the war with claims to about 1 billion pounds sterling (4 billion dollars) of blocked exchange in Great Britain. A closely related aspect of war financing was the sale of long-term foreign securities by Great Britain and some of the other European Allies.[4]

For decades prior to the Second World War Great Britain, France, and a number of lesser European countries purchased foreign raw materials and foodstuffs with net income from investments abroad. These countries are no longer creditor nations; they became debtor nations as a consequence of that war. So long as postwar Europe is borrowing progressively larger sums from the United States for reconstruction, a European passive trade balance can be maintained. But when Europe's annual service charges on past and current borrowings exceed the dollar exchange available from current borrowings, trade balance adjustments will be called for. Payment of service charges on borrowings and loss of income from foreign investments sold during the war period will act in the direction of forcing Great Britain, France, and certain other European countries to sell more goods and services abroad in relation to their foreign purchases than was the case prior to the Second World War.

[3] The United States provided foreign countries "with 48.1 billion dollars of goods and services under 'straight' Lend-lease and an additional 3.4 billion dollars of civilian supply and relief articles on a gift, grant or offset basis." These sums are not carried on the books of the United States government as outstanding debts. SOURCE: *Survey of Current Business,* January, 1947, pp. 19*ff.*

[4] Great Britain's overseas disinvestments during the period Sept. 1, 1939, to June 30, 1945, are estimated to have totaled nearly 4 billion pounds sterling, of which about 2.7 billion pounds was represented by foreign-owned sterling balances at the end of the war. In addition sale of British-owned, long-term, overseas investments during the same period aggregated about 1 billion pounds, and long-term loans to the British government extended by India, Canada, and other British dominions and colonies totaled about 200 million pounds sterling. BLOOMFIELD, ARTHUR I., *The British Balance of Payments Problem,* Princeton University Press, Princeton, N. J., Autumn, 1945.

Since that war reconstruction loans made by the United States to Europe have been so large as to create a difficult problem of transferring wealth from Europe to the United States when service charges on these loans reach peak levels sometime after 1950. It is interesting to observe in this connection that as early as September, 1946, the aggregate of postwar loans which the United States had extended or had committed herself to extend to Europe and on which she expects to collect interest and principal, approached the magnitude of war debts owed by Europe to the United States after the First World War.[5] Reconstruction loans to Europe contribute to increased world production, more world trade, and higher levels of economic activity in borrowing and lending nations, but there is danger that they may lead to serious fluctuations in business activity.

Great Britain, Germany, France, Belgium, and Netherlands are among the European countries that are borrowing from the United States. These countries are densely populated; in decades gone by they have been highly industrialized, creditor nations. War period destruction took them, temporarily, out of the arena of keen competition for export markets and placed them in the category of low-productivity capital-borrowing nations. As a result the United States, Switzerland, Sweden, and other countries that, in whole or in part, escaped the effects of direct war damage to their industrial plant were placed in advantageous positions. Competition in the sale of manufactured goods in foreign markets is temporarily less severe than in prewar decades, and capital loans to the devastated areas have created abnormal demand for capital equipment. When reconstruction in the devastated areas is largely completed, if foreign loans cannot be diverted to industrially backward regions in sufficient amount to maintain and to increase world demand for export goods, business depression in creditor nations may ensue. The reason for this conclusion can be traced initially to probable losses in volume of net exports of the creditor nations. The reconstructed countries, if prosperous, must export more goods than they import when the need for foreign bor-

[5] The United States war debt claims against Europe after the First World War aggregated about 10 billion dollars. As of Sept. 30, 1946, outstanding loans and loan commitments made by the United States to Europe after the end of the Second World War aggregated nearly 9 billion dollars. These loans and commitments were in addition to commitments made by the United States to the International Bank for Reconstruction and the International Monetary Fund, described in Chap. XXIII of the present volume. SOURCE: *Survey of Current Business*, January, 1947, pp. 19*ff*.

rowing is passed. Their exports must be sufficient to pay service charges on borrowings for reconstruction and to provide foreign exchange for the purchase of essential imports such as raw materials. If net exports of the reconstructed countries are to increase, the rate of industrialization elsewhere must increase, or net exports of creditor countries are likely to decline. For these reasons, contraction in the volume of foreign loans to Europe may contribute to business depression in the United States and other creditor countries. Large magnitudes of possible expansion and contraction in United States loans to postwar Europe are inherent in the processes of reconstruction and are among the time-fuse dangers of war-born dislocations of industry, trade, and international payments balances.

In addition to "external" debts arising from the Second World War, large "internal" war debts were incurred. Internal war debts consist of money owed by a government to its own subjects. In order to service these debts and retire them money must be collected from domestic taxpayers and transferred to domestic holders of government securities. Servicing and retirement of internal debts do not directly involve a depletion of national wealth. Indirectly an internal debt may tend to reduce annual production if it injects elements of uncertainty into a country's monetary and fiscal policy. For example, will the 260 billion dollar Federal government debt outstanding in the United States in 1946 be a motive for continuous monetary and fiscal policy designed to perpetuate a low rate of interest in this country? If so, what effect may such a national government policy have upon internal economic stability?

UPHEAVAL OF NATIONAL PRICE LEVELS AND DISRUPTION OF FOREIGN EXCHANGES

In a war period price levels in various countries tend to rise by different amounts. Between 1939 and 1945 wholesale prices increased in the United States approximately 37 per cent; in the United Kingdom, 64 per cent; in the Netherlands, 72 per cent; in Sweden, 69 per cent; in Switzerland, 91 per cent; in Canada, 39 per cent; in Mexico, 94 per cent. After 1945 price indices in these countries continued to move erratically in relation to one another. Between 1945 and March, 1947, the wholesale price index in the United States increased about 41 per cent; in the United Kingdom, 9 per cent; in the Netherlands, 49 per cent; in Canada, 15 per cent; and in Mexico, 23 per cent. In both Sweden and Switzerland the wholesale price indices were practi-

cally the same in March, 1947, as in 1945 after having recovered from slight declines in 1946.[6]

Foreign exchange rates of these countries also varied, but the variations in exchange rates were not consistent when compared with price changes. Between 1939 and 1945, for example, when the dollar value of the pound sterling declined 9 per cent [7] and British wholesale prices rose 64 per cent, the dollar value of the guilder declined 29 per cent [8] and Netherlands wholesale prices rose 72 per cent, the value of the Canadian dollar in terms of the United States dollar declined 6 per cent [9] and Canadian prices rose 39 per cent, whereas in Mexico the dollar value of the peso rose 7 per cent [10] and prices in Mexico increased 94 per cent. These marked inconsistencies may be attributed to different combinations of such factors as the degrees of price and foreign exchange control in the countries concerned and distortions in trade and other payments balance items resulting from wartime shifts in their movements. There is little or no reason to believe that the war-end relationships represented a condition of peacetime payments balance equilibrium.[11] Price changes and exchange rate changes of the magnitudes cited are evidences of fundamental dislocations that contribute to the violence of fluctuation in trade and business activity.

DANGERS OF OVERLOADING A COMPETITIVE ECONOMIC MECHANISM

Theoretically a competitive system can force economic adjustments of any magnitude that are necessary to competitive self-stabilization, internally and externally. Theoretically, deflation can force high-cost firms in an industry with excessive production capacity to introduce cost-saving economies or go out of business. Theoretically, downward pressure of prices can force production factors out of industries with excessive production capacity and into industries capable of expansion. Theoretically, deflationary pressure can force prices and costs in a country with a passive payments balance down to a point where merchandise exports increase in relation to merchandise imports. The-

[6] *Federal Reserve Bulletin*, July, 1947, p. 934.

[7] From 443.5 cents in 1939 to 403.5 cents in 1945, *ibid.*, p. 933.

[8] From 53.3 cents in 1939 to 37.9 cents in 1945, *idem.*

[9] From 96.0 cents in 1939 to 90.5 cents in 1945, *idem.*

[10] From 19.3 cents in 1939 to 20.6 cents in 1945, *idem.*

[11] Relative stability of national price levels and foreign exchange rates with full employment or near full employment of valuable production factors in the several trading countries.

oretically, adjustments of this kind can be made within a framework of world-wide stability in foreign exchange rates. The competitive theory is logically sound, and there is an impressive body of historical evidence to indicate that competitive forces work in directions compatible with the economic theory so long as the institutional framework of competitive economic systems remains intact. Between the World Wars the institutional framework of competitive economic systems broke down, in greater or less degrees, in many countries—Germany, Italy, France, Great Britain, United States, and elsewhere. An unanswered question at present is whether reestablishment of competitive economic systems and political environments necessary to their successful operation may be possible in a sufficient number of countries to justify a modicum of dependence upon competitive self-stabilization processes in international economic relations. A second unanswered question is the extent to which the end results of competition may be approximated in international economic relations through agreements and treaties between countries with varying degrees of state management of their several economic systems.

War-caused maladjustment in the international economy is not a new phenomenon. The Napoleonic Wars, the American Civil War, and the Franco-German War, one and all, caused economic dislocations which in time were overcome without destruction of democratic political systems and competitive economic systems which had developed or were developing in a number of nineteenth-century nations. The First World War (1914 to 1918) was more gigantic and more all-pervasive than nineteenth-century wars. During and following that war the Russian economic system was forced into a socialist mold through a process of bloody liquidation of opposition. During the interval between the World Wars Germany experienced hyperinflation and political revolution; France experienced moderate inflation and an undermining of her political stability. In neither Great Britain nor the United States was the political framework of the capitalist system sturdy enough to force the competitive engine to accomplish its work of self-stabilization. The valiant attempt that is being made after the Second World War to establish stable political institutions in Western Europe, to lay a foundation for the nurturing of institutional stability in other parts of the world, and to reestablish a modicum of competitive self-stabilization that will function successfully alongside state monopolies must be judged not only in the light of the magnitude of dislocating influences of the Second World War but

also in the light of the two decades of political and economic confusion that preceded that war. These are the foundations upon which such institutions as the International Bank for Reconstruction and Development, the International Monetary Fund, and the proposed International Trade Organization must rest.

CHAPTER XXIII

THE BRETTON WOODS AGREEMENTS

The United States, along with Great Britain and other countries that were allied against the Axis powers in the Second World War, has taken the initiative in attempting to establish economic institutions, within the framework of the newly created United Nations organization, institutions designed to forestall a postwar drift toward economic nationalism such as preceded that war. The principal institutions that thus far have been established or proposed for this purpose are the International Monetary Fund, the International Bank for Reconstruction and Development, and the proposed International Trade Organization. These agencies are founded upon the theory and experience of international competition on the one hand, and on the other hand upon a clear recognition of need for national measures to promote full utilization of valuable production factors in each particular country.

GUIDES TO INTERNATIONAL ECONOMIC POLICY

From the theory and experience of international competition have come foundational guides to future international economy policy such as the following:

1. International trade and territorial division of labor contribute to increased world production of goods and services, provided sustained unemployment of valuable production factors can be avoided.

2. Increases in world production of goods and services, made possible by international trade, are distributed in greater or less proportions among all the trading countries.

3. In the absence of mass migration or revolutionary technological developments beyond the range of present-day knowledge and experience, the principal opportunity for large improvement in the economic status of people residing in densely populated countries that are relatively poor in natural resources is through international trade. Trade permits such countries to import fuels, fabricating materials, and foodstuffs in exchange for fabricated goods. Thus can labor—the one valuable resource that such countries possess in relative abundance—be sold at higher prices in foreign markets.

4. If high-level employment of valuable production factors can be maintained in all countries, in a community of trading nations, improvements in production efficiency in one or more of the countries will contribute to increased production efficiency in all the countries in the trading community.

5. In order to maximize the production advantages of international trade, avoidance of excessive international trade barriers is necessary.

6. In order to maximize the production advantages of international trade, minimization of fluctuations in exchange rates of the monetary units of the several trading countries is necessary.

7. In a dynamic economic system—characterized by improvements in production methods, discoveries of new sources of raw materials supplies, extension of capital and improved technical methods to industrially backward regions, and changes in consumption habits—a continuous process of movement of production factors from one industry to another in each of the trading countries is necessary to full employment of all valuable production factors in industries with relatively high productivity.

8. If the international trading system is to function smoothly, each participating country must develop internal economic policies to facilitate full utilization of its valuable production factors in relatively high-productivity industries. These internal economic policies must be consistent with each country's political system, its economic system, and the fundamentals of international trade cited in paragraphs 5 and 6, *viz.*, avoidance of extreme international trade barriers and avoidance of extreme monetary exchange rate fluctuations.

OBSTACLES TO DEVELOPMENT OF A WORLD TRADING SYSTEM

These are foundational objectives of a world trade system that member nations are attempting to establish within the international political framework of the United Nations. Among the obstacles to successful accomplishment of the foregoing objectives are existing maladjustments in the internal economies of the member nations. Some of these internal economic maladjustments are a direct result of the recent war; some are a result of slow-moving evolutionary changes in world economy. Examples of the dislocating effects of the Second World War were cited in Chap. XXII of the present volume. Examples of disruptive effects of slow-moving evolutionary changes in world economy are to be found in many countries. Prior to the Second World War, for example, expansion of textile manufacturing in the Orient, particularly in Japan, was slowly undermin-

ing Great Britain's traditional advantage in foreign textile markets. As another example of slow-moving changes that call for economic readjustment, one may cite the fact that South American, Central American, and Caribbean countries were slower than some of the North American and European countries in making widespread use of power machinery in agriculture and manufacturing. These countries can probably increase their production efficiency through the importation of capital and the installation of more power machinery. Industrial realignments and developments called for in circumstances such as these involve the development of appropriate types of entrepreneurial leadership, the training or retraining of workers, the development of marketing organizations and markets, and in some cases modification of thought habits of political, industrial, and labor leaders. With problems such as these in mind, as well as problems of postwar reconstruction and the deleterious effects of extreme economic nationalism, representatives from 44 countries met at Bretton Woods, New Hampshire, in July, 1944, for the purpose of drawing up recommendations to their several governments for the establishment of international financial institutions capable of coping successfully with certain types of international economic problems that in all probability would arise in the postwar period. The International Monetary Fund and the International Bank for Reconstruction and Development were established as a result of recommendations made by the delegates who attended the conference there. The Fund is primarily concerned with the stabilization of the foreign exchanges and the Bank with the promotion of long-term foreign investment.

THE INTERNATIONAL MONETARY FUND

The purpose of the International Monetary Fund is the establishment of

> . . . a reasonably stable standard of international exchange to which all countries can adhere without sacrificing the freedom of action necessary to meet their internal problems.[1]

Under the international gold standard, as it operated for half a century or more prior to the First World War, fluctuations in foreign exchange rates were held within narrow limits by international move-

[1] United Nations Monetary and Financial Conference, *Articles of Agreement, International Monetary Fund and International Bank for Reconstruction and Development*, p. iv, U. S. Treasury, Washington, D. C., 1944.

ments of gold. Persistent loss of gold was a signal to the gold-losing country that action must be taken to lower its internal prices and costs. It was customarily accompanied by increases in bank discount rates with one or both of two results as follows: (1) attraction of short-term banking funds from abroad and (2) sufficient contraction of the domestic supply of currency and credit to force down domestic prices. The free gold-standard system operated prior to 1914 without international commitments on the part of trading nations to take particular types of action to force internal prices down when gold flowed out of the country or to permit internal prices to rise when gold flowed into the country. Habitual practices necessary to operation of the system appear to have developed as a result of national self-interest of the countries involved. During the period prior to the First World War, when the international gold standard functioned successfully, the leading commercial and industrial countries of the world were not called upon simultaneously to undergo internal structural changes in industry and trade of the magnitudes necessary to international economic equilibrium after that war. Countries were capable of absorbing the comparatively small internal adjustments necessary to foreign exchange rate stability and relatively free international trade during the half century prior to 1914 without political upheaval of a magnitude to cause revolutionary changes in the institutional framework of existing political and economic systems. The half century before 1914 did not see such major changes as the election in the United States of a New Deal government; the establishment of a dictatorship in Germany bent on setting up a system of national socialism; or Great Britain's majority vote in favor of socializing her heavy industries.

The half century or more prior to 1914, when the international gold standard appears to have functioned reasonably well, was a period of comparative peace and of unparalleled economic growth in Western countries. After 1914 the international gold standard and the economic and political habits of action essential to its successful operation were subject to strains of economic maladjustments which ripped asunder not only the gold standard but also other economic institutions of long standing.

Representatives of the 44 nations who met at Bretton Woods in 1944 to discuss proposals for international monetary policy were unwilling even to consider seriously internal deflationary policies after the Second World War to be applied with a rigor and persistence necessary to make the traditional gold standard function successfully.

The International Monetary Fund, which was approved at this conference, has been described as an

> . . . outgrowth of the experiments made in the 'thirties with stabilization funds and of the desire to devise a monetary system more flexible than the gold standard and better able to cope with the instabilities and emergencies of the postwar world.[2]

Members and Quotas. Original membership in the Fund was open to all those countries represented at the United Nations Monetary and Financial Conference whose governments accepted membership before a specified date.[3] Provision was made for membership of the governments of other countries at such time and in accordance with such terms as the Fund might prescribe. The Articles of Agreement of the Fund entered into force on Dec. 27, 1945. Before the end of 1946 a total of 39 countries had joined both the Fund and the Bank.[4]

Fund members have been assigned quotas [5] that determine the size

[2] *The Stakes of Bretton Woods,* A Statement by the Committee on International Policy of the National Planning Association, pp. 7-8, Washington, D. C., 1945.

[3] Extended from Dec. 31, 1945, to Dec. 31, 1946. *Federal Reserve Bulletin,* February, 1947, p. 126.

[4] These 39 countries were as follows:

Belgium	Egypt	Nicaragua
Bolivia	Ethiopia	Norway
Brazil	France	Panama
Canada	Greece	Paraguay
Chile	Guatemala	Peru
China	Honduras	Philippine Commonwealth
Colombia	Iceland	Poland
Costa Rica	India	El Salvador
Cuba	Iran	Union of South Africa
Czechoslovakia	Iraq	United Kingdom
Denmark	Luxembourg	United States
Dominican Republic	Mexico	Uruguay
Ecuador	Netherlands	Yugoslavia

In the year ending June 30, 1947, five additional countries were admitted to membership in the Fund, making a total of 44 members, and two further applications for membership were received. The new members were Italy, Lebanon, Syria, Turkey, and Venezuela. The applications were from Australia and Finland. Prior to Mar. 1, 1948, 46 countries had become members of the Fund. SOURCES: *Federal Reserve Bulletin,* October, 1946, February, 1947, and June, 1947. See also footnote 14, p. 318.

[5] *Articles of Agreement, op. cit.,* p. 42, for original quotas; *Federal Reserve Bulletin,* February, 1947, for quota revisions.

of subscriptions and voting power. As new members are taken in, they too will be assigned quotas. The United States quota, for example, is 2,750 million dollars; that of the United Kingdom, 1,300 million dollars. Quotas assigned to a number of other member nations are as follows: China, 550 million dollars; France, 525 million dollars; India, 400 million dollars; Canada, 300 million dollars; Netherlands, 275 million dollars; Belgium, 225 million dollars; Czechoslovakia and Poland, 125 million dollars each, and Union of South Africa, 100 million dollars. The aggregate of Fund quotas for the 39 member countries cited on page 310 of the present volume is in the neighborhood of 7 billion, 300 million dollars. These quotas are not permanently fixed inasmuch as they will be reviewed and possibly modified every 5 years, and they may be changed in the interim at the request of a member and with approval of the Fund membership.

The Articles of Agreement of the Fund provide that each member shall subscribe to the Fund an amount equal to its quota. A part of the subscription (about 25 per cent) is to be paid in gold or United States dollars, the remainder in the member currency, or in some cases non-interest-bearing notes or similar obligations. The subscriptions are to be utilized for the purpose of assisting members to maintain exchange rate stability.

Organization and Management. The principal office of the Fund is in Washington, D. C., a city of the member having the largest quota. The Fund is directed and managed by a board of governers, executive directors, a managing director, and a staff. All powers of the Fund are vested in the board of governors consisting of one voting governor and one nonvoting alternate appointed by each member in such manner as it may determine. The board selects one of the governors as its chairman. The executive directors, not less than 12 in number, are appointed as follows:

1. Five by members having the largest quotas.
2. Other directors by other Fund members in accordance with procedures laid out in the Articles of Agreement.

The executive directors are responsible for the conduct of the general operations of the Fund under authority delegated by the board of governors. The executive directors select a managing director to act as their chairman and as chief of the operating staff of the Fund. The first managing director was Mr. Camille Gutt of Belgium.[6]

[6] *Federal Reserve Bulletin*, p. 1125, Board of Governors of the Federal Reserve System, Washington, D. C., October, 1946.

Depositories. Each member country shall designate its central bank as a depository for all the Fund's holdings of its currency, or if it has no central bank it shall designate such other institutions as may be acceptable to the Fund. . . . The Fund may hold other assets including gold, in the depositories designated by the five members having the largest quotas and in such other designated depositories as the Fund may select. Initially, at least one half of the holdings of the Fund shall be held in the depository designated by the member in whose territory the Fund has its principal office and at least forty per cent shall be held in the depositories designated by the remaining four members referred to above. . . . In an emergency the Executive Directors may transfer all or any part of the Fund's gold holdings to any place where they can be adequately protected.[7]

Stabilization Procedures. On Dec. 18, 1946, the Fund announced initial par values of the currencies for 32 countries, which were set in terms of gold as a common denominator or in terms of United States dollars of the weight and fineness in effect on July 1, 1944. These par values are presented in Table 22.

Members undertake "to collaborate with the Fund to promote exchange stability, to maintain orderly exchange arrangements with other members, and to avoid competitive exchange alterations."[8] The Fund undertakes to supply its members on their initiative with the currencies of other members in exchange for gold or for the currency of the purchasing member. Such purchases of foreign currencies are limited to needs for the making of current payments consistent with the purposes of the Fund, and in amount they are limited to specified percentages of the purchasing member's quota. The foundational objectives are as follows:

1. To make foreign exchange available at stable rates to a member with a passive payments balance and pressure on its exchange during a period necessary to correction of conditions responsible for the passive payments balance.

2. To advise with members suffering from passive payments balances and pressure on their exchanges for the purpose of facilitating internal or external adjustments necessary to exchange rate stability.

3. To advise with members, whose payments balances may be persistently active and whose exchange may be scarce in foreign markets, for the purpose of facilitating the correction of conditions responsible for the maladjustment.

[7] *Articles of Agreement, op. cit.*, p. 28.
[8] *Articles of Agreement, op. cit.*, p. 5.

TABLE 22. INITIAL PAR VALUES OF CURRENCIES FOR 32 COUNTRIES *

Country	Unit	Par value	
		Grams of fine gold per currency unit	United States cents per currency unit
Belgium	Franc	0.0202765	2.28167
Bolivia	Boliviano	0.0211588	2.38095
Canada	Dollar	0.888671	100.000
Chile	Peso	0.0286668	3.22581
Colombia	Peso	0.507816	57.1433
Costa Rica	Colon	0.158267	17.8094
Cuba	Peso	0.888671	100.000
Czechoslovakia	Koruna	0.0177734	2.00000
Denmark	Krone	0.185178	20.8376
Ecuador	Sucre	0.0658275	7.40741
Egypt	Pound	3.67288	413.300
El Salvador	Colon	0.355468	40.0000
Ethiopia	Dollar	0.357690	40.2500
France	Franc	0.00746113	0.839583
Guatemala	Quetzal	0.888671	100.000
Honduras	Lempira	0.444335	50.0000
Iceland	Krona	0.136954	15.4111
India	Rupee	0.268601	30.2250
Iran	Rial	0.0275557	3.10078
Iraq	Dinar	3.58134	403.000
Luxembourg	Franc	0.0202765	2.28167
Mexico	Peso	0.183042	20.5973
Netherlands	Guilder	0.334987	37.6953
Nicaragua	Cordoba	0.177734	20.0000
Norway	Krone	0.179067	20.1500
Panama	Balboa	0.888671	100.000
Paraguay	Guarani	0.287595	32.3625
Peru	Sol	0.136719	15.3846
Philippine Commonwealth	Peso	0.444335	50.0000
Union of South Africa	Pound	3.58134	403.000
United Kingdom	Pound	3.58134	403.000
United States	Dollar	0.888671	100.000

* By courtesy of the *Federal Reserve Bulletin*, January, 1947, p. 12.

*

4. To permit devaluation of overvalued currencies in cases where "fundamental disequilibrium" exists, without the danger of retaliatory actions abroad and the initiation of unrestrained competitive exchange depreciation.

5. To discourage excessive exchange rate speculation and the disrupting effects of speculative mass flights of funds from weak-currency countries.

Limitations are set on amounts that exchange members may purchase from the Fund in relation to member subscriptions. In order, however, to achieve the foregoing objectives the Fund in its discretion and on terms that safeguard its interests may waive customary exchange purchase limitations to assist a member. The Fund may, for example, permit a member to purchase exchange in such amounts as to cause the Fund's holdings of the purchasing member's currency to increase by not more than 25 per cent of its quota during a period of 12 months ending on the date of the purchase or to exceed in aggregate 200 per cent of its quota. In such cases progressive service charges on purchases over and above customary limits are levied by the Fund.

The Fund may prevent use of its resources to meet a large or sustained outflow of capital from a member country. Such restrictions on the use of the Fund may be imposed even though the Fund's resources are customarily used for international capital transactions of reasonable amounts required for the expansion of exports or in ordinary course of trade, banking, or other business, or as required to effect capital movements that are met out of a member's own resources of gold or foreign exchange. If the Fund finds that a general scarcity of a particular currency is developing, it may so inform its members and issue a report setting forth the causes of the scarcity and containing recommendations designed to bring the scarcity to an end. The Fund may ration a scarce currency and may permit other members temporarily to impose limitations on the freedom of exchange operations in the scarce currency. In case of scarcity of a particular member country's currency the Fund may permit that member to relieve the scarcity by lending its currency to the Fund. This conclusion does not imply, however, that a principal function of the Fund is to permit sustained exporting of capital through the process of continuous and unlimited advances to the Fund on the part of members whose currencies may be chronically scarce.

Exchange stabilization, advice, and assistance to members faced with internal economic changes necessary to exchange stabilization, as distinct from a process of exchange stabilization through persistent,

one-way lending and borrowing, is the purpose of the Fund. If a country with a weak currency cannot adjust its internal economy in a manner to strengthen its currency without incurring persistent mass unemployment, that country may depreciate its currency by as much as 10 per cent without approval of the Fund and by greater amounts with approval of the Fund. These provisions are to permit a member some leeway in the direction of changing the par value of its currency to correct a "fundamental disequilibrium."

General Obligations of Members. Members of the Fund obligate themselves to refrain from imposition of restrictions on the making of payments and transfers for international transactions except during the postwar transition period and in cases where another member's currency is declared scarce by the Fund. Members obligate themselves in all cases to

> . . . have continuous regard in their foreign policies to the purposes of the Fund; and, as soon as conditions permit, . . . [to] take all possible measures to develop such commercial and financial arrangements with other members as will facilitate international payments and the maintenance of exchange stability.[9]

If a member is to avail itself of transition-period exchange-restriction privileges, as referred to in this paragraph, it must so notify the Fund before it becomes eligible to full obligations of Fund membership. Members that elect to avail themselves of transition-period restriction privileges must report periodically to the Fund concerning restrictions that remain in force. If, ultimately, the Fund finds that a member persists in maintaining restrictions that are inconsistent with the purposes of the Fund, the offending member may be declared ineligible to use the resources of the Fund. Ultimately the offending member may be required to withdraw from the Fund.

Conclusion. The exchange stabilization objectives of the International Monetary Fund can be achieved only to the extent that member nations are capable of bringing about—with the aid of the Fund and related institutions, such as the International Bank for Reconstruction and Development, the International Trade Organization, and domestic agencies—internal economic adjustments necessary to multilateral trade with a minimum of national restrictions. Success in achieving maximum objectives of the endeavor implies avoidance in large countries of mass unemployment and business depression of a character and magnitude seriously to undermine the customary levels

[9] *Articles of Agreement, op. cit.*, p. 29.

of imports, exports, and foreign finance. Avoidance of future business depressions in free-enterprise countries probably is too much to expect. In any event the Fund will serve a useful purpose if it can minimize international flights of "hot" money and prevent extremities of unilateral action in such directions as exchange control and exchange depreciation in cases where such actions are not justified by economic circumstances in the offending country.

A number of countries, whose international transactions are comparatively large, have not as yet become members of the Fund—the Soviet Union, Argentina, and Sweden, for example. Furthermore the future international economic positions of Japan, Germany, Austria, and a number of east-European countries is uncertain. If these countries cannot be brought into the Fund organization or induced to cooperate toward an objective of world-wide exchange stability, enduring success of the Fund in the achievement of its maximum objectives is dubious. If the Fund can achieve a modicum of success without membership of all important countries, those which have been hesitant to participate may find in time that their interests can best be served by becoming members. The least that can be said is that the International Monetary Fund Agreement represents a serious effort to establish types of cooperative practices without which world trade and finance are likely to become encumbered with unilateral restrictive practices of a character that might undermine the foundations of economic prosperity and opportunities for economic growth in many countries.

THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Promotion of long-term foreign investment is the principal function of the Bank. As indicated in the preceding section of the present chapter, the Fund is primarily concerned with stabilization of foreign exchange transactions. Long-term capital loans are needed in war-ravaged countries for the replacement of factories, power plants, railroads, communication systems, and other types of capital equipment. Other areas—particularly the Far East and Latin-American countries —need long-term loans to facilitate the initial installation of railroads, power plants, factory machinery, mining machinery, and other types of equipment. Installation of capital equipment in these areas can contribute to greater production through the development and fuller utilization of relatively abundant natural resources. Encouragement and regulation of long-term loans to facilitate industrial development

in war-ravaged areas and in industrially backward areas is the primary function of the International Bank for Reconstruction and Development.

The Bank will encourage long-term investments by helping to determine the soundness of projects for which loans are sought from the point of view of possible contributions of the loans to enlargement of national income in the borrowing country. If a loan is approved, the Bank will secure a guarantee from the borrowing country for payment of service charges and principal and will add its own guarantee to that of the borrower and the borrower's country. The Bank guarantee is a form of insurance for which the Bank must charge a guarantee commission of not less than 1 per cent per annum of the amount of the loan outstanding during the first 10 years of the Bank's operation. The risk assumed by the Bank in guaranteeing protection of investors is shared by the governments of all countries that are members of it. By assuming risk the Bank will reduce the risk assumed by investors. From the borrowers' point of view the advantages are less difficulty in securing loans, if the purpose for borrowing is economically sound, and, presumably, ability to secure loans at lower rates of interest than would be charged in the absence of the Bank's participation.

Although the principal function of the Bank is to encourage private investment, it may make loans directly to borrowers.

> The Bank may sell its own securities in the market of a member country, and in turn lend directly to the ultimate borrower. By this device the Bank will be able to consolidate numerous demands for small amounts of capital and to appeal to certain investors who might prefer to invest in securities issued by the Bank itself. The obligations thus incurred will be secured 100 per cent, as will be the guaranteed loans, by the Bank's reserves and unimpaired capital.[10]

The Bank may also make loans, for productive purposes, out of its capital assets; such loans not to exceed 20 per cent of the Bank's subscribed capital. "All loans and guarantees must have the consent of the country whose currency is involved." [11] Dollar loans, for example, both those made directly by the Bank and those guaranteed by it and floated in the United States must have the approval of the United States government.

The activities of the Bank are not designed to discourage or prevent

[10] *The Bretton Woods Proposals,* p. 11, U. S. Treasury Department, Washington, D. C., 1945.

[11] *Idem.*

international loans that may be negotiated independently by borrowers and lenders. The Bank proposes to supplement independent borrowing and lending; to arrange the loans made or guaranteed by it so as to encourage development of projects that are most urgent and useful; and to minimize, in so far as feasible, the disruptive effects of changes in the volume and direction of foreign lending. The resources and facilities of the Bank are for the use of members only.

Membership and Capital. The Articles of Agreement under which the International Bank for Reconstruction and Development was established provide that "the original members of the Bank shall be those members of the International Monetary Fund which accept membership in the Bank before December 31, 1945."[12] The Articles provide also that Bank "membership shall be open to other members of the Fund, at such times and in accordance with such terms as may be prescribed by the Bank."[13]

Prior to March, 1948, 46 countries had joined both the Bank and the Fund.[14]

The authorized capital stock of the Bank is 10 billion dollars in terms of United States dollars of the weight and fineness in effect on July 1, 1944. Each member is required to subscribe shares of the capital stock of the Bank. Each member is assigned a minimum subscription. The subscription assigned to the United States is 3,175 million dollars, that assigned to the United Kingdom is 1,300 million dollars. Subscriptions assigned to a number of other member countries are as follows: China, 600 million dollars; France, 525 million dollars; Canada, 325 million dollars; Netherlands, 275 million dollars; Belgium, 225 million dollars; Czechoslovakia and Poland, each 125 million dollars; Brazil, 105 million dollars; and the Union of South Africa, 100 million dollars. The aggregate of minimum Bank subscriptions for the 39 countries cited on page 310 of the present volume is in the neighborhood of 7 billion, 700 million dollars.[15]

The capital stock of the Bank may be increased by a three-fourths majority of the total voting power, the total voting power of the Bank being 250 votes per member plus one additional vote for each share

[12] *Articles of Agreement, op. cit.*, pp. 52, 82. The date was later extended to Dec. 31, 1946.

[13] *Ibid.*

[14] *Questions and Answers*, International Bank for Reconstruction and Development, Washington, D. C., 1948.

[15] *Articles of Agreement, op. cit.*, p. 84, and *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D. C., February, 1947, p. 127.

of stock held. The Bank is authorized to fix conditions under which members may subscribe shares of authorized capital stock of the Bank over and above their required minimum subscriptions. An increase in the authorized capital stock of the Bank does not obligate any member to subscribe any part of the increased capital, although every member will be given an opportunity to subscribe to an authorized increase in capital stock in proportion to its original minimum subscription.

Two per cent of each member's minimum subscription is payable in gold or in United States dollars within 60 days of the date on which the Bank began operations.[16] An additional 18 per cent of the minimum subscription is payable in the currency of the member when called for by the Bank. The remaining 80 per cent of minimum subscriptions shall be subject to call when the Bank has to fulfill obligations growing out of its loans or guarantees and is to be paid at the option of the member either in gold, in United States dollars, or in the currency required to discharge the obligation of the Bank for the purpose for which the call is made.

Organization and Management. The Bank has a board of governors, executive directors, a president, and such other officers and staff as are needed to operate the Bank and perform such duties as may be required of it. Each member country is privileged to appoint one voting governor and one nonvoting alternate to the board of directors. The board selects one of its members to act as chairman. Every 2 years executive directors, 12 in number, are selected as follows:

1. Each of the five member countries having the largest number of Bank shares appoints one executive director.

2. Seven executive directors are elected by the governors exclusive of those representing each of the five members having the right to appoint an executive director.

The Executive Directors are responsible for conduct of the general operations of the Bank under authority delegated by the board of governors. The executive directors function continuously at the principal office of the Bank, *i.e.*, in Washington, D. C.

A quorum for any meeting of the Executive Directors shall be a majority of the Directors, exercising not less than one-half of the total voting power.[17]

[16] Certain postponements are permissible for countries that have suffered serious war damage. See *Articles of Agreement, op. cit.*, p. 54. The Bank formally began operations June 25, 1946. See *Federal Reserve Bulletin, op. cit.*, p. 126.

[17] *Articles of Agreement, op. cit.*, p. 68.

Each appointed director is entitled to cast the number of votes allotted to the country that appointed him. Each elected director is entitled to cast the number of votes that counted toward his election. All votes that a director is entitled to cast must be cast as a unit.

The executive directors select as their chairman a president, who may not be a governor, an executive director, or an alternate for either; he has no vote except a deciding vote in case of an equal division.

In addition to the board of governors, the executive directors, and the president, the Bank has an advisory council of not less than seven persons which meets annually and on such other occasions as the Bank may request. Members of the council are advisers on matters pertaining to banking, commerce, industry, labor, and agriculture. They are selected by the board of governors with the purpose of securing advisers who have special knowledge of the foregoing areas of economic endeavor. The services of other experts are made available to the Bank through the appointment of loan committees. Each loan committee must include an expert selected by the governor representing the member in whose territories the project is located and one or more members of the technical staff of the Bank.

Depositories. Each member shall designate its central bank as a depository for all the Bank's holdings of its currency, or if it has no central bank, it shall designate such other institution as may be acceptable to the Bank. . . . The Bank may hold other assets, including gold, in depositories designated by the five members having the largest number of shares and in such other designated depositories as the Bank may select. Initially, at least one-half of the gold holdings of the Bank shall be held in the depository designated by the member in whose territory the Bank has its principal office, and at least forty per cent shall be held in the depositories designated by the remaining four members referred to above, each of such depositories to hold, initially, not less than the amount of gold paid on the shares of the member designating it. . . . In an emergency the Executive Directors may transfer all or any part of the Bank's gold holdings to any place where they can be adequately protected.[18]

Conclusions. It is reasonable to believe that the Bank's activities will contribute to an increase in the aggregate volume of foreign lending, and, in a number of respects, to a more stable foundation for foreign loans. A primary purpose of the Bank is supplementation and promotion of private foreign lending; not replacement of it. The insurance feature of the Bank, whereby losses from default are borne by many countries, should tend to make default less popular and more

[18] *Articles of Agreement, op. cit.*, p. 71.

difficult, by creating an international public opinion against it. When a borrower defaults on a loan granted or guaranteed by the Bank, the burdens of his default falls not alone upon some wealthy foreign "Shylock" but upon his own government and upon the governments of a community of nations with membership in the Bank. Defaulting a debt owed to a wealthy stranger has a different psychological impact from that caused by defaulting a debt participated in by one's friends and neighbors. This aspect of the Bank's activities should contribute both to increased confidence on the part of investors in foreign securities and to more moderate rates of interest.

The Bank is likely to be better situated to judge the soundness of some foreign loans than any private individual or agency acting alone. This fact likewise should reduce somewhat the risk element incident to foreign lending and the interest rates involved. Interest charges, particularly on investments of high risk, are likely to be lower with Bank participation than without. Lower rates on high-risk loans may reduce somewhat the vicious circle of high risk, high interest, and higher risk because of high interest. Another way in which the Bank's activities may contribute to increase the aggregate of foreign loans is by establishing standards and precedents that private creditors may follow. Still other ways in which it may contribute to increases in the aggregate of foreign lending are through intergovernmental division of the risks incident to loans for projects in member countries with weak governments or socialized industries. A loan to a country with a weak government indirectly may serve to strengthen the weak government and, in any event, Bank loans with a broad base of intergovernmental participation are more likely to be extended in such cases than purely private loans. In the case of socialized industries, particularly in countries where a large proportion of industry is socialized, private loans from abroad are difficult to secure. The experience of the U.S.S.R. during the two decades after the First World War may be cited as an example. A country with a large part of its industry socialized might prove to be a very good risk from the point of view of the Bank, whereas a private loan might be difficult to secure. A government's guarantee to its neighboring governments, which have membership in the Bank, might appear to be more meaningful than a guarantee by a socialist government to a foreign private capitalist. Finally there may be an advantage to small, industrially backward countries in borrowing through the instrumentalities of the Bank, from the point of view of reducing the dangers of an obnoxious kind of imperialism

on the part of private lenders. This factor also may contribute to increased international lending as a result of the Bank's activities.

An aspect of the Bank which is least assuring is the small degree of emphasis placed upon stabilization of the aggregate of foreign lending as contrasted with the emphasis upon increasing the aggregate volume of foreign lending. The history of foreign lending for two centuries or more is a record of periods of rapid expansion in the aggregate volume of foreign investments followed by sharp contractions, disruption of economic activities, unnecessary losses, and excessive default. One of the explicit purposes of the Bank is

> . . . to promote the long-range balanced growth of international trade and the maintenance of equilibrium in balance of payments by encouraging international investment for the development of the productive resources of members, thereby assisting in raising productivity, the standard of living, and conditions of labor in their territories.[19]

In this connection little emphasis appears to be placed upon the possible use of Bank funds and Bank guarantees to operate counter to the business cycle for the purpose of contributing to the stabilization of the flow of foreign loans as distinct from contributing to the aggregate flow of foreign loans in periods of economic prosperity. In the early postwar years (years following the Second World War) devastated areas in Europe need, and will continue for some years to need, huge loans for reconstruction. When the reconstruction is completed, Europe will be faced with a problem of paying service charges and principal pertaining to these loans and with a problem of exporting relatively more goods and importing relatively less. Unless foreign loans can be channeled in rapidly increasing volume to industrially backward regions, when that time comes, world economy may suffer a serious setback incident to internal readjustment problems of large magnitude in capital-exporting countries. From the points of view of world economic stability, equilibrium in international payments balances, and, in the last analysis, high productivity, high living standards, and improved labor conditions, the equilibrium aspect of foreign investing may be more important than the expansion aspect of foreign investments. In the Articles of Agreement pertaining to the establishment and operation of the Bank the equilibrium aspects of foreign investments appear to have been accorded less emphasis than the expansion aspect of international lending.

[19] *Articles of Agreement, op. cit.*, pp. 51, 52.

CHAPTER XXIV

THE PROPOSED INTERNATIONAL TRADE ORGANIZATION

The proposed International Trade Organization is intended to apply to international trade the same principles of intranational cooperation and consultation that the institutions created at Bretton Woods have applied to international finance. Plans for such a trade organization were not formally initiated until after the end of the Second World War, and negotiations for its establishment were completed in Havana, Cuba, in March, 1948.[1]

On Dec. 6, 1945, the U. S. Secretary of State published *Proposals for Expansion of World Trade and Employment.*[2] These proposals suggested that the United Nations call an international conference on trade and employment to create an international trade organization as part of the United Nations structure. Also in December, 1945, the United States invited 15 nations to meet to draft a tentative charter of an international trade organization for consideration later by the general conference.[3] In February, 1946, the Economic and Social Council of the United Nations adopted a resolution to call an international conference on trade and employment and establish a preparatory committee to prepare agenda for such a conference. Representatives of 18 governments [4] were appointed to the preparatory committee, which met in London in October and November, 1946. Representatives of 17 countries participated; the eighteenth country—Russia—has not taken part in the negotiations for the establishment of an international trade organization.

[1] United Nations Conference on Trade and Employment Held at Havana, Cuba, from Nov. 21, 1947 to Mar. 24, 1948, *Final Act and Related Documents.*

[2] *Department of State Bulletin,* Dec. 9, 1945, p. 912. Also separate pamphlet, Department of State publication 2411, November, 1945.

[3] U. S. Department of State, *American Trade Proposals,* Publication 2551, Washington 1946, pp. 21, 22.

[4] Australia, Belgium-Luxembourg, Brazil, Canada, Chile, China, Cuba, Czechoslovakia, France, India, Lebanon, Netherlands, New Zealand, Norway, South Africa, U.S.S.R., the United States, and the United Kingdom. This list includes the 15 countries previously invited by the United States, plus Chile, Lebanon, and Norway. *Ibid.,* p. 22.

In preparation for the London Conference the United States prepared and presented as a basis for discussion a *Suggested Charter for an International Trade Organization of the United Nations.*[5] A "Preliminary Draft" Charter emerged from the London Conference.[6] This charter was worked on by an interim drafting committee in New York in January and February, 1947, and formed the basis for discussion at the second meeting of the preparatory committee which met in Geneva, Switzerland, in April to August, 1947. The Geneva Conference prepared another and supposedly final draft of a charter to be submitted for approval to a world trade conference in Havana, Cuba, in November, 1947. Representatives of 53 countries signed the Final Act in Havana in March, 1948. (Russia did not participate.) This Act must now go to the several legislative bodies of the signatory countries for approval.

Although the protracted discussions and the compromises of the London, Geneva, and Havana conferences made numerous changes in the provisions of the first suggested Charter, the nature of the subject matter included changed very little. The wide range of subjects included and the extent to which they impinge upon the domestic policies of individual countries are especially noteworthy.

ECONOMIC PROBLEMS INCLUDED WITHIN THE SCOPE OF THE HAVANA CHARTER FOR AN INTERNATIONAL TRADE ORGANIZATION

Members of the proposed International Trade Organization are expected to collaborate in five major aspects of international economic policy. These are listed in the charter[7] as follows:

1. Employment
2. Economic development
3. General commercial policy
4. Restrictive business practices
5. Intergovernmental commodity arrangements

Employment.

Members recognize that the avoidance of unemployment . . . and maintenance in each country of useful employment opportunities . . . and a large and steadily growing volume of production and effective demand for goods and services is not of domestic concern alone, but is also a necessary condition

[5] *Department of State Publication* 2598, September, 1946.
[6] *Department of State Publication* 2728, December, 1946.
[7] Chapters II-VI of the *Havana Charter,* United Nations publication, 1948.

for . . . the expansion of international trade and thus for the well-being of all other countries.[8]

Each member is to commit itself to domestic policies designed to achieve and to maintain domestic employment through measures appropriate to its own political and economic institutions and not inconsistent with the purposes of the International Trade Organization. Members agree to make full contribution to action designed to correct fundamental disequilibrium in balances of payments that handicap other members in their efforts to maintain employment, and in other ways to cooperate in the maintenance of high-level world demand.

Economic Development.

Members recognize that the productive use of the world's human and material resources is of concern to, and will benefit, all countries and that the industrial and general economic development of all countries, particularly of those . . . countries whose economies have been devastated by war, will improve opportunities for employment, enhance the productivity of labor, increase the demand for goods and services, contribute to economic balance, expand international trade, and raise levels of real income.[9]

Members are to promote economic development in their own and other countries and are to agree to place no unreasonable impediments on international movements of capital, materials, equipment, technology, trained workers, and managerial skill. It is recognized that countries engaged in programs of economic development may find it desirable to adopt protective measures for the promotion of new industries. Such measures may be adopted in cases where they do not impose undue burdens upon international trade or increase unnecessarily the difficulties of adjustment for the economies of other countries.

General Commercial Policy. The chapter of the charter dealing with commercial policy covers a wide range of problems and is primarily intended to lower barriers to international trade and minimize discrimination. The various provisions of this chapter were subject to protracted negotiations at London, Geneva, and Havana. Some reservations are confusing, but it is possible to state the general nature of the provisions.

Members agree to give each other general most-favored-nation treatment with respect to customs duties. They agree to "enter into

[8] *Ibid.*, p. 6.
[9] *Ibid.*, p. 8.

. . . negotiations [with each other] directed to the substantial reduction of . . . tariffs and other charges on imports and exports, and to the elimination of . . . preferences." [10] Over one hundred such negotiations, in fact, took place at Geneva simultaneously with the Charter discussions.[11]

One of the basic problems that was the subject of much discussion was the problem of quantitative restrictions or quotas. The United States regarded these as being much more serious than tariffs as impediments to international trade. A number of countries felt that they might find it necessary to impose import quotas, especially for short-run emergency purposes. The Charter is opposed to quantitative restrictions in principle but approves certain exceptions, the most important of which is for the benefit of countries that may find themselves in balance-of-payments difficulties. It is expected that this type of exception will require the approval of the International Monetary Fund.[12]

The most important remaining provisions of this chapter of the Charter are concerned with subsidies and state trading enterprises. Subsidies are disapproved in principle. State trading enterprises are to avoid discrimination among member nations and to be influenced solely by commercial considerations in external purchases or sales.

In general, membership in the International Trade Organization is to imply acceptance of the idea that trade restrictions and preferences are harmful to the interests of the community of trading nations, that trade restrictions should be reduced to the lowest practical minimum, and that each member country will freely negotiate and wholeheartedly cooperate toward this end. The general philosophy of procedure seems to be that disclosure of trade restrictions, discussion of them in open forum, and voluntary negotiation for reciprocal elimination of harmful restrictions will go a long way toward creating freer trade conditions, even in the absence of hard and fast commitments and of penalty measures.

Restrictive Business Practices. The chapter of the Charter dealing with restrictive business practices is primarily concerned with cartels and other types of monopolistic organization.

The Charter specifies that

Each member shall take appropriate measures and shall cooperate with the Organization, to prevent on the part of private or public commercial enter-

[10] *Ibid.*, p. 14.

[11] *Department of State Bulletin*, Aug. 10, 1947, p. 292.

[12] *Havana Charter*, pp. 21, 22, United Nations publication, 1948.

prises business practices affecting international trade which restrain competition, limit access to markets, or foster monopolistic control whenever such practices have harmful effects on the expansion of production or trade . . .[13]

The Charter provides that combinations or agreements for such purposes as price fixing, allocation of markets or customers, boycotting of particular enterprises, suppression of technological processes or inventions, or unauthorized use of patent, trade-mark, or copyright privileges shall be subject to investigation by the Organization. The Charter provides also for the conduct of studies of types of restrictive business practices in international trade, and of conventions, laws, and procedures in member countries pertaining to restrictive business practices. The findings of such investigations are to be published. Members agree to take the fullest account of the Organization's findings and of its requests and recommendations growing out of these studies and to take all possible steps by legislation or otherwise to ensure that enterprises within their jurisdictions do not engage in practices in violation of Charter commitments.

Intergovernmental Commodity Arrangements. All the drafts of a charter for the International Trade Organization have had provisions concerning intergovernmental commodity arrangements, particularly in respect to primary commodities. The Charter states that[14]

> Members recognize that the conditions under which some primary commodities are produced, exchanged and consumed are such that international trade in these commodities may be affected by special difficulties such as the tendency toward persistent disequilibrium between production and consumption, the accumulation of burdensome stocks and pronounced fluctuations in prices. . . . The Members recognize that such difficulties may, at times, necessitate special treatment of the international trade in such commodities[15] through inter-governmental agreement.

Members agree that intergovernmental commodity agreements may be employed to enable countries to find solutions to special commodity difficulties, such as alleviation of problems that arise when

[13] *Ibid.*, p. 35.

[14] *Ibid.*, p. 39.

[15] "For the purposes of this Charter the term 'primary commodity' means any product of farm, forest or fishery or any mineral, in its natural form or which has undergone such processing as is customarily required to prepare it for marketing in substantial volume in international trade." The term also includes goods closely related to the foregoing in production or utilization and in exceptional circumstances commodities that do not fall precisely under either the primary or the extended definition. *Ibid.*, p. 39.

market forces fail to bring about production adjustments; moderation of price fluctuations of primary commodities; protection of natural resources from unnecessary exhaustion, and production expansion of a commodity in short supply. The Charter provides that commodity agreements to achieve the foregoing purposes shall be open to members of the International Trade Organization and to nonmembers who may be invited by the Organization to participate. The Charter also provides that adequate provision shall be made for participation in commodity agreements of countries which are largely dependent for consumption on imports of a commodity involved in such arrangements. Members agree that

> Full publicity shall be given to any intergovernmental commodity agreement proposed or concluded, to the statements of considerations and objectives advanced by the proposing Members, to the nature and development of measures adopted to correct the underlying situation which gave rise to the agreement and, periodically, to the operation of the agreement.[16]

In this as in other chapters of the proposed Charter various exceptions are allowed primarily to permit members to act independently in matters pertaining to health, the preservation of life, and in matters pertaining to national defense.

MEMBERSHIP AND ORGANIZATION

The Havana Charter provides that original membership in the International Trade Organization is open to all States invited to the United Nations Conference on Trade and Employment whose governments accept the Charter by Sept. 30, 1949. Membership of other countries that accept the provisions of the Charter will be subject to the approval of the Organization.[17]

The Organization's operating structure is to consist of a Conference, an Executive Board, Commissions that may be established in accordance with Charter provisions, a Director General and Staff, and such other organs as may be required.

> The Conference shall consist of all the Members of the Organization . . . Each Member shall have one vote in the Conference . . . Except as otherwise provided in this Charter decisions of the Conference shall be taken by a majority of the Members present and voting . . . The Executive Board shall consist of Eighteen Members of the Organization selected by the Conference.

[16] *Ibid.*, p. 40.
[17] *Ibid.*, p. 44.

The Director General is to be appointed by the Conference upon the recommendation of the Executive Board and is to be subject to the general supervision of the Board.[18]

CONCLUSIONS

The proposed International Trade Organization, like the International Monetary Fund and the International Bank for Reconstruction and Development, is to be an instrumentality of the Economic and Social Council of the United Nations. These agencies represent a group endeavor on the part of many nations to facilitate reconstruction in a war-damaged world, to promote economic growth, and to foster economic and financial stability. These results are ingredients of world peace, and for that reason they are interests of an organization of United Nations dedicated to the maintenance of world peace. The International Monetary Fund, the International Bank for Reconstruction and Development, and the proposed International Trade Organization have functions that are complementary. It is a responsibility of the Economic and Social Council to coordinate these functions.

Specifically, it is to be the function of the International Trade Organization to contribute to world trade expansion by minimizing restrictions imposed by governments or private combines and cartels, to facilitate industrial development in industrially backward countries, to minimize fear and confusion arising from serious maladjustment between production and consumption of certain primary commodities, and to contribute in so far as possible to minimization of the disruptive effects upon world economy of business depression and mass unemployment in any one of or all the member nations. During the period of half a century or more immediately preceding the First World War many countries traded, not without any international trade barriers, but in the absence of extreme restrictive measures such as those which were imposed during the interwar period. The motive, at least in part, for the relatively free trade of the earlier period was national self-interest. Possibly that motive is yet sufficiently strong to exercise a moderating effect upon trade-restrictive influences if it can be vitalized through the activities of an international trade organization. The International Trade Organization is not designed to impose upon its members inflexible commitments that cannot be broken without war, boycott, or other punitive measures against an offending member. It does provide a mechanism for multilateral agreements, a forum for

[18] *Ibid.*, pp. 45–47.

discussion and compromise, a procedure for attacking at least some of the basic causes of fundamental disequilibria, and an atmosphere in which liberal trade practices can develop if the self-interest motives of member nations are sufficiently strong, in this generation, to support them.

There is little reason to believe that business depression in free-enterprise national economies, or its counterpart of economic maladjustment in socialized national economies, can be prevented by International Trade Organization policies and parallel national employment policies for which the organization Charter provides. It is possible, however, that the Organization and its sister institutions can prevent depression and its impact upon world economy from degenerating into extreme forms of international economic warfare.

International cartels are not ruled out of existence by the organization Charter, but provision is made for bringing their activities into the open where they can be subjected to the influence—corrective influence, possibly—of international public opinion.

The Organization Charter does not prohibit the establishment of governmental barriers to international trade, but it subjects them to international agreement or, at least, to the joint consideration of many nations. If minimization of trade restrictions serves the best aggregative interests of member nations, the collective weight of persuasive influence, voluntarily exercised, may be sufficient to tip the balance in favor of more liberal trade policies than would arise from unilateral national actions taken singly and individually. No member nation of the International Trade Organization is to relinquish its sovereign right to regulate its dealings with foreign countries, but the members are to commit themselves to consult with other members regarding actions that may be harmful to these other members. Deliberation, consultation, a weighing of individual national interests against community national interests, and a deliberate judging of the possible ultimate effect of a nation's action upon itself may yield constructive results. Plans for the International Trade Organization are founded upon an assumption that all nations gain from relatively unrestricted world trade. If this assumption, which has been examined at length in earlier chapters of the present volume, is correct, the International Trade Organization will have, at least, a chance of rendering a useful service.

There is little probability that all important commercial nations will become members of the proposed Organization at an early stage in its development. The 17 nations that met at Geneva were reported as

representing 80 per cent of world trade.[19] The 53 countries that signed the Final Charter probably represent more than 80 per cent of world trade. As economic recovery takes place in such war-damaged countries as Germany, Japan, and Russia this percentage may decline. However, the 17 nations referred to carried on over half of world international trade in prewar years.[20] If these and other countries, therefore, whose representatives signed the final Charter, become members of the Organization by acts of their legislative bodies, the Organization will represent a sufficient volume of trade to be extremely influential in international economic affairs. If the Organization succeeds in accomplishing a sufficient part of its objectives to improve the economic status of its members, other nations may be induced, in time, to seek the benefits of membership.

[19] *The New York Times*, Aug. 21 and 24, 1947.
[20] *Foreign Commerce Yearbook*, 1938, p. 426.

CHAPTER XXV

POSITION OF THE UNITED STATES IN WORLD ECONOMY

During the past two centuries the United States has evolved from a colonial status in world economy to that of wealthiest nation in the world and one of the most influential. During the past three decades the United States has ceased to be a debtor nation on international account and has become the world's leading creditor nation. This change in debtor-creditor status has profound implications from points of view of the country's trade balance, its customs tariff policy, and its influence upon political and economic systems abroad.

TARIFF HISTORY

For more than a century the United States has had a system of protective tariffs. Before the American Revolution England exercised a controlling influence over colonial tariff policy. After it the Constitution gave Congress power to regulate commerce with foreign nations and among the several states. When the separate states ratified the Constitution, they renounced their separate rights to levy customs duties against either sister states or foreign countries. The first Congressional tariff act was passed in 1789. Like the colonial measures that had come into existence by separate acts of the several states during the period of confederation, this first national act was principally for the purpose of raising revenue. The protective motive did not assume primary importance until the tariff act of 1816. During the decade prior to 1816 there had been an almost complete cessation of foreign competition as a result of blockades incident to the Napoleonic Wars and the War of 1812. During this period new industries got a foothold in America and were prosperous. With the reopening of the channels of international trade in 1815 came an influx of foreign manufactures, particularly textiles and iron goods, and a rising tide of protective sentiment. The emergency was so great that opposition to acceptance of the protective principle was overridden in 1816. Protective sentiment continued to grow until after 1828, the year when the so-called "Tariff of Abominations" was passed. This act imposed

the highest duties in force at any other time previous to the Civil War.

During the period from 1828 to 1861 Northern manufacturers favored protection. They were opposed by Southern planters. These opposing interests seesawed back and forth in the legislative halls of Congress, sometimes one group having the upper hand, sometimes the other. The tariff act of 1832 imposed lower duties than those of the 1828 act, and the next year, 1833, provision was made for still further reductions. A reversion to higher protection occurred in 1842 only to be followed by a swing back to lower duties in 1846 and a further reduction in 1857. The rates of the 1857 act were lower than any that had been in force since 1816, but these relatively low rates were destined to be short-lived. A new bill was voted in 1860, after the South had seceded, and the rates were put back to the 1846 level or above. Then came the Civil War and with it need for additional Federal revenue. The acts of 1862 and 1864 brought United States tariffs back to about the level of 1828. Tariffs remained generally high after the Civil War in spite of persistent agitation and minor reductions in 1870, 1872, and 1883. Duties were raised in the McKinley Tariff of 1890 and lowered somewhat by the Wilson Tariff of 1894. The seesawing, up and down, continued until 1913. The Underwood Tariff Act of 1913—passed after the election of Woodrow Wilson, a Democratic president—slashed rates more than they had been slashed since the 1840's and 1850's. However, the measureable effects of the low 1913 rates were obscured by developments incident to the First World War. After the war the Republicans came into power again. They legislated an emergency tariff act for protection in 1921 and consistently maintained distinctly protective duties in the acts of 1922 and 1930.[1] When again a Democrat, Roosevelt, came into the presidency (1933) recourse was had to legislation providing for the negotiation of reciprocal trade agreements in place of a general lowering of rates similar to actions that had been taken in earlier Democratic administrations.[2] Reciprocal trade agreements negotiated since June, 1934, have resulted in some relaxation of the trade restrictions that were in force when the Democrats came into power.

[1] The 1930 act was the last general tariff act of the Hoover administration. However, certain commodities that had previously been on the free list were made taxable by a provision in the Revenue Act of 1932. The principal commodities affected were petroleum, copper, lumber, and coal.

[2] An Act to Amend the Tariff Act of 1930. This amendment authorized the President to enter into reciprocal foreign trade agreements with foreign countries and to modify existing duties necessary to the carrying out of such agreements.

Protection in the United States has been maintained for more than 100 years. At times the general movement of rates has been upward; at other times the movement has been downward; but at no time has the rate structure closely approached a free-trade status. There is no accurate way of measuring the height and effectiveness of a protective tariff wall, but such evidences as are available suggest that 1932 may have been the all-time high level of United States protection for classes of goods subject to duty.[3] In Fig. 8 are shown ratios of duty collected to the value of dutiable imports (*A*) and duty collected to value of total imports (*B*). The ratio of duty collected to value of dutiable imports (curve *A*) was higher in the early 1930's than it had been at any earlier period. This fact is due partly to the increase in tariff rates in 1930 and partly to the stability of specific duties during the general price decline of the depression years. The ratio of tariff revenue to the value of total imports (curve *B*) was lower in the early 1930's than before the First World War but higher than it had been during and immediately after the war. The rise in this ratio after 1920 was due in part to rate increases and in part to the fact that prices of imports declined in relation to specific duties. The decline from 1900 to 1920 was due in part to a lowering of tariff rates, in part to the fact that prices of imports rose during this period faster than specific duties, and in part to the fact that goods on the free list constituted an increasing proportion of United States imports. The decline in the two ratios in the late 1930's and the 1940's was due largely to increasing prices. The reciprocal trade agreements of the 1930's also had some effect by way of reducing tariff rates.

It is significant to note that the ratio of the value of free-list imports to the value of total imports has increased during the past century as the United States has become more highly industrialized. From 1841 to 1850, 18 per cent of total imports into the United States (in terms of value) were on the free list. Comparable percentages for later periods were as follows: 1876 to 1880, 32 per cent; 1896 to 1900, 47 per cent; 1911 to 1915, 57 per cent; 1926 to 1930, 66 per cent; 1936 to 1940, 60 per cent.[4] Ratios of customs revenue to the value of imports (duti-

[3] The removal of certain goods from the free list provided for in the 1932 revenue act and the general decline in prices raised the 1932 tariff wall above that of 1930. Declining prices tend to raise the ad valorem equivalents of specific duties. See LOVEDAY, A., "The Measurement of Tariff Levels," *Journal of the Royal Statistical Society*, Part IV, 1929, pp. 487–516, discussion of statistical measurement of tariff levels.

[4] *Statistical Abstract of the United States*, 1946, p. 930.

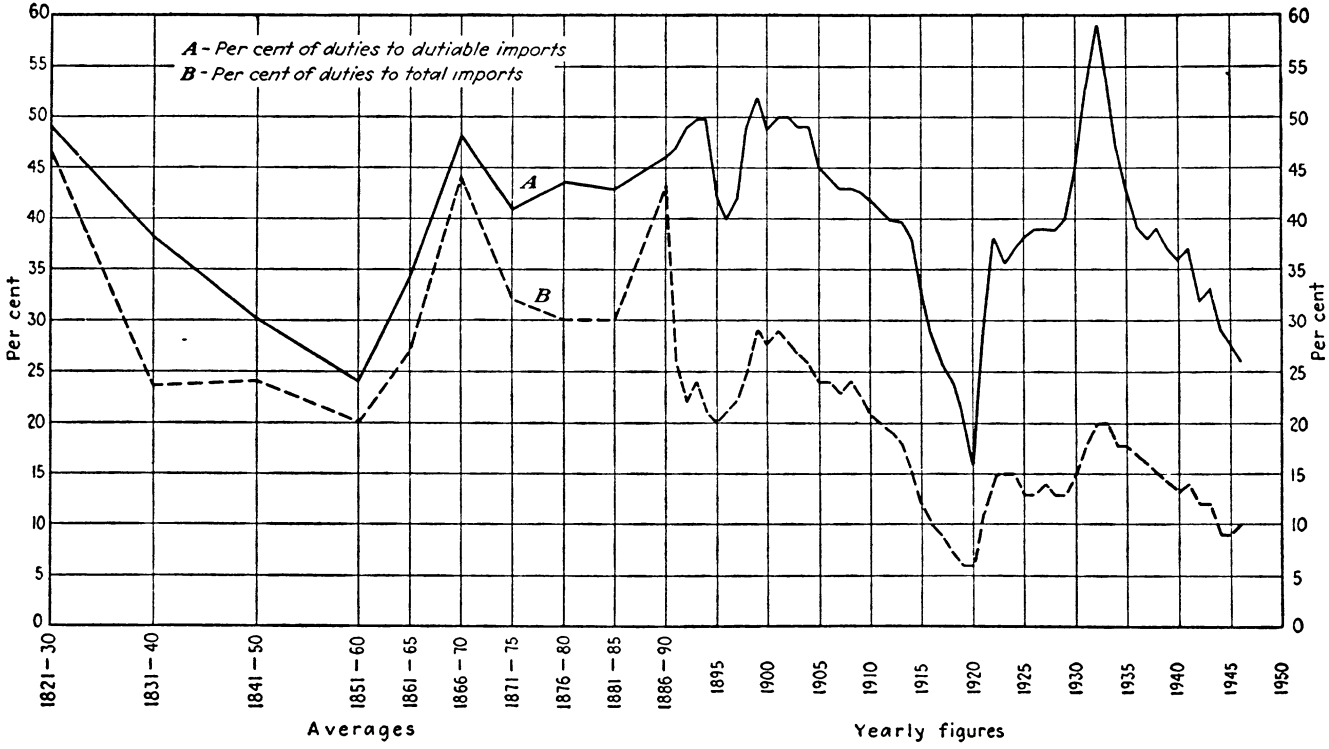


FIG. 8. RATIOS OF REVENUE FROM DUTIES TO VALUE OF IMPORTS INTO THE UNITED STATES, 1821 TO 1946

SOURCES: 1821 to 1944 inclusive, *Statistical Abstracts of the United States*. 1945 and 1946, *Extracts from Monthly Summary of Foreign Commerce of the United States*, January, 1947. Prior to 1945 the data are ratios of estimated amounts of duties collected to all imports and to dutiable imports. The data for 1945 and 1946 are ratios of actual amounts of duties collected to imports for consumption and dutiable imports for consumption. These differences do not seriously distort the comparability of the data for purposes of trend analysis.

able or total) may be suggestive of changing levels of protection, but they should be used for this purpose with discretion because (1) proportions of free and dutiable imports are not constant, (2) tariff rate changes are not highly correlated with price changes, and (3) tariff revenue does not always change in proportion to ad valorem tariff rate changes. If, for example, a duty is high enough to exclude the goods taxed, it yields no revenue.

TRADE AND PAYMENTS BALANCES

Prior to the First World War the United States was a debtor nation; her trade balance was favorable. The United States is now a creditor nation. The shift from debtor to creditor position has an important bearing upon a country's trade balance status and upon her commercial policy.

Trade Balance. Between 1850 and 1873 United States imports of merchandise exceeded merchandise exports regularly, year after year. In so far as data are available, they indicate that merchandise imports exceeded exports during earlier years also, but for the purposes at hand we need not go into a detailed analysis of conditions that prevailed during the first half of the nineteenth century. The persistent excess of imports over exports between 1850 and 1873 appears to have been largely a result of gold and silver exports from the United States and capital imports (purchase of United States securities by foreign investors).[5] Net imports of merchandise for the 24 years in question (1850–1873) aggregated about 1,500 million dollars. Net exports of gold and silver for the same period aggregated approximately 1,100 million dollars. American securities held abroad are estimated to have increased from about 200 million dollars in 1850 to possibly 1,000 million dollars in 1873. Other invisible items that brought the account into balance for the period as a whole include service charges on loans, tourist expenditures, immigrant remittances, and shipping services.[6]

The year 1873 marked a world-wide crisis. European lending to the United States temporarily ceased; railroad construction was halted, and in the following year, 1874, the trade balance shifted. Between 1874 and 1914 the trade balance of the United States was favorable every year except three: 1875, 1888, and 1893, when there were small import balances. The exports consisted of both raw materials and manufactures. In the 1870's crude materials and foodstuffs constituted

[5] BULLOCK, WILLIAMS, and TUCKER, "The Balance of Trade of the United States," *Review of Economic Statistics*, July, 1919, pp. 215*ff*.

[6] *Ibid.*

more than half the value of the country's total exports. Between 1910 and 1915 the value of manufactured exports exceeded that of other classes of exports. Exports were drawn out of the country in excess of imports in payment of a rising tide of service charges on accumulated and accumulating foreign borrowings.

At the outbreak of the First World War the United States was a debtor nation on balance to the extent of some 3 billion dollars.[7] With the war came a substantial increase in Europe's demand for goods. The United States being the only highly industrialized, large nation that was not drawn into the war at an early date, this country was called upon to supply an increased demand for manufactured goods. Also American agriculture was favorably situated for profitable expansion to supply an increasing wartime demand for foodstuffs. Belligerent countries sold some of their holdings of United States securities to American investors in order to raise funds for the purchase of equipment and supplies; at the same time they were borrowing in this country. Net exports of private United States capital during the period July 1, 1914, to Dec. 31, 1919, are estimated to have totaled about 4,600 million dollars.[8] United States government payments and advances to foreign governments during this period are estimated to have totaled about 10,400 million dollars.[9] The net balance of merchandise exports during the period July 1, 1914, to Dec. 31, 1919, is estimated to have totaled about 16 billion dollars.[10]

After the United States declared war in 1917, the floating of private loans in the United States for European countries subsided until the end of the war. After the war private lending was resumed. Foreign lending contributed to the building up of huge export balances of merchandise on the part of the United States during the war. After the war foreign lending by the United States continued in one form or another and the trade balance remained favorable. During the depres-

[7] YOUNG, R. A., *The International Financial Position of the United States*, p. 3, University of Pennsylvania, Philadelphia, 1929; *A New Estimate of American (United States) Investments Abroad, Trade Information Bulletin* 767, U. S. Department of Commerce, 1931, p. 7; and BULLOCK, WILLIAMS, and TUCKER, *op. cit.*

[8] MADDEN, JOHN T., *et al.*, *America's Experience as a Creditor Nation*, pp. 48*ff.*, Prentice-Hall, Inc., New York, 1937. Repatriation of American securities is estimated to have totaled in excess of 2 billion dollars. New issues of foreign securities in the United States (exclusive of refunding issues) amounted to nearly 4 billion dollars and capital imports to about 1,400 million dollars.

[9] *Ibid.*

[10] *Ibid.*

sion years, 1929 to 1933, United States foreign trade (both exports and imports) declined precipitately. Exports declined from approximately 5,200 million dollars in 1929 to approximately 1,700 million dollars in 1933. Imports declined from approximately 4,400 million dollars in 1929 to approximately 1,400 million dollars in 1933. The export trade balance declined from approximately 842 million dollars in 1929 to approximately 225 million dollars in 1933. In 1936 net exports reached the lowest point for any year in the 42-year period, 1895 to 1936 inclusive, *i.e.*, approximately 33 million dollars.[11] After 1936 the export trade balance of the United States increased. It was over 1 billion dollars in 1938; in 1946 it was almost 7 billion dollars. The huge export balance in 1946 was largely a result of postwar loans and gifts.[12]

TABLE 23. UNITED STATES BALANCE OF PAYMENTS 1922–1928, 1929–1933, 1935, AND 1946 *

(Millions of dollars)

	Yearly averages		Yearly figures	
	1922 1928	1929–1933	1935	1946
Merchandise	$+657	$+407	$+ 255	$+6,876
Services	−792	−719	− 367	+ 819
Interest and dividends	+535	+589	+ 320	+ 438
Gifts and donations				−3,110
Gold	− 41	− 12	−1,739	− 623
Long-term capital	−477	+ 51	+1,075	−3,342
Short-term capital	+228	−413	+ 462	−1,176
Residual items (net)	−110	+ 97	− 6	+ 118

* Plus (+) indicates net exports or credits; minus (−) indicates net imports or debits. The data except 1946, are from *Trade Information Bulletins*, 819 and 833. The data from these sources were combined as in the foregoing table. Minor adjustments were necessary. For example, net receipts from brokerage, stock transfer taxes, etc., were removed from interest and dividend accounts and placed under services; net payments or receipts of interest on short-term investments were separated from the long-term interest and dividend accounts. The groupings for the periods 1922–1928 and 1929–1933 were compiled by Mr. E. J. Stone, sometime assistant in the Department of Economics, Brown University. The groupings for 1935 were made by the authors, and those for 1946 are as given in *Survey of Current Business*, March, 1947, p. 13.

Payments Balances. In contrast with its position as debtor nation to the extent of about 3 billion dollars at the beginning of the First

[11] *Statistical Abstract of the United States*, 1946, p. 889.
[12] *Survey of Current Business*, March, 1947, p. 14.

World War the United States emerged from the depression of 1920–1921 a creditor nation to the extent of nearly 6 billion dollars [13] on private account and about 10 billion dollars on war debts account.[14] The items that entered into United States payments balances during the periods 1922 to 1928, 1929 to 1933, and in 1935 and 1946 are shown in Table 23. The data have been arranged in a manner to emphasize major changes that occurred in payment balance items during the period covered. Between the periods 1922–1928 and 1929–1933 long-term capital loans gave way to short-term credit extensions. The merchandise trade balance remained favorable. In 1935 extension of foreign credit by the United States had shrunk, and capital movements into the United States had increased to a point where the net movements of both long-term and short-term capital were toward this country. The favorable trade balance in 1935 was made possible by net imports of a large amount of gold. Gold imports were less in 1946 than they had been in 1935. The huge increase in net exports of merchandise in 1946 as compared with 1935 was offset largely by United States gifts and donations and by United States foreign loans, both long-term and short-term.

UNITED STATES TRADE BY GEOGRAPHICAL REGIONS

The geographical distribution of the foreign trade of the United States has a significant bearing upon this country's present and future position in world economy for a number of reasons.

1. Customary peacetime patterns of world trade were distorted incident to the exigencies of the Second World War. Inasmuch as the United States was the leading exporting country during this period, postwar revival of peacetime patterns of world trade will subject the internal economy of this country to readjustment strains. The possible nature and magnitude of these strains are suggested by the geographical status of United States foreign trade.

2. An ever-changing status of industrialization in backward regions will bring about changes in the character and direction of the external trade of the United States. An understanding of the geographical distribution of this country's foreign trade will illuminate the nature of this problem.

[13] MILLS, F. C., *Economic Tendencies in the United States*, The National Bureau of Economic Research, Inc., New York, in cooperation with the Committee on Recent Economic Changes, 1932, p. 475. MADDEN, *op. cit.*, p. 54, estimated the net creditor position of the United States on private account at the end of 1919 at about 4 billion dollars.

[14] Secretary of the U. S. Treasury, *Annual Report*, 1921, p. 56, Washington, 1922.

3. United States foreign loans affect the volume of this country's external trade, and the geographical distribution of these loans conditions, in important respects, the kinds of goods exported and imported. For these reasons a working knowledge of the geographical distribution of this country's foreign trade is useful in evaluating the possible impact of foreign loans upon the industrial structure of the United States.

4. A working knowledge of the geographical distribution of the foreign trade of the United States is essential to correct evaluation of the possible impact upon this country's economic system of changes in the existing structure of international trade barriers. The geographical distribution of a country's external trade and the status of its trade balance with the more important geographical regions of the world are important indications of that country's strength or vulnerability in world economy.

Exports of the United States consist of minerals, products of extensive agriculture, and manufactures; imports consist of light manufactures, tropical and semitropical foodstuffs, minerals, and other industrial raw materials that this country does not produce or produces in quantities insufficient to satisfy the demand of fabricators. The foreign trade of the United States is not primarily an exchange of raw materials and foodstuffs for manufactures or vice versa. It is mixed in kind and scattered in direction.

Trade with Western Europe. For many years the United States trade balance with Europe has been active; *i.e.*, the value of goods sent to Europe has exceeded the value of goods moving in the opposite direction. In 1939 Europe took 40 per cent of this country's exports (in terms of value) and provided approximately 27 per cent of the imports.[15] In 1946 Europe took 42 per cent of the total value of United States merchandise exports and sent to this country only 16 per cent of the total value of United States imports.[16] Even though the 1939 and the 1946 data are not strictly comparable because the European areas covered by the two tabulations are not strictly comparable, they point up the unquestionable fact that the United States favorable trade balance with Europe largely increased as a result of the war. A large United States export trade balance with Europe places this country in a vulnerable position in world economy because the favorable European trade balance is unlikely to be maintained.

Comparative advantage in the United States is such that this coun-

[15] *Statistical Abstract of the United States*, 1944–1945, p. 544.

[16] *Survey of Current Business*, March, 1947, p. S20.

try is in position to send to Europe raw cotton, tobacco, wheat, refined copper, petroleum products, machinery, motor vehicles, and certain other manufactures and primary commodities—cigarettes, motion-picture films, sulphur, and phosphates, for example. Europe's principal advantage in trade with the United States is in the production and export of light manufactures and intensive agricultural products that embody relatively large amounts of labor. Examples are textiles and glass manufactures, surgical instruments, leather goods specialties, toys, alcoholic beverages, dairy products, and olive oil. Inasmuch as postwar Europe is a debtor region in respect to international long-term financing, she will have to increase exports in relation to imports when borrowing for purposes of postwar reconstruction terminates. Since the United States market is the largest single market in the world for the kinds of goods Europe produces for export, there is little likelihood that a reconstructed Europe can continue to maintain a large passive trade balance with the United States.

Canada. For decades prior to the Second World War Europe was the United States largest export market. Great Britain (a part of Europe as here defined) ranked first among all national foreign markets of the United States. Canada ranked second. In 1939 Great Britain took 16 per cent of United States exports (in value); Canada took 15 per cent.[17] In 1946 Canada took 15 per cent of United States exports and Great Britain took 9 per cent. The increase in United States postwar exports to Canada is a result, at least in part, of war damage in Great Britain. When Great Britain gets back into production after reconstruction, her exports to Canada are likely to increase. A result may be a contraction of opportunities for United States exports to Canada. This conclusion is strengthened by the fact that the United States trade balance with Canada is favorable; *i.e.*, the value of United States exports to Canada exceeds the value of United States imports from Canada. In 1939 United States imports from Canada were approximately 30 per cent less than United States exports to Canada. The comparable figure for 1946 was 39 per cent.[18]

Among the important items that Canada obtained from the United States in 1946 were coal, petroleum, automobiles and parts, machinery, miscellaneous iron and steel manufactures and semimanufactures, textile manufactures, and fresh fruits. Great Britain is likely to supply an increasing proportion of Canadian imports of textile manufactures,

[17] *Statistical Abstract of the United States*, 1943, pp. 534–535.

[18] *Survey of Current Business*, March, 1947, pp. S20, S21.

light metal manufactures, and other light manufactures. Among the leading items sent by Canada to the United States are newsprint paper, wood pulp, wood, nickel, furs, copper, asbestos, grains, and vegetables. Canada's comparative-cost position in these lines of production is such as to place her in a strong position for maintenance of exports to the United States. If, for the reasons cited, the United States favorable trade balance with Canada declines in the years ahead, adjustments in the United States will be called for either in the direction of shrinkage in the size of the United States total favorable trade balance or in the direction of increasing exports to other regions of the world in relation to imports from them.

South America. Prior to the Second World War United States imports from South American countries customarily exceeded exports to them. Average annual imports from South America for the period 1936 to 1941 amounted to 394 million dollars; exports to South American countries averaged 352 million dollars.[19] The import trade balance with South American countries increased during the war years. In 1945 the United States import balance with South American countries amounted to about 346 million dollars.[20] After the war the United States-South American trade balance changed. In the postwar year 1946, United States imports from South America totaled 1,095 million dollars; exports to South America totaled 1,152 million dollars.[21] The export balance in 1946 was due in part to the large dollar balances that South American countries built up in the United States during the war and in part to the fact that production of manufactures in European countries that served South America before the war was at a low level immediately after the war.

Among the leading United States import items from South American countries are coffee, petroleum, nitrates, hides and skins, wool, linseed, manganese, textiles, and cocoa beans. South America's comparative-cost position in the production and sale of these goods is strong. South America is also in a comparative-cost position favorable in relation to that of the United States in the production of meat, wool, and wheat. Manufactures, including processed foodstuffs such as canned goods, bulk large in the values of South American imports. From a comparative-cost point of view developments in United States trade with South America would appear likely to take the following directions: (1)

[19] Chamber of Commerce of the United States, *Our World Trade during the War*, 1939–1945, pp. 13, 21.

[20] *Idem.*

[21] *Survey of Current Business*, March, 1947, p. S20.

more United States imports of meat, wool, and other farm, forest, and mineral products, (2) relatively less South American imports of light manufactures from the United States because of European competition and South American production, (3) more South American imports of industrial equipment from the United States if United States long-term loans provide sufficient South American buying power. In the absence of such loans there is no reason to anticipate that a favorable United States trade balance with South America can be developed to offset probable shrinkage of the United States favorable trade balance with Europe. A large United States favorable trade balance with Europe might be maintained if offset by a large United States passive trade balance with South America. The United States might sell to Europe, Europe might sell to South America, and the United States might buy from South America, thus balancing the international account, but in the absence of large United States loans abroad this country cannot simultaneously maintain large favorable trade balances with Europe, Canada, South America, and all other parts of the world.

Asia and Oceania. For many years prior to the Second World War the annual value of United States imports from Asia and Oceania exceeded that of exports to these regions. This relationship was reversed during the war years. In 1946 the value of imports from Asia and Oceania was only 1,090 million dollars as compared with exports to these regions totaling 1,461 million dollars.[22]

Wool, rubber, silk, spices, tin, alloy metals, jute, and light manufactures were among the prewar imports from Asia. Rubber and silk imports may be of less importance in years ahead because of the competition of synthetic products. Mass-production manufactures are among the principal United States exports to Asia. From a trade balance point of view the relation of the United States to Asia and Oceania is similar to that between the United States and South America.

Other Regions. Cuba, Mexico, Central America, and Africa remain to be considered. In general, trade between the United States and these regions is an exchange of manufactures for raw materials and foodstuffs. Sugar from Cuba, petroleum from Mexico, bananas from Central America, and copper and diamonds from Africa suggest the nature of imports from these areas. Machinery, iron and steel mill products, petroleum refinery products, canned foods, and textile manufactures are among the items sent in exchange. The trade balance

[22] *Survey of Current Business*, March, 1947, p. S20.

problem is similar to that between the United States and South America or between the United States and Asia. Either the United States will extend foreign loans for more rapid industrialization in these industrially backward regions, or the country's favorable trade balance is likely to be subjected to drastic reduction when United States loans for European reconstruction begin to dry up.

UNITED STATES TRADE BY COMMODITIES

If, in the course of time, the trade balance of the United States is to become less active or if it is to become passive in conformity with this country's international creditor position, imports may be expected to increase. The domestic industries directly affected in an adverse manner by increased imports will be the high-cost industries, those which operate at a comparative disadvantage in this country. Costs per unit to produce in the protected, import industries are not so low as costs of foreign competitors. Few if any of the protected industries in the United States would disappear entirely if the country's tariffs were reduced sufficiently to permit an unfavorable or passive trade balance. However, some United States industries would, no doubt, be forced to contract.

In contrast with the so-called "high-cost industries" are those with costs that are relatively low. These so-called "low-cost industries" enjoy comparative advantages. They pay relatively high wages, earn relatively high rates of return on their capital, undersell foreign competitors in the domestic market, and invade foreign markets. An industry may enjoy a comparative advantage in a particular country as a result of some one favorable circumstance or a combination of favorable circumstances. Among the circumstances favorable to industries in the United States that enjoy comparative advantages are (1) abundant and easily accessible natural resources, (2) a large and homogeneous domestic market that fosters economies of mass production, (3) superior technical skills that have not as yet been acquired by foreign competitors, (4) forms of business organization and methods superior to those of foreign competitors, (5) geographical propinquity to markets, and (6) superior reputation for quality of merchandise or services.

The line of division between low-cost and high-cost industries in the international sense, or between industries that enjoy comparative advantages and those which do not, is seldom subject to sharp delineation. Nevertheless, one's ideas concerning the probable effect of customs tariff changes and trade balance changes may be clarified somewhat

by classifying industries into high-cost and low-cost groups in so far as classification is possible. Statistics of exports and imports provide one available basis of classification. The fact that a country exports more of the products of a particular industry than it imports is not conclusive evidence that the industry in question enjoys a comparative advantage. In a world of imperfect competition, goods are sometimes dumped into foreign markets at prices substantially below those which prevail at home. Conversely, the products of a low-cost industry may be excluded from foreign markets by trade restrictions, with the result that an industry's comparative strength is not registered by volume of exports. In spite of these and other difficulties, a division of industries into export and import groups, as indicated by exports and imports of leading commodities, is a useful initial step in the estimation of probable effects of a general raising or lowering of protective tariff walls.

Export Industries. A list of merchandise items which, in terms of value, were among the more important exports of the United States in 1914, 1923, 1933, 1939, and 1946 are presented in Table 24. The data suggest that certain agricultural products, certain mass refinery products, and mass-production metal products are relatively low-cost goods in the United States. Large quantities of raw cotton and tobacco are produced by "noncompeting" groups of low-wage workers in Southern states, particularly Negro workers who are less mobile than other worker groups in this country. Wheat and meat have been produced at relatively low cost in the United States for many decades on Western land that was abundant and relatively cheap. This advantage may be slipping away, however, as a result of improved transportation facilities and increased competition from sparsely settled areas suited to grain and livestock production in Argentina, Australia, South Africa, and elsewhere. The mass-refining industries—particularly copper and petroleum refining—require relatively large amounts of capital and relatively small amounts of labor—skilled labor—in proportion to value added in the refinery process. Iron and steel, automobile and machinery industries make effective use of large amounts of machinery and nonhuman energy per worker. Coal appears in the list of important exports, but exporting is not of major importance to the United States coal industry. Output per worker in coal mining in the United States is much greater than coal output per worker abroad, but the great foreign markets for coal are overseas, and the product is so bulky in relation to its value as seriously to penalize sources of supply far removed from points of consumption. For this reason the United States exports very little coal in proportion to production in this coun-

try. The large domestic market in the United States, the abundance of coal and other fuel resources, plentiful supplies of capital and technological and management skills, all contribute to relatively low costs in mass-production metal industries. Mass-produced metal goods have become this country's leading exports. Cotton manufac-

TABLE 24. IMPORTANT UNITED STATES EXPORTS, 1914, 1923, 1933, 1939, AND 1946

Commodity	Value of exports of United States merchandise, per cent *				
	1914	1923	1933	1939	1946
Raw cotton	26.2	19.7	24.2	7.8	5.6
Tobacco, unmanufactured	2.3	3.8	5.0	2.5	3.7
Wheat and flour	6.1	5.0	0.1	2.0	6.4
Fruits and nuts	1.4	1.7	4.2	2.7	1.5
Meat products and animal fats and oils	6.4	7.6	4.0	1.8	4.5
Coal and coke	2.7	4.1	2.5	2.1	3.3
Copper (mostly refined) and manufactures	6.5	3.2	1.5	3.1	0.4
Petroleum products (crude petroleum excluded) †	6.2	8.4	10.2	9.4	3.8
Sawmill products	3.1	2.6	2.0	1.3	0.6
Iron and steel mill products	3.9	4.1	2.8	7.5	6.3
Automobiles, including gas engines and parts	1.5	4.2	5.5	8.1	5.6
Machinery, all classes	7.2	6.9	8.0	16.7	14.4
Cotton manufactures	2.1	3.3	2.4	2.2	4.4
Totals	75.6	74.6	72.4	67.2	60.5

* SOURCE: Calculations made from data obtained from *Statistical Abstracts of the United States* and Reports FT 410, U. S. Bureau of the Census, March, 1947. Because the 1946 percentages were calculated by Miss Ann Killough from preliminary reports, the classifications may not in all cases be exactly comparable with those of earlier years. The comparability is sufficiently close, however, for the use to which the table is put.

† Figures for 1914 and 1923 are for total mineral oils refined

tures appear in Table 24 as an important category of exports and also in Table 25 as an important category of imports. In general, textile manufactures are among the most highly protected industries in the United States but, nevertheless, some types of textile goods can be produced in this country at lower money costs than comparable items produced abroad. Fruits and nuts and sawmill products also appear as important items in the lists of both exports and imports. Exports and imports of fruits and nuts are conditioned largely by climate and

soil factors. Some fruits and nuts are peculiarly suited to climate and soil conditions in the United States; others are not. In the sawmill industry, United States advantage is not so all-pervasive now as in times gone by when virgin timber was more abundant; nevertheless, some kinds of sawmill products still can be produced for sale in foreign markets at prices to compete with those of comparable items originating in Canada, Russia, and the Scandinavian countries.

Relative costs and advantages and disadvantages in production change continuously as techniques of production, population, natural resource reserves, supplies of capital, and other conditions affecting production in particular localities undergo changes. In general, the United States greatest advantage, as measured in terms of worker efficiency, appears to be in mass-production industries where proximity and access to a mass market, technological and management leadership, worker skills, and abundant supplies of capital and nonhuman energy resources are dominant influences. Manufacture of machines, tools, and appliances, semifabrication of iron and steel goods, and refining of petroleum and copper appear to be zones of relatively high productive efficiency in this country. Production advantages in these industries rest not so much upon single factors that contribute in each case to efficiency, as upon a combination of circumstances that favor the whole group of industries. At least four types of favorable circumstances contribute to production efficiency in this group of low-cost industries:

1. The country's abundant and easily accessible coal and iron reserves. These resources provide cheap power and cheap steel for further fabrications.

2. The domestic market of the United States is the largest market under single political rule in the world. A single language and standardization of consumption goods, of machines, and of methods, which mass advertising has encouraged, lead to a maximization of the economies of large-scale production.

3. Institutions in the United States have been sufficiently flexible to permit rapid growth of the corporate form of business organization and other organizational changes necessary to mass production and distribution.

4. Scientists in the United States have contributed largely to the discovery of improved techniques, and industrialists have been quick to adopt cost-reducing improvements. The same favorable circumstances contribute to advantage in the production of certain kinds of rubber and leather goods, certain kinds of chemicals, and a miscellany

of other goods, individually small in export values but important in the aggregate.

Import Industries. Branches of manufacture which employ relatively large amounts of hand labor, which are not subject to extreme mass-production methods, and which have not been subjected recently to basic changes in production technique, are among the import industries of the United States. This country's import industries include, also, intensive forms of agriculture and certain other extractive industries that depend upon mineral deposits or extremes of climate that do not occur in the United States. Statistics of merchandise imports are an inadequate guide to high-cost industries because of the retarding effects of customs tariffs upon imports. Nevertheless the import statistics are not entirely devoid of usefulness as a guide to industries that operate at a relative disadvantage. In Table 25 is a list of important United States imports together with the percentage which the value of imports of each of these items or groups of items was of total United States imports in each of the years, 1914, 1923, 1933, 1939, and 1946.

In 1939 approximately 45 per cent of the total value of United States imports consisted of crude materials (including crude foodstuffs) and another 21 per cent consisted of semimanufactures. The remaining third of the imports were manufactured foodstuffs and finished manufactures. Sugar, coffee, crude rubber, raw wool, raw silk, copper, crude petroleum, and tin were among the crude materials imports. The semitropical climates of Cuba, Brazil, and Malaya suggest reasons for sugar, coffee, and rubber imports. Wool came from Australia, Argentina, and South Africa where grazing land is abundant and cheap. Silk came from Japan and China where cheap labor for tending silkworms is abundant; crude copper and petroleum came from regions where, deposits being abundant, production was relatively cheap. The United States imports tin because this country is deficient in tin deposits. Among the more important United States imports of manufactures in 1939 were paper, burlaps, cotton goods, and wool goods. Scarcity of pulpwood in the United States accounts, at least in part, for the paper imports. Low wages abroad and the fact that textile manufacturing makes use of relatively more cheap labor and relatively less power machinery, account, at least in part, for the imports of textile manufactures.

As already suggested, the fact that raw materials top the list of United States imports is not proof that they represent the industries which in all cases, find their greatest comparative advantage abroad.

Other goods may be imported in smaller amounts because tariff obstacles to their entry are greater. There is no way of knowing precisely what the volume of imports of protected-industry goods might be in the absence of protective tariffs. However, the fact that many

TABLE 25. IMPORTANT UNITED STATES IMPORTS, 1914, 1923, 1933, 1939, AND 1946

Commodity	Value of United States merchandise imports, per cent *				
	1914	1923	1933	1939	1946
Sugar	5.4	10.1	7.4	5.5	4.0
Coffee	5.8	5.0	8.6	6.1	9.6
Vegetable oils and fats	1.6	1.7	2.4	2.2	0.3
Cocoa beans and chocolate	1.1	0.9	1.3	1.2	1.2
Bananas	0.9	0.5	1.4	1.3	0.9
Other fruits and nuts	2.7	1.9	2.6	2.6	2.1
Tea	0.9	0.6	0.9	0.9	0.7
Tobacco, unmanufactured	1.8	1.5	1.5	1.6	2.4
Wool and mohair	2.8	3.4	1.4	2.2	6.1
Raw silk	5.2	10.3	7.1	5.3	2.6
Crude rubber	3.8	4.9	3.2	7.8	4.8
Hides and skins	6.4	3.1	3.2	2.1	1.6
Wood pulp	0.9	2.0	4.0	3.4	2.8
Fertilizers	2.4	1.7	1.7	1.4	0.7
Copper ore and manufactures (mostly unrefined copper)	2.9	2.5	1.2	1.9	2.0
Petroleum and products (mostly crude)	0.8	2.1	1.8	1.9	3.3
Tin, including ore	2.1	1.7	3.5	3.1	1.2
Nickel and manufactures	0.3	0.2	0.4	1.3	1.0
Sawmill products	1.0	1.7	0.6	0.9	1.6
Paper and manufactures	1.0	3.1	5.3	5.6	5.1
Furs and manufactures	0.7	2.3	2.6	2.4	4.9
Burlaps	2.2	1.8	1.7	1.2	1.6
Cotton manufactures	3.7	2.6	2.2	1.7	0.9
Wool manufactures	1.8	1.8	1.1	1.1	0.9
Totals	58.2	67.4	67.1	64.7	62.3

* General imports for 1914, 1923, 1933; imports for consumption, 1939, 1946. SOURCES: Percentages calculated from data obtained from *Statistical Abstracts of the United States* and *Foreign Commerce and Navigation of the United States*, U. S. Department of Commerce, Washington, D. C., and Reports FT 110, U. S. Bureau of the Census, February, 1947. Because the 1946 percentages were calculated by Miss Ann Killough from preliminary reports, the classifications may not in all cases be exactly comparable with those of earlier years. The comparability is sufficiently close, however, for the use to which the table is put.

competitive goods enter this country's domestic market over fairly high tariff walls is evidence of greater or less amounts of relatively high-cost production in the United States that might have to give way if tariff protection were removed. Among the goods in this category are dairy products, raw wool, beef, textile manufactures, clay and glass goods, paper and paper manufactures, certain kinds of leather and leather goods, certain chemicals, and a miscellaneous list of light manufactures not already mentioned.

POSSIBLE STRUCTURAL CHANGES IN THE UNITED STATES INCIDENT TO LOWERING OF CUSTOMS TARIFFS

Extensive agriculture in the United States competes with extensive agriculture in sparsely settled lands like Argentina, Canada, and Australia. Intensive agriculture and light manufacturing in this country compete with similar activities in densely populated regions like the Netherlands, England, Italy, and Japan. Tariff protection in the United States shelters, to some extent, both high-cost farming enterprises and high-cost manufacturing enterprises against foreign competition. There is no way of knowing precisely how large a part of any of the protected industries in this country would be destroyed by the removal or downward revision of United States customs tariffs. It is possible, however, to indicate what segments of industry in this country are protected by tariffs and to provide a basis for a rough judgment of the relative sizes of the protected and unprotected segments of industry.

Distribution of Workers among the Principal Industries. In 1940 there were approximately 53 million persons fourteen years of age or over classified as in the United States labor force. The labor force has increased since 1940, but no general population census has been taken since that year and estimates of the size of the labor force in 1946 or 1947 vary.[23] For the purpose of indicating, in broad outline, possible directions of structural change incident to downward revision of United States customs tariffs, use of the 1940 data probably is more meaningful than use of postwar estimates for reconversion years. Of the 53 million persons in the labor force in 1940 approximately 5 million were "seeking work," approximately 2½ million were "on public emergency work," and 45 million plus were otherwise em-

[23] One estimate puts the civilian labor force for 1946 at 57.5 million and the armed forces at 3.3 million, making the total labor force about 61 million. *Survey of Current Business,* February, 1947, p. S9.

ployed.[24] Of every 1,000 workers employed (those on emergency work excluded) approximately 234 were in manufacturing and 188 in agriculture, forest, and fishing industries. These are the segments of United States industry that are directly affected by changes in the country's trade balance and in its customs tariff system. The remaining 578 workers of every 1,000 employed are in service industries, construction, and other domestic industries producing goods that do not enter, directly, the channels of international trade.[25]

Agriculture. In 1940 the number of experienced workers attached to agriculture (exclusive of housewives) was in the neighborhood of 9 million. Some of these workers were engaged in producing agricultural goods for export, and some were engaged in producing goods for the domestic market that would be displaced by foreign competition if agricultural tariffs were reduced. Attempts to segregate the farm population into groups according to kinds of crops and livestock products sold lead to no very definite conclusions because a number of different crops and several kinds of livestock may be produced on one farm. However, generalizations such as those to follow provide some basis for judging the possible number of farm workers who might be affected directly by customs tariff changes. There are about 6 million farms in the United States. Possibly as many as 2 million of them produce wheat and 1½ million raise cotton—both cotton and wheat being produced on many of these farms. Reduction in customs tariff protection in the United States might benefit workers employed on cotton farms and wheat farms [26] in so far as United States purchase of more foreign goods might stimulate sale abroad of more cotton and wheat. Furthermore, cotton and wheat farmers might benefit from lower prices of the manufactured goods that they purchase in the domestic market if tariffs were reduced. On the other hand, some cotton and wheat farmers produce dairy products, poultry products, wool, and beef for market, and these products are protected by customs tariffs. The direct effect of tariff changes upon farmers, in terms of advantage or disadvantage in the sale of their products, is mixed.

In total, United States farmers have a much larger stake in the country's domestic market than in foreign markets. During the pe-

[24] *Statistical Abstract of the United States*, 1946, p. 169.

[25] *Ibid.*, p. 178.

[26] Workers employed on farms producing long-staple grades of import cotton and import grades of wheat such as No. 1 Northern Spring wheat, excluded. Import grades of cotton and wheat produced in the United States are very small percentages of total production of these crops in the United States.

riod 1921 to 1940, and during the war years 1941–1945, the value of agricultural products exported was less than 15 per cent of cash farm receipts.[27] Furthermore, an increasing proportion of domestic-market sales of farm produce is represented by types of produce that benefit from domestic-market protection. Dairy and poultry products, cattle, sugar, and wool are among the more important United States farm products that benefit from tariff protection. Sales of these classes of produce constitute a larger percentage of cash farm receipts for the period 1936 to 1940, for example, than for the period 1910 to 1914. As the United States has become more industrialized, as the population has increased, and as agriculture has become more diversified, tariff protection for agriculture has become increasingly effective.

Agriculture and low tariffs are ideas that have been related in the thinking habits of Americans for more than a century. For this reason one may experience difficulty in realizing the fact that large segments of agriculture are among the United States industries that are zealously protected. United States customs duties in 1946 on a few agricultural commodities were as follows: [28] cattle, 1½ cents per pound; beef or veal, fresh, chilled, or frozen, the product of Cuba, 3 cents per pound; whole milk, 3¼ cents per gallon; cream, 28⅜₁₀ to 56⅜₁₀ cents per gallon; cheese, 5 to 7 cents per pound but not less than 20 to 35 per cent ad valorem; dried eggs, 27 cents per pound; unrefined sugar, about 1 cent per pound; raw wool, 15 to 35 cents per pound.

When the magnitude and extent of agricultural protection are taken into account and when the small proportion of agricultural production that is exported is considered, a conclusion that the direct effect of a general lowering of United States tariffs would adversely affect United States agriculture, as a whole, seems to rest on sound statistical and logical bases.

Manufacturing. Manufacturing, as a whole, unlike agriculture, would probably benefit from reduction in this country's import trade barriers. Some sections of manufacturing would be seriously affected in an adverse manner by tariff reductions. Transition maladjustments incident to tariff reduction might seriously affect all branches of manufacturing in this country in an adverse manner. If, however, the transition maladjustments could be overcome, the long-run effects of tariff reductions would probably be beneficial to this country's manufacturing industries in the aggregate.

Manufacturing in the United States employed about 10½ million

[27] *Statistical Abstract of the United States,* 1946, pp. 626, 629.

[28] U. S. Tariff Commission, *United States Import Duties,* Schedules 7, pp. 205*ff.*, June, 1946, Washington, D. C., 1946.

workers in 1940.[29] Just as some branches of agriculture are effectively protected by customs duties while others are not, so also some branches of manufacturing are effectively protected while others are not. Among the protected products of manufacturing industries are textiles, leather goods, glass and clay goods, spirits and wines, various kinds of metal goods, and a miscellany of light manufactures such as toys, rugs, jewelry, watches and parts, perfumery, paints and colors, brushes, pencils, feather dusters, ladies' handbags, and musical instruments. The branches of industry represented by some of these products export as well as import, but the imports would be greater if tariffs were revised downward or removed. The extent to which these branches of manufacturing are protected by customs duties can be illustrated by a few examples of the tariff rates that apply to some of their products. In 1946 tariff rates applying to selected cotton manufactures were as follows: [30] cotton cloth, bleached, printed, dyed, or colored, 10 to 39 per cent ad valorem; knitted underwear, 30 per cent ad valorem; cotton clothing and wearing apparel, 15 to 20 per cent ad valorem plus specific duties; wool woven fabrics, 37½ to 40 per cent ad valorem plus specific duties; wool outerwear, 25 to 75 per cent ad valorem plus specific duties; woven silk or rayon fabrics, 30 to 50 per cent ad valorem plus specific duties. There is no accurate way to measure, statistically, the height and effectiveness of a protective tariff wall. The foregoing examples of rates applying to certain textile manufactures suggest that tariff removal would have a seriously adverse effect upon the industry.

Examples of tariff rates affecting products of a number of other protected industries that would be adversely affected by removal of tariff barriers follow: [31] leather boots and shoes, 10 to 50 per cent ad valorem; earthenware, crockery, porcelain, chinaware, 25 to 70 per cent ad valorem plus specific duties; whisky, gin, brandy, liqueurs, $2.50 per proof gallon; textile machinery, 15 to 25 per cent or more ad valorem; screws, rivets, nuts, and washers, about 30 per cent ad valorem; pocket, table, and butcher knives, 25 to 35 per cent ad valorem plus specific duties; electric vacuum cleaners, 35 per cent ad valorem; bicycles, 30 per cent ad valorem plus specific duties; dolls, 35 per cent ad valorem; other toys not specifically provided for, 45 per cent ad valorem; linoleum, including mats and rugs, 32 per cent

[29] 1946 estimates put the employment figure for manufacturing in excess of 14 million; whereas agricultural employment for 1946 is estimated to have been only about 8½ million. *Survey of Current Business,* February, 1947, p. S9.

[30] *United States Import Duties,* June, 1946.

[31] *Idem.*

ad valorem; gold and platinum jewelry, 60 per cent ad valorem; watch cases, 30 per cent ad valorem plus specific duties; perfumery, 37½ per cent ad valorem plus specific duties; ladies' handbags, 25 to 60 per cent ad valorem plus specific duties; snap fasteners, 30 to 55 per cent ad valorem; brass wind musical instruments, 40 per cent ad valorem.

Textile and apparel manufacturing industries in the United States customarily employ more than 2 million workers. Protected industries that produce leather goods, clay, stone, and glassware, liquors, metal goods, and a miscellany of light manufactures, such as toys, jewelry, perfume, pencils, and brushes, employ more than 1 million workers. No one can possibly know exactly how many workers might be thrown out of employment in protected industries and related services in the United States if customs tariffs were removed, nor how fast these workers might be absorbed in other industries and services. The least that can be said is that the number of persons who might be affected adversely by removal of tariff barriers is not negligible. It is possible that removal of tariff barriers might, for a time, increase merchandise imports without causing an increase in merchandise exports anywhere nearly equivalent in value, if merchandise flowed into the United States in payment of interest and principal on foreign loans. In this case labor forced out of protected industries might not find employment until the economic system had undergone far-reaching structural changes involving price changes, changes in the distribution of income, and other changes of a character and magnitude that could not be made in a free-enterprise competitive economy in the absence of severe business depression.

In considering the adverse effects of downward revision of tariffs upon protected industries it is well, however, to keep in mind the fact that large segments of United States manufacturing do not need tariff protection. The automotive industry is an example. Furthermore, it is well to remember that more manufacturing workers are employed in industries that do not need protection than are employed in the protected manufacturing industries. Finally there is the fact that low-price competition of foreign goods that might enter the United States market if tariffs were reduced would contribute to a reduction in living costs in this country.

ALTERNATIVE POLICY COURSES

Political and commercial history discloses a number of different patterns of national commercial policy in international relations. One

such policy is variously referred to as national self-sufficiency, closed economy, or autarky. An extreme illustration is to be found in Japan during the seventeenth and eighteenth centuries. During much of the 250 years prior to about 1850 the central government of Japan prohibited international commerce; Japanese nationals were prohibited under penalty of death from holding intercourse with foreigners. Less extreme illustrations of autarky are to be found in Egypt about 1200 B.C., in China about 400 B.C., and in western Europe during the Middle Ages. A policy of autarky carried to its logical conclusion would eliminate all economic intercourse with foreign countries. In contrast with autarky is free trade. A free-trade policy encourages full participation in international economic intercourse. Between these two extremes are various degrees of national protection; examples, mercantilism and Hamilton-List protectionism. To date, the foreign trade policy of the United States has followed a middle course. Introduced at an early date to protect and to foster young industries, this country's trade-restrictive system has remained to protect vested interests.

As already stated, Alexander Hamilton was among the earliest and most eloquent advocates of a protective policy for the United States. In his time[32] this nation comprised an Atlantic seaboard area of only 892,135 square miles. The several states were loosely joined in a new political union, and the agricultural and mechanical arts were primitive. At present continental United States[33] comprises an area of approximately 3 million square miles stretching from Canada to Mexico, north and south, and from the Atlantic Ocean to the Pacific, east and west. In addition this country's noncontiguous territories and possessions comprise an area of approximately 600,000 square miles. They include Alaska (586,400 square miles), American Samoa (76 square miles), Guam (206 square miles), Hawaii (6,407 square miles), Panama Canal Zone (549 square miles), Puerto Rico (3,435 square miles), and Virgin Islands of the United States (135 square miles). The aggregate area of continental United States and her possessions is approximately 3.6 million square miles.

Between 1790 and 1853 the United States acquired Louisiana, Florida, and a part of New Mexico and Arizona by purchase, Texas by voluntary annexation, and the remainder of her contiguous continental territory by conquest. Alaska was purchased from Russia

[32] Alexander Hamilton (1757–1804) was the first Secretary of the Treasury of the United States.

[33] Alaska not included.

in 1876; Hawaii was acquired in 1898 by voluntary annexation. Puerto Rico and Guam were ceded to the United States by Spain as indemnity at the same time. American Samoa was acquired by treaty with England and Germany in 1900. The Panama Canal Zone was purchased in 1904, and the Virgin Islands of the United States were purchased in 1917. During this period of territorial expansion the national government of the United States was strengthened, and the country's manufacturing and transportation underwent developments surpassed by no other nation in the world. The Second World War weakened the influence of Great Britain, Germany, France, and Japan in world economy and diplomacy and pushed Russia and the United States into positions of leadership. Russia's political and economic system is different from that of the United States, and recent developments suggest that a tug of war is under way to determine whether the Russian system or the American system will exercise the greater influence outside the boundaries of these two great nations. In view of these facts many informed observers believe that the time has arrived when the United States should adopt a commercial policy course better suited than the old Hamiltonian system to her present economic and political status.

If America must choose a new policy, what are the alternatives? Some persons would have the United States choose a policy of economic self-sufficiency. Other interested parties would have Congress reduce the protection for some lines of industry while maintaining or increasing it for other lines. Such a policy might be referred to as a "planned middle course." Still other informed persons are convinced that the time has come for the United States definitely to point her commercial policy course toward the ultimate goal of full participation in world commerce on a free-trade basis. Many arguments are advanced for each of these several commercial policy preferences. No absolute criterion exists for judging these arguments because motives vary and assumptions are not uniform. Nevertheless, critical examination of the pros and cons of alternative policy courses, against a background of findings in earlier chapters of this volume, will illuminate aspects of the United States position in world economy that some of us may have overlooked.

SELF-SUFFICIENCY

Motives prompting the advocacy of a policy of autarky for the United States are mixed. One motive is a desire for greater profits and

more employment in particular industries that would benefit by protection. If importation of plantation rubber into the United States were prohibited, domestic producers of synthetic rubber would, no doubt, profit thereby. Exclusion of real silk would result in greater sales of domestic rayon, nylon, and fine cotton fabrics in the domestic market. Similar reasoning applies to many other import goods, manufactures as well as raw materials. A second motive that prompts the advocacy of a policy of autarky rests upon an assumption that the United States would be stronger in self-defense if she were economically self-sufficient. A third motive rests upon an assumption that the fewer the international transactions in which a country engages, the less probability there is of its being drawn into international conflict. This point of view harks back to Washington and other founders of the so-called "American system," who advocated policies to avoid entanglement in European political affairs. A fourth motive rests upon an assumption that domestic industry would be less subject to unstabilizing influences if all economic connections with the outside world were severed.

The Special-interests Argument. Those who advocate a policy of autarky merely because their special interests would be served by it are guilty of no worse a crime against society than carrying the most common motive for trade restrictions to its logical conclusion. Special interests have been attempting, successfully or otherwise, to gain favors at the hands of governments ever since governments came into being. Some of the reasons advanced for exclusion of foreign goods are so transparent and so obviously biased in favor of particular industrial groups as to warrant little serious consideration. Certain chemical interests, for example, have been advocating self-sufficiency for the United States in the production of rubber. A synthetic substitute for natural rubber is produced in the United States, but there are some uses for rubber in which the synthetic product is not so satisfactory as natural rubber. Furthermore, it is doubtful that synthetic rubber can be produced in this country at a cost to compete freely and successfully with imported natural rubber in all uses. Exclusion of natural rubber for the sole purpose of making the synthetic-rubber industry in the United States more profitable is clearly not justifiable, but the maintenance of a large rubber industry in this country for national-defense reasons—either by tariff protection or, preferably, by direct subsidization—probably is justifiable. When profit motives and national-defense motives become inextricably intermixed, the

voter cannot be sure whether he is dealing with the essence of benign patriotism or with cleverly concealed plans for the exploitation of consumers.

The National-defense Argument. Economic self-sufficiency as a national-defense measure has been accorded serious consideration in the United States and abroad as a result of the experiences of the First and Second World Wars. When subjected to close evaluation the argument loses much of its initial appeal. At the outbreak of the First World War and also of the Second World War, the United States was dependent upon foreign sources of supply for many essential commodities: quinine, camphor, sugar, rubber, nickel, tin, tungsten, manganese, vanadium, cobalt, and chrome, for example. The building-up in peacetimes of stock piles of strategic materials which are durable and which may be sorely needed in time of war is a more logical national-defense policy than the readjustment of United States economy to a basis of less efficient operation without any imports.

The Neutrality Argument. Closely associated with the national-defense argument for a policy looking to complete self-sufficiency in the United States are supporting reasons advanced by pacifists who would go to almost any lengths to avoid dangers of the United States becoming involved in international conflict. When foreign nations are at war, the neutral country with ships moving in and out of foreign ports and with citizens engaged in foreign enterprises may become involved in embarrassing incidents that tend to draw it into the conflict. A policy of economic isolation might minimize dangers of this character.

With the diversity of natural resources occurring in continental United States, this country might become economically independent of other areas at a less permanent sacrifice in terms of reduced productive efficiency than any other industrialized nation in the world unless it is Russia. The principal raw materials imported for domestic consumption in the United States are as follows:

Rubber	Exotic foodstuffs	Fission materials
Wool	Condiments	Copper ore and concentrates
Silk	Vegetable oils	Crude petroleum
Jute	Linseed	Potassium
Sisal and hemp	Dyestuffs	Miscellaneous chemicals
Hides and skins	Miscellaneous drugs	Asbestos
Furs	Wood pulp	Precious stones
Coffee	Bauxite	Other rare substances
Sugar	Alloy metals	

With few exceptions the necessary raw materials in this list, or substitutes for them, could be produced in the United States if prices warranted the cost. If a policy of economic self-sufficiency were politically possible and if it could give reasonable assurance of preventing this country from becoming involved in future wars, it might be worth at least a trial. These are large *ifs*. So long as United States lawmakers and the chief executive are elected, there is little likelihood that a consistent policy of autarky could be enforced. During the whole of the past 300 or 400 years of recorded history people have been traveling, trading, and extending their interests—economic and noneconomic—beyond their political boundaries. The urge toward foreign intercourse is strong, and the facilities for foreign trading, foreign investing, and foreign travel have been vastly improved during the past few decades. To the steamboat and the telegraph of the nineteenth century have been added the airplane and the radio of the twentieth century. During an emergency period a policy prohibiting foreign trade, foreign travel, and the granting of external loans might be enforced, but during long periods of world peace it is doubtful if such a policy would attract sufficient political support to make possible its enforcement. Furthermore, after a long period of isolation the United States might find itself forced to fight a war in isolation and without allies. The United States is separated from European and Asiatic powers by the broad expanses of the Atlantic and Pacific oceans and, at present, countries to the north and south are not strong enough to be a seriously disturbing influence. But half a century of autarky in the United States, or even a shorter period, might change the whole aspect of geographical isolation that the United States now appears to some people to enjoy. Should one or more of the European or Asiatic powers gain control of Mexico, Canada, Central America, or some of the South American countries, the United States might find her position of comfortable seclusion no longer comfortable.[34] Furthermore, in this day and age of atomic bombs and rocket ships there probably is no such thing as comfortable seclusion anywhere on earth unless it is in someone's imagination.

The Industrial-stability Argument. From an economic point of view, the central theory in support of full participation in world trade rests upon gains in production efficiency to be derived from territorial

[34] Someone may suggest that the Monroe Doctrine prevents European and Asiatic powers from gaining a foothold in the Western Hemisphere. That doctrine is not effective without implementation, and implementation of it in this day and age means participation in world affairs, not withdrawal into isolation.

specialization. The autarkist cites this theory and proceeds to argue for less trade and less specialization on the grounds that international trade aggravates economic instability. He may be correct in his reasoning, but there is no proof of the point, pro or con. Furthermore, there is no valid reason to assume that depression could be prevented if this country could isolate itself from the outside world or that antidepression policies are doomed to failure because of international trade. Even if the United States could achieve greater economic stability without international trade than with it, the gains from greater economic stability would have to be weighed against economic and noneconomic losses incident to isolation before one could be sure that isolation was the best policy. At this point the argument becomes involved with imponderables of international diplomacy and is no longer confined within the areas of knowledge and judgment where an economist is most proficient.

ECONOMIC INTERNATIONALISM

In contrast with conceptions of economic isolation are those of an expanding economic internationalism. The country that practices an isolationist policy restricts its external economic and financial relations to a minimum. The country that practices a policy of economic internationalism encourages trade and financial intercourse with other nations. Economic and political developments in the United States and abroad during the past half century appear to many students of the subject to have set the stage for a United States policy of more internationalism rather than less.

Within the past half century the United States has participated in two world wars, and there is little reason to believe that this country will not be involved in other major wars if they should occur. Victorious participation in two major wars has left an aftermath of economic and political responsibility abroad that the United States cannot avoid dealing with in one way or another. Inasmuch as American industry has been subjected to less war damage than that of many other parts of the world, this country has become the most important source of supply of loans and other aids both for reconstruction in war-devastated countries and for industrialization in industrially backward countries. The position of the United States in world economy of the twentieth century is similar in some respects to that of Great Britain during the last half of the nineteenth century. Great Britain was a creditor nation at that time; her exports of manufactured goods and her imports of raw materials were increasing; she was in a posi-

tion to lend capital to less industrialized regions and was faced with a problem of collecting service charges on foreign loans. As in nineteenth-century England, so also in twentieth-century United States, international trade can contribute to important gains, economic and political. A liberal trading policy will facilitate transfer to the United States of debt payments from foreign countries. Such a policy will remove some of the causes of economic strain abroad by providing countries with low productivity and low living standards additional opportunities for the sale of their goods and more foreign exchange for the purchase of essential raw materials. More trade, higher living standards for all, and less international friction are among the ultimate gains visualized by advocates of a liberal trading policy for the United States. International trade makes possible the sale abroad of American goods that embody relatively large amounts of natural resources and mass-production efficiency and the purchase abroad of goods produced with low-wage foreign labor. Employment of more United States workers in high-productivity export industries will tend to increase real wages and living standards in this country, provided, of course, that more trade does not cause more economic instability and unemployment.[35]

Terms of Trade. Among the objective indices of a country's gains from trade are changes in relative prices of export and import goods. Indices of prices of export and import goods and an index of the net barter terms of trade [36] for the United States for the period of 1890 to 1938 are shown in Fig. 9. During this period prices of goods imported declined in relation to those of goods exported. Manufactured exports and raw-materials imports increased. In 1890 about one-half the exports (in terms of value) were manufactures; [37] in 1938 more than 70 per cent of exports in value were manufactures. In 1890 22 per cent of the imports were crude materials exclusive of foodstuffs; the comparable figure for 1938 was 30 per cent. The Second World War disrupted price structures in import and export markets all over the world, but there is no reason to assume that the prewar trend in United States terms of trade has been permanently changed as a result of the war. Freer trade might not contribute materially to the United States terms of raw-materials purchase because many of

[35] See the section of the present chapter entitled Possible Structural Changes in the United States Incident to Lowering of Customs Tariffs.

[36] See Chap. XI of the present volume for a discussion of the concept "terms of trade."

[37] Manufactured foodstuffs, semimanufactures, and finished manufactures.

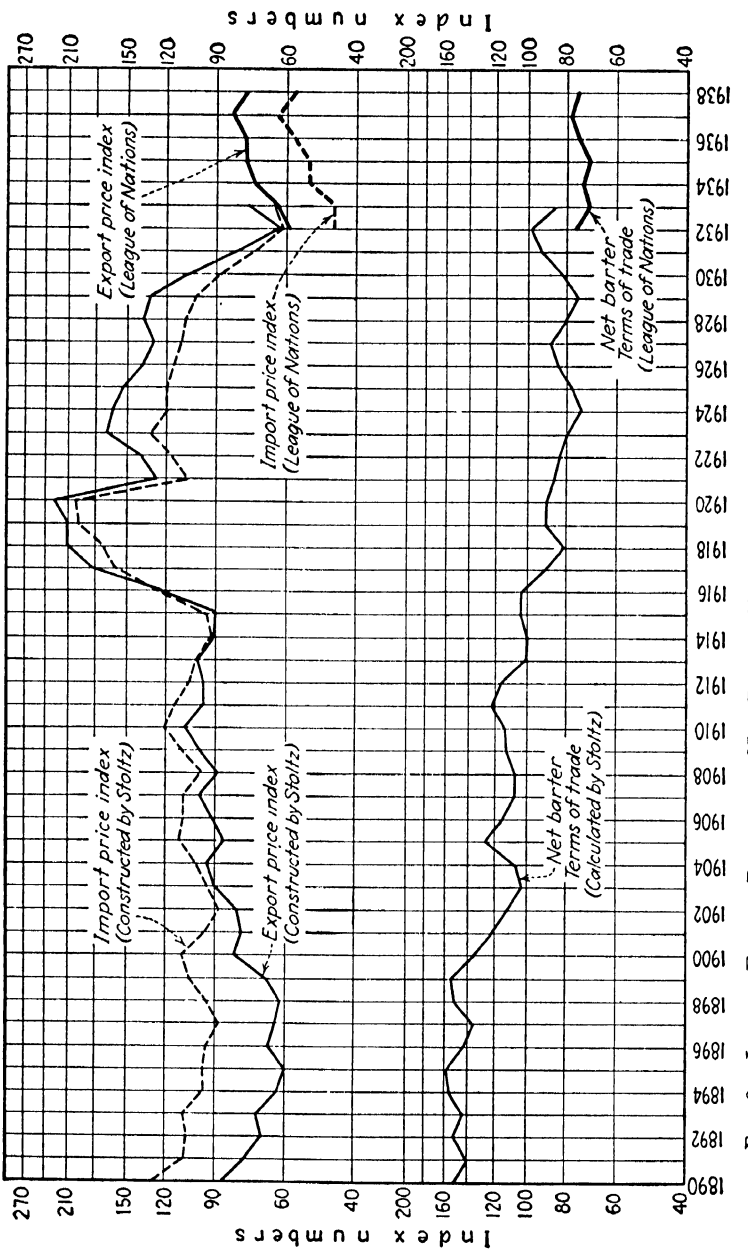


FIG. 9. IMPORT, EXPORT PRICES AND NET BARTER TERMS OF TRADE, UNITED STATES, 1890 TO 1938

SOURCES: The indexes here used, other than League of Nations figures, were compiled by Professor Stoltz, *Some Aspects of the Theory of International Trade Reconsidered*, master's thesis, 1936, unpublished, Brown University, Providence, Rhode Island. League of Nations source, *Review of World Trade*, 1938, pp. 70–71.

her raw-materials imports are already on a no-tariff basis. Freer trade might contribute, however, to reduction in domestic prices of light manufactures and protected agricultural goods without causing a corresponding reduction in prices of mass-production exports. In short, after the internal adjustment difficulties incident to a lowering of trade-restrictive barriers had been solved, consumers' goods might cost less in the domestic market, and a larger proportion of the country's labor might find employment in high-wage, mass-production export industries. Gains would tend to come both from improvement in existing terms of trade and from application of favorable exchange ratios to a larger volume of trade.

CONCLUSIONS

A nation's political policy in international diplomacy and its political policy in international economic relations are functionally related. Inasmuch as the economist cannot know what direction American diplomatic policy will take in the future, he is not in a position to make precise recommendations in respect to international economic policy. Nevertheless, he can draw some conclusions which, in the light of available information, appear to be economically sound.

1. The available evidence points overwhelmingly to the conclusion that a policy of economic isolation is not in accord with the tides of economic development. The United States is moving in the direction of more participation in world economy, not less.

2. The evidence that advantages are to be derived from a lower tariff policy for the United States is impressive. The economic logic of the case for freer trade as a means of improving the living standards of consumers in the United States is convincing, if one is willing to accept two assumptions: (1) that the transition to a freer trade policy can be made in such a manner as to minimize its disruptive effects upon the domestic economy and (2) that recurrent periods of business depression will be no more frequent and no more severe under freer trade than they would be under a system of protection.

The extent to which these two assumptions may be accepted as being correct cannot be definitely determined. The truth or falsity of the first assumption, concerning the transition period, can best be ascertained by gradually lowering tariff barriers and observing the results. In view of the near equality of political strength on the part of groups which stand to lose by tariff reductions and those which stand to gain, reductions based upon a process of timely selection and reciprocal agreements where possible are more likely to succeed politically than

tariff reductions applying equally to all rates and all industries. Experimentation of this nature may be costly but the possibilities of gain are great. The second assumption, concerning recurrent periods of business depression, is a consideration pertaining more to theories of extreme isolation versus free trade than to questions of a little more or a little less protection for a market that is already subject to the influence of economic conditions abroad. In general, we may be reasonably sure that so long as the United States is not completely self-sufficient economically, the country's domestic economy will be sensitive to economic instability in other parts of the world.

3. Too much emphasis cannot be laid upon the importance of giving appropriate recognition to all the many causes of world-wide economic maladjustment. Modification of the tariff policy of the United States cannot cure all economic ills of the world or of the United States. Economic dislocations carried over from two world wars call for readjustments in national economies everywhere. By working for international monetary stability and a relaxation of trade barriers both at home and abroad and by fostering over-all expansion of world economy through capital loans to countries most in need of them, the United States may be able to lessen, in some degree, the difficulties of the economic rearrangements necessary to both world economic stability and world peace. An equally important contribution to world economic stability may be made by the United States if her citizens can recognize the domestic causes of internal economic instability in this country, as well as the external causes, and cooperate in courageous and vigorous corrective action.

CHAPTER XXVI

ECONOMIC POLICY PROBLEMS IN A NUMBER OF OTHER COUNTRIES

Reconstruction is in various stages of progress in countries where industries were severely damaged by the ravages of the Second World War; elsewhere, postwar readjustment is under way. There is little reason to believe that the international economic positions of all nations will settle back into their prewar grooves. National economies are seldom static for long periods of time. Some regions are favored by technological developments and the evolution of institutional arrangements; others are not. The position of one nation in world economy may become stronger, while that of another becomes less favorable. This phenomenon is not new. Phoenicia was at one time the leading commercial nation of the world. A few centuries later Greek commerce overshadowed that of Phoenicia. In the nineteenth century Great Britain became the leading commercial nation. German economy surged forward during the last quarter of the nineteenth century and the first decade of the twentieth. During the period between the First and Second World Wars the rate of industrial development was greater in Russia than in any other country. Political institutions had not been so favorable to industrialization in Russia during the nineteenth century as in Great Britain and Germany; hence the greater rate of industrial development in Russia after the First World War. Uncertainties concerning political tendencies and institutional changes are so numerous at the present time as to discourage predictions concerning relative rates of economic development in different parts of the world in the years ahead. It is possible, however, to cite examples of the kinds of economic problems that certain nations are faced with and to suggest the nature and directions of pressure that these problems generate.

GREAT BRITAIN

At the beginning of the twentieth century coal mining, textile manufacture, and metal fabrication were among Great Britain's leading industries. Before the First World War evidence was available to suggest that she was faced with a problem of far-reaching internal

structural readjustment if she was successfully to meet the rising tide of foreign competition in these segments of industry. For a quarter century or more prior to that war, output of coal per worker in Great Britain declined in relation to that in Germany and the United States. Great Britain's relative efficiency in coal mining continued to worsen after the war as indicated by the data in Table 26.

TABLE 26. OUTPUT OF COAL PER PERSON EMPLOYED IN COAL MINING IN VARIOUS COUNTRIES, 1874 TO 1942

Period	United Kingdom	Germany	United States	
			Bituminous and lignite	Anthracite
Yearly Average Output per Person Employed, Long Tons *				
1874–1878	270	209	341	323
1894–1898	287	262	511	336
1909–1913	257	256	698	449
Daily Average Output per Person Employed, Metric Tons †				
1924–1928	0.98	1.05	4.15	1.85
1931–1935	1.14	1.63	4.42	2.33
1938	1.16	1.97 ‡	4.44	2.53
1942	1.07	1.85 ‡	4.64	2.68

* *Report of the Royal Commission on the Coal Industry* (1925) His Majesty's Stationery Office, London, 1926. Presumably long tons; report specifies "tons" with no qualifying adjective.

† Data supplied by U. S. Department of the Interior, Bureau of Mines, Washington, D. C. Data by years comparable with that in the top half of the table are not readily available for the later years, and the daily figures are not readily available for the earlier years.

‡ Ruhr only. Comparable figures for the Aachen area were 1.39 tons for 1938 and 1.27 for 1942; for the Saar, 1.65 tons in 1938 and 1.64 in 1942.

Coal mines in Great Britain are deeper, the seams are not so thick, and the layout for efficient mining is not so good as in Germany and the United States. This is not a weakness that Great Britain can remedy readily because her most easily available coal deposits have been consumed. Some such technological innovation as underground conversion of coal to gas to reduce the cost of mining may improve Great Britain's relative position in the coal-mining industry, but this

is not a certainty upon which predictions may be made with confidence. The facts available at present point to the conclusion that Great Britain's competitive position in coal mining is weaker than it was in the heyday of her economic and political leadership.

Coal and metallurgical industries are related, particularly coal and ferrous-metal smelting and fabrication in the earlier stages. During the quarter century prior to the Second World War Great Britain's production of pig iron tended to decline and her competitive position in heavy iron and steel goods worsened. The steel industry of Germany, one of Great Britain's principal competitors, is disorganized and disrupted at present, but the richness of coal, iron ore, and technical skill in the Ruhr-Saar-Lorraine region of western Europe is such as to suggest that the steel industry in this area will be revived in the course of time under whatever political leadership survives the power politics of the postwar era.

As in the case of coal and iron industries so also in textile manufacturing—particularly, cotton textile manufacturing—Great Britain's competitive position worsened during the quarter century or more prior to the Second World War. Consumption of raw cotton is a rough-and-ready measure of expansion or contraction in cotton textile manufacturing. Between 1910 and the late 1930's annual consumption of raw cotton in Great Britain declined from about 4 million bales to less than 3 million. Not since the 1870's had Great Britain's annual consumption of raw cotton averaged as low as it was during the interwar years. Japan's annual consumption of raw cotton increased between 1910 and the late 1930's from about 1 million bales to nearly 4 million. Between 1929 and the late 1930's Great Britain's exports of cotton fabrics (measured in square yards) declined about 40 or 50 per cent whereas Japan's exports of cotton fabrics increased about 50 per cent during the same period. In the late 1930's Japan's exports of cotton fabrics (measured in square yards) exceeded those of Great Britain by at least one-fourth.

The foregoing facts do not suggest that Great Britain's whole economy was being permanently undermined by foreign competition prior to the Second World War. They do suggest the need for difficult and painful structural changes in British industry.

The reversion of British commercial policy from free trade to a substantial amount of home-market protection during the interwar period has similar implications. British exports of manufactured goods, both in dollar volume at 1913 prices and in terms of a quantum

index, declined between 1913 and the late 1930's more than manufactures exports of Germany, and at a time when manufactures exports of the United States, Japan, Belgium, and Sweden were increasing. These comparisons are shown in Table 27. British exports of manufactures might not be expected to increase so rapidly as exports of an industrially less mature country, but a decline of 30 to 40 per cent during a period when German exports of manufactures declined less than 20 per cent (notwithstanding the Hitler self-sufficiency policy) and exports of a number of competitor countries increased from 4 to almost 400 per cent, calls for explanations other than mere differences in rates of industrialization.

TABLE 27. EXPORTS OF MANUFACTURED GOODS FROM A NUMBER OF COUNTRIES, 1913 TO 1936–1938 *

Country	Volume of exports			
	Millions of 1913 dollars		Quantum index	
	1913	1936–1938	1913	1936–1938
United Kingdom and Ireland	2,029	1,277	100	63
Germany	1,615	1,357	100	84
United States	721	1,116	100	155
Japan	102	481	100	472
Belgium	280	290	100	104
Sweden	68	149	100	219

* League of Nations, Economic and Financial Section, *Industrialization and Foreign Trade*, 1945, pp. 160–163. By courtesy of International Documents Service, Columbia University Press.

British economy was subjected to searching analysis during the interwar years. The published results of a number of these investigations are cited in the Bibliography of the present volume. The consensus pointed in the general direction of need for greater emphasis upon production of manufactures requiring high degrees of skill (precision instruments and chemicals, for example); to more concentration on mass production of profitable lines of metal goods (machines, for example); to production of more goods for home consumption in both manufacturing and agricultural industries (house and office furnishings, processed foodstuffs, dairy and poultry products, for example);

and to more aggressive merchandising policies in the sale of British goods in foreign markets.

In spite of the destruction of German, Japanese, Russian, and French industry during the Second World War, postwar Britain is faced with foreign competition and interindustry adjustment problems not altogether different from those of the prewar period. In addition she is faced with a more acute problem of increasing her exports in relation to her imports because of the dissipation of British overseas investments during the war. Before the war the British held overseas investments with a nominal value in the neighborhood of 4 billion pounds sterling. As a result of a huge wartime balance-of-payments deficit the British liquidated (during the war) over 1 billion pounds of their most marketable overseas investments and increased their overseas liabilities by about 3 billion pounds (over and above lend-lease and mutual-aid commitments).[1] Since the end of the war Great Britain has borrowed additional sums from the United States.[2] In short, postwar Great Britain is a debtor nation on overseas account in place of her traditional prewar creditor position. Her net income from overseas investments was approximately 210 million pounds sterling in 1913 and not far from that figure in the late 1930's.[3] To what extent the British may have to bear the burden of a net outgo on foreign investments and borrowings in years to come is not possible to know at this time. The available evidence suggests, however, that she will not have a net income from this source comparable with that realized prior to the Second World War.

Some of the effects of the wartime deterioration in Britain's international economic position upon British policy attitudes have been indicated already in connection with discussions of the International Monetary Fund, the International Bank for Reconstruction and Development, and the proposed International Trade Organization. Whereas United States opinion has been strongly in favor of early restoration of a multilateral trading system and stabilization of foreign exchanges, influential sections of the British public have hesitated to support such measures because of Britain's weakened competitive

[1] BLOOMFIELD, ARTHUR I., *The British Balance of Payments Problem*, pp. 2, 4, Princeton University Press, Princeton, N. J., Autumn, 1945.

[2] Great Britain negotiated a loan amounting to 3,750 million dollars from the United States in July, 1946. KRIZ, MIROSLAV A., *Postwar International Lending*, p. 1, Princeton University Press, Princeton, N. J., Spring, 1947.

[3] Bloomfield estimated Britain's net income from overseas investments for the years 1936–1938 to be 203 million pounds a year. BLOOMFIELD, *op. cit.*, p. 11.

position and possible advantages to be had from bilateral trade agreements, exchange controls, tariff protection, and international cartel arrangements. The acute economic problems in the British Isles no doubt have had an important influence, also, in the recent trend toward socialization of heavy industries in that country.

Great Britain's apogee of international political influence, relatively high per capita productivity, and comparatively great national wealth was reached before the First World War. Factors contributing to her weakening relative position were cited by the authors of the present volume in a book published almost 20 years ago.[4] Present information and prospective future developments cannot be interpreted with sufficient accuracy to determine whether living standards in Great Britain must decline. The facts do indicate, however, that her principal problem is one of deficit production, not of excessive production and oversaving.

One or some combination of three kinds of policy measures may be resorted to in Great Britain to meet her current emergency problem as reflected by a passive payments balance and acute scarcity of dollar exchange. These measures are (1) reduction of wage rates, (2) depreciation of the external value of the pound and relative deflation of the pound in the domestic market, (3) resort to import controls and shrewd bilateral bargaining in an effort to improve British terms of external trade.[5] Attempts to reduce wage rates would probably meet with strenuous opposition from labor unions. A policy of exchange depreciation is difficult and hazardous from points of view of controlling the internal price level and of preventing foreign retaliation and disruption of the foundational purposes of the International Monetary Fund. Likewise a policy of shrewd bargaining with the use of such tools as import controls and bilateral trade agreements is hazardous, from points of view of foreign retaliation and initiation of trade restrictions abroad. Such restrictions might, in time, so stifle world trade as to cause Great Britain more losses than she could hope to offset by any successes that she might achieve as a result of shrewd bargaining. Cooperation in international policies working in the

[4] KILLOUGH, HUGH B., and LUCY W. KILLOUGH, *Raw Materials of Industrialism*, The Thomas Y. Crowell Company, New York, 1929. For a more recent discussion of the subject, see BROWN, PHILIP S., "Prospective National Income and Capital Formation in the United Kingdom," *American Economic Review*, September, 1946, p. 544.

[5] See KAHN, ALFRED E., "The British Balance of Payments and Problems of Domestic Policy," *Quarterly Journal of Economics*, May, 1947, p. 386.

direction of freer international trade and world trade expansion appears to be the policy most likely to ease Great Britain's economic difficulties, but domestic political pressures are such that a long-range consistent policy of this kind may not be politically possible in a war-weary United Kingdom.

UNION OF SOVIET SOCIALIST REPUBLICS

More goods—consumption and production goods—are an impelling necessity in Soviet Russia. The question of whether this need will result in a policy of Russian cooperation with democratic countries and foreign borrowing to purchase capital equipment or to a policy of belligerent self-sufficiency is a critical current issue in world politics. Postwar developments to date point in the general direction of a Russian policy of exploiting near-by satellite countries and of belligerently challenging the policies of economic cooperation of other countries.

Two fundamentally different national policy tendencies in respect to international economic relations have been in evidence over a long period of time, especially since the Industrial Revolution. Free trade to make possible a greater degree of territorial division of labor was a characteristic feature of British policy in the nineteenth century. This policy resulted in British importation of more raw materials and foodstuffs and exportation of more manufactures. Another type of economic policy developed in less densely populated countries with greater diversity of natural resources, and a comparatively late start in the utilization of improved technology. Nineteenth-century United States, late nineteenth-century Germany, and Russia after the First World War are examples of countries that employed trade-restrictive policies to accelerate industrial development and the application of improved technological methods in the exploitation of a wealth of domestic natural resources. In this respect nineteenth-century United States policy and interwar Russian policy were similar. The Russian interwar experience differed from early nineteenth-century American experience, however, in at least one fundamental respect. Whereas the Americans borrowed from abroad, imported goods in excess of exports, and thus accelerated the process of domestic industrialization, the Russians did not borrow abroad on a comparably large scale.[6]

Industrial Expansion of Russia. Without more complete data than are available, the manner in which the Soviet Union has increased its

[6] The Russian Revolution and the Soviet interwar communist regime were not conducive to large foreign investment in Russian industry.

production of capital equipment cannot be precisely described. In general, increased production efficiency there appears to have occurred as a result of more effective combination of productive factors within the political boundaries of the Union and without resort to an increase in foreign trade.[7] The magnitude of the country's economic expansion in various directions during the period 1925 to 1940 is suggested by statistical indices that are available annually for all or a part of this period. In interpreting these figures, one may recall the fact that all industrial activity in Russia was at a low ebb in 1925. Russian industry had not fully recovered from the adverse effects of the communist Revolution; as a result there was less industrial production in Russia in 1925 than there had been before the First World War.[8] Between 1925 and 1935[9] agricultural production in the U.S.S.R. is estimated to have increased about 4 per cent; between 1925 and 1938 manufacturing production is estimated to have increased about 1,100 per cent. These data are summarized in Table 28.

Notwithstanding the apparent increase in manufacturing production Russia was a relatively poor country in terms of per capita output even before the destruction of production facilities incident to the Second World War. This conclusion is suggested by examples of per capita production of goods in Russia and in other countries. As late as 1937 her per capita production of no one of the following items—electric power, steel, coal, cement, cotton fabrics, woolen fabrics, leather footwear—was equal to one-half that of England, not to mention even higher levels of per capita production of these goods in the United States.[10]

Foreign Trade Tendencies. Two significant shifts occurred in the foreign trade of the Soviet Union during the interwar period. (1) The

[7] For the period 1911–1913 the annual value of Russian imports averaged 636 million dollars; exports, 794 million dollars. Roughly comparable figures for the years 1936–1938 were as follows: imports, 162 million dollars; exports 174 million dollars. In the earlier period (1911–1913) Russian foreign trade was approximately 3.6 per cent of world trade. In the later period (1936–1938) Russian foreign trade was only about 1.2 per cent of world trade. CONDOIDE, M. V., *Russian-American Trade,* p. 63, Ohio State University, Columbus, Ohio, 1946.

[8] Manufacturing production in 1925 is estimated to have been about 30 per cent below the 1913 figure. League of Nations, *Industrialization and Foreign Trade,* p. 134, International Documents Service, Columbia University Press, New York, 1945.

[9] Comparable data for later years are not available.

[10] LEONTIEF, W. W., SR., "Soviet Planning: The Problem of Economic Balance," *The Russian Review,* New York, Autumn, 1946, p. 30.

total declined in terms of both value and quantity.[11] (2) The composition of export and import goods underwent significant changes. In the period 1909–1913 approximately 70 per cent of total exports from Russia were agricultural products. The comparable percentage

TABLE 28. INDICES OF AGRICULTURAL PRODUCTION AND MANUFACTURING PRODUCTION FOR THE U.S.S.R. AND THE WORLD AS A WHOLE, 1925 TO 1938 *

(1925 = 100 per cent)

Year	World		U.S.S.R.	
	Agricultural production	Manufacturing production	Agricultural production	Manufacturing production
1925	100	100	100	100
1926	100	105	109	143
1927	102	111	109	163
1928	106	117	111	204
1929	106	127	111	258
1930	107	114	119	335
1931	106	101	99	419
1932	107	90	89 †	479
1933	107	101	97	517
1934	104	113	99	623
1935	104	128	104	763
1936	...	148	...	988
1937	...	162	...	1,100
1938	...	151	...	1,221

* League of Nations, *World Production and Prices*, 1925–1934 and 1935–1936, and *Industrialization and Foreign Trade*, 1945. Used by courtesy of International Documents Service, Columbia University Press, New York.

NOTE: The bases have been shifted to the year 1925 to facilitate comparisons.

† Data for 1932 and after are provisional.

for the late 1930's was 30. Exports other than agricultural products, in the same years, included timber and mill products, oil and oil products, furs, ores, fertilizers, cement, and metals in various stages of manufacture. In the period 1909–1913 about one-fourth of Russia's imports were consumer goods; in the late 1930's only about 10 per cent of her imports were consumer goods.[12] Machinery and metal

[11] Between 1913 and 1938 the value figure for Soviet foreign trade declined 78 per cent; the quantum figure declined 73 per cent. CONDOIDE, *op. cit.*, pp. 65, 66.

[12] *Ibid.*, p. 68.

goods in various stages of fabrication bulked large in Russia's imports in the 1930's.[13]

Conclusions. Rapid industrialization and national self-sufficiency appear to have been primary objectives of the Soviet system, objectives that were feasible because of Russia's large land area and her abundance and diversity of minerals and other natural resources.

Producer goods appear to have constituted an increasing proportion of Russian production and imports under the Soviet regime.[14] Prior to the Second World War rapid industrialization was given priority over increase in living standards in the Soviet Union. Because Russian economic life had been dominated by a vigorous drive for industrialization under Soviet leadership, Russian economy was not unprepared for the German attack in 1941. During the war Russia's production capacity suffered serious damage. The Dnepropetrovsk region, which was overrrun by the Germans, accounted in 1938 for over 50 per cent of total extraction of iron ore in the Soviet Union and the Don Basin accounted for about 60 per cent of the 1938 output of coal. Territories under German occupation in 1942 had provided about 85 per cent of Russia's output of sugar before the war. Of Russia's total railway network about 30 to 40 per cent came under German control in the course of the war. The Russians moved a large part of the railway rolling stock before Germany seized the roads. They also moved manufacturing and mining equipment eastward as the Germans moved forward. The Russians pursued a "scorched-earth" policy for the purpose of destroying buildings and installations that could not be removed ahead of the German invasion. This policy helped to win the war for Russia, but it left her with depleted production facilities.

After the Second World War the Russians persisted in demands for reparations from conquered territories; they were slow to release German and Japanese prisoners from Russian work camps; and their leaders showed comparatively little interest in participation in plans

[13] In 1938 machinery, precision instruments, and electrical equipment constituted about 33 per cent of the value of Russian imports; other metal goods, about 26 per cent; wool and woolen goods, about 5 per cent; rubber and rubber goods, about 4 per cent. BAYKOV, ALEXANDER, *Soviet Foreign Trade,* Appendix, Princeton University Press, Princeton, N. J., 1946.

[14] Producer goods constituted approximately 41 per cent of total industrial production in 1928, 54 per cent in 1934. League of Nations, *Statistical Year-Book,* 1937–1938, pp. 182, 183. As already stated, consumer goods imports declined from about 27 per cent of total imports in the period 1909–1913 to 9 per cent in 1937. Furthermore, total imports declined during this period. CONDOIDE, *op. cit.,* p. 68.

for fostering multilateral trade and relaxation of international trade restrictions. These policy tendencies of the U.S.S.R. were in harmony with her national self-sufficiency policy.

The living standard of the Russians is low relative to that of the British, the French, the Swedes, the Swiss, and other national groups in Europe. Prior to the First World War the Communist party in Russia kept living standards and output of consumption goods at a low level, thus to favor production of capital goods. A continuation of this kind of policy in Russia is not likely to be conducive to friendship of the Russian masses for their more prosperous foreign neighbors. Such a policy might, however, lead to a maximum of Russian preparedness for a Third World War.

EASTERN AND CENTRAL EUROPE

Postwar reconstruction and development problems in eastern and central Europe are so involved in power politics as greatly to limit the meaningfulness of a purely economic analysis.

Eastern Europe. Austria, Czechoslovakia, Hungary, Poland, Greece, Rumania, Bulgaria, and Yugoslavia all are relatively poor agricultural countries. In Table 29 are estimates of percentages of the populations of these countries that were dependent upon agriculture as a main source of livelihood prior to the Second World War.

TABLE 29. PERCENTAGES OF POPULATION DEPENDENT UPON AGRICULTURE AS A MAIN SOURCE OF LIVELIHOOD IN A NUMBER OF EUROPEAN COUNTRIES *

Country	Percentage
Poland	61
Czechoslovakia	37
Austria	27
Hungary	52
Roumania	68
Yugoslavia	70
Bulgaria	72
Greece	46
Weighted average	55+

* SOURCE: *Planning*, a broadsheet issued by Political and Economic Planning, No. 223, July, 1944. Reprinted by *The New Republic*, New York. By courtesy of the publisher.

Traditionally, people in the highly industrialized parts of Germany have looked to eastern Germany and to the countries listed in Table 29 for a part of their food supply. The economic future of this whole European area—with France, Belgium, Netherlands, and Denmark

included—is more or less dependent upon what happens in the way of industrial revival in Germany and upon the opening of trade channels within the European area as well as upon the development of trade between Europe and other regions.

The countries listed in Table 29, like many other countries with large populations depending mainly upon agricultural production for support, are relatively poor. P.E.P.'s [15] estimates of income in these countries in the 1930's ranged from a low of 12 pounds sterling per capita in Yugoslavia to a high of 33 pounds sterling per capita in Austria, as compared with a per capita income of 105 pounds sterling in Great Britain. A long-range program of economic improvement in these countries should probably involve more industrialization as well as improvement in agricultural techniques. A program for more immediate relief involves reestablishment of agricultural production and the opening of channels for the exchange of agricultural goods for essential manufactured imports. Efficient utilization of the rich coal, iron, and other natural resources in Germany, and reestablishment of trade between Germany and other countries are among the essentials to a maximum of economic prosperity in Europe.

FRANCE

Prewar France was not so highly industrialized as Great Britain. She depended more upon light industries and an efficient agriculture. Nevertheless, coal, iron and steel, and metallurgical manufacture were not unimportant parts of the prewar French economy. France had iron-ore resources but comparatively little coal. Coal production in the Saar and Ruhr is an important factor in the reconstruction of postwar French economy. European industry became specialized and integrated during the century prior to the Second World War. Postwar utilization of French and German mineral resources in an integrated system of manufacture and trade is essential to maximum prosperity for both France and Germany and for other European countries as well.

France has long held a position of world leadership in the production of certain fashion and luxury goods, which have constituted a large proportion of her export trade. In 1925, the interwar year in which the value of French exports was at its maximum, French exports

[15] *Planning*, a broadsheet issued by Political and Economic Planning, No. 223, July, 1944. Reprinted by *The New Republic*, New York. See also, EZEKIEL, MORDECAI, *et al.*, *Towards World Prosperity*, Chap. IX, Harper & Brothers, New York, 1947.

of cotton, wool, and silk fabrics, clothing, and lingerie, and leather and its manufactures were valued at 600 million dollars, 27 per cent of the value of all French exports. With the coming of the depression, world markets for these goods shrank even more severely than world markets in general. By 1933 the value of French exports of the same products had fallen to 93 million dollars, 13 per cent of the value of all French exports in that year.[16] The French still have a unique reputation as producers of fine fabrics, as leaders in the design of women's clothing, and as makers of luxury items such as jewelry, perfumes, and fine wines. France can hope to maintain a substantial export trade in such articles, however, only under conditions of considerable prosperity in the rest of the world.

ITALY AND JAPAN

Many of the basic economic problems of Italy and Japan are similar in character and origin. Both countries are densely populated; neither has an abundance of natural resources; both must look to foreign trade as the most promising means of improving the economic circumstances of their people; both nations were on the losing side in the Second World War. United States attempts to lead the way in the development of international economic relations policies that will foster the expansion of world trade are influenced by the economic needs of Italy, Japan, and other countries that cannot prosper without foreign trade. If the most promising channels of economic growth, *viz.*, an expanding foreign trade, are closed to Italy, Japan, and other countries with dense populations and a dearth of natural resources, the foundations of lasting world peace will be weakened thereby.

Italy and Japan have only one production factor that is relatively large in comparison with production factors in other countries, *viz.*, labor. Labor as such is not subject to exportation or importation in large amounts. It must be embodied in movable goods before it can enter the channels of international trade *en masse*. Importation of fuels, fabricating materials, extensively produced foodstuffs and heavy metal goods, and exportation of intensively produced agricultural products and light manufactures are the most promising directions of economic development in densely populated countries that are relatively poor in natural resources. Thus it is possible for such countries to make effective use of their labor in producing export goods that em-

[16] Figures compiled from data in *Foreign Commerce Yearbooks*, U. S. Department of Commerce, Washington, D. C.

body relatively large amounts of labor in exchange for import goods that embody fewer hours of work per unit of value. Prior to the Second World War economic developments in Italy and Japan had moved in this general direction notwithstanding international trade barriers erected during the interwar years. During the period 1900 to 1938, for example, manufacturing production more than doubled in Italy and increased eightfold in Japan. During the same period Italian and Japanese exports of manufactures increased more than their imports of manufactures, and imports of primary products increased more than exports. These data are summarized in Table 30.

TABLE 30. INDICES OF MANUFACTURING PRODUCTION AND FOREIGN TRADE, ITALY AND JAPAN, 1901–1905 TO 1936–1938 *

Years	Italy					Japan				
	Manufactures			Primary products		Manufactures			Primary products	
	Production	Exports	Imports	Imports	Exports	Production	Exports	Imports	Imports	Exports
1901–1905	100	100	100	100	100	100 †	100	100	100	100
1936–1938	278	204	89	103	64	866	1,001	203	387	123

* League of Nations, *Industrialization and Foreign Trade*, International Documents Service, Columbia University Press, New York, 1945, pp. 140, 160–163, 166, 167. By courtesy of International Documents Service, Columbia University Press.

† 1905 only: not available 1901–1904.

Notwithstanding the industrial development and foreign trade tendencies suggested by the data in Table 30, neither Italy nor Japan prior to the Second World War appeared to have reached the limits of increased production efficiency through industrialization and foreign trade. Other densely populated countries had developed more manufacturing and foreign trade than either Italy or Japan. Prior to that war about 47 per cent of gainfully occupied persons in Italy were in agriculture and about 29 per cent in manufacturing and handicraft industries; in Japan about 45 per cent of the gainful workers were in agriculture and 25 per cent in manufacturing and handicraft industries. Roughly comparable percentages for the United Kingdom were 6 per cent in agriculture and 40 per cent in manufacturing; for Belgium, 19 per cent in agriculture and 40 per cent in manufacturing; for Netherlands, 21 per cent in agriculture and 37 per cent in manufacturing; for Switzerland, 26 per cent in agriculture and 44 per cent in

manufacturing.[17] Italy's per capita foreign trade (in dollars) in 1937 was 29 and that of Japan 28. Comparable figures for the United Kingdom, Belgium, Luxembourg, Netherlands, and Switzerland were 163, 205, 172, and 169, respectively.[18]

In 1937 about one-third of Italy's exports consisted of products of intensive agriculture—fresh and preserved fruits, vegetables, cheese, etc.—and more than half consisted of light manufactures and semimanufactures—textile fabrics, rayon, leather gloves, buttons, wines, etc.

Italy's imports in that year consisted largely of extensively produced foodstuffs (wheat, for example); fabricating materials, such as cotton and wool; fuel, and heavy manufactures and semimanufactures, such as steel and machinery.[19] Italy's industries developed along the lines of international specialization suited to her position in world economy during this period but less rapidly than her more prosperous competitors.

The Second World War seriously disrupted Italy's production and trade. Whereas the value of her exports was approximately equal to the value of imports in 1938 and 1939, the value of imports exceeded that of exports by about 50 per cent in 1946.[20] A basic economic problem of Italy and of countries that would assist her to establish a firm foundation for economic prosperity is reestablishment and acceleration of the industrial development tendencies suggested by the foregoing analysis. Italy needs freer access to foreign markets, internal economic stability, and foreign loans for the development of hydroelectric energy and the procurement of machinery.

It is not reasonable to anticipate that Italy will develop heavy in-

[17] SOURCE: U. S. Department of Commerce, *Commerce Yearbook, 1938*, pp. 389, 390, Washington, D. C. THOMAS, IVOR, *The Problem of Italy*, George Routledge & Sons, Ltd., London, 1946. ACKERMAN, EDWARD A., *et al., Japan's Prospects*, Chap. VII by Edward A. Ackerman, pp. 175*ff*., Harvard University Press, Cambridge, Mass., 1946.

Local resources in Italy and Japan are not available for the development of large, heavy iron and steel industries such as those to be found in Great Britain and Belgium. Light manufacturing industries are well suited to Italian and Japanese facilities. Typical light industry products are textiles, porcelain, bicycles, tools, instruments, toys, paper goods, buttons, lamp bulbs, etc. The location of this type of industry is less restricted by proximity to large resources of coal, iron ore, and other bulky mineral resources than is that of heavy industries.

[18] *Foreign Commerce Yearbook, 1938*, p. 427.

[19] *Ibid.*, pp. 94, 95.

[20] United Nations, *Monthly Bulletin of Statistics*, June, 1947, p. 74, Statistical Office of the United Nations, New York.

dustries such as those to be found in Great Britain, Belgium, and the German Ruhr—industries dependent upon primary iron and steel production and local sources of supply of coal and iron. Comparisons of proportions of gainful workers in agriculture and manufacturing in Great Britain and Italy do not imply that Italy should have an occupational pattern identical with that of Great Britain. The suggestion is to the effect that with freer world trade Italy might improve her economic circumstances by further expansion of exports of her light manufactures. The extent of such expansion that is favorable to Italy can be determined more accurately by competitive trial and error than by advance statistical calculations and estimates.

Prerequisites for greater per capita production in Japan are similar to those in Italy. Japan is densely populated in relation to her natural resources. Before the Second World War her principal exports were products of intensive agriculture and light manufacturing. At least half of her prewar exports were light manufactures such as textiles, paper products, pottery, glassware, chemicals, toys, and buttons. About three-fourths of her imports consisted of fabricating materials such as cotton, wool, hides, rubber, wood, ores and metals, phosphate rock, and potash.[21] As in Italy, so also in Japan, the recent war disrupted production. Manufacturing production in Japan in 1946 was only about one-fourth what it had been in 1939.[22] As in Italy, the most promising directions of economic growth in Japan are through expansion of foreign trade.

In prewar Japan 30 per cent or more of the manufacturing workers were in metal-manufacturing industries (including basic iron and steel production), machine-tool manufacture, shipbuilding, and the manufacture of vehicles.[23] These industries were subsidized in various ways including direct government subsidies, tax advantages, import tariffs, government financing, and freight rate differentials. Diversion of workers from such industries to industries in which Japan has a comparative advantage in world trade (textiles, ceramics, etc.) under freer trade conditions would be likely to contribute to a higher level of economic prosperity in Japan. Such a development would contribute also to less likelihood of Japanese adventure in military imperialism.

[21] *Foreign Commerce Yearbook, 1938,* pp. 331–333.
[22] *Monthly Bulletin of Statistics,* June, 1947, p. 24.
[23] ACKERMAN, *op. cit.,* p. 203.

CHINA AND INDIA[24]

The international economic problems of China and India are similar in a number of important respects. Since they are the two largest countries of the world in terms of population and among the largest in terms of area, they might be expected to rank high among the great trading nations of the modern world. In neither country, however, have the people constituted important markets for the products of other countries, nor has either country contributed such a volume of its own goods to world commerce as would seem to be commensurate with its population and area. In 1928, the highest of the interwar years in the trade of both countries, the per capita value of the combined exports and imports of China was less than $4 and of India[25] just under $7. This was a year in which the per capita value of the international trade of a number of countries—Great Britain, Denmark, and Canada, for example—was well over $200.

Both China and India are economically backward. The major portions of their populations are engaged in agricultural pursuits. Subsistence farming is a principal industry in both countries. In good years there is hardly enough food; in bad years there are famines. Any increases in productivity appear to have been followed by population increases with the result that no significant improvements in living standards of the masses of the people have occurred. In the early 1930's both China proper and India had population densities of about 250 persons per square mile. Populations of this density can be supported comfortably in regions with manufacturing industries and a substantial volume of international trade;[26] they can barely be kept alive in regions devoted largely to primitive agriculture.

If China and India are to improve their economic conditions, they must greatly increase their own per capita productivity in both domestic and export goods. Increased production of the latter would enable them to buy from other countries the goods that they cannot produce at home. The outlook for significant production increases in either country is far from good. There can be no question of the fact that both China and India have natural resources for industrialization sufficient greatly to increase the per capita production of populations of their present size, although it is unlikely that their resources

[24] The term "India" is used here to include the whole area known as India before the British withdrawal in August, 1947.

[25] *Foreign Commerce Yearbooks.*

[26] See Table 2 of the present volume for population densities in other countries.

are sufficiently abundant to support an industrial superstructure comparable to that of the United States, the United Kingdom, or prewar Germany. Other elements necessary to bring about the economic development of these areas have been missing in modern times, and there are no definite immediate prospects of their being supplied. Among the most important missing elements are skilled labor, technical training, leadership in industrial organization and management, capital equipment, transportation facilities, and political stability.

A brief examination of the nature of the resources of each country will shed some light on the extent of the problem. China has more undeveloped and underdeveloped mineral resources per capita than either Italy or Japan. She has large underutilized areas suited to forestry and extensive agriculture. These areas are in the outlying provinces beyond the boundaries of China proper and are still thinly populated. China also has an abundance of coal, potentially large hydroelectric resources, some petroleum, iron-ore resources of an indeterminate amount, and a variety of other metallic and nonmetallic resources such as tin, manganese, tungsten, magnesite, bauxite (the raw material of aluminum), phosphate, sulphur, asbestos, and kaolin for the manufacture of high-grade porcelain ware.

The near future prospect of the development of China's resources is not encouraging. Until she achieves a greater degree of political solidarity and stability, her chances of borrowing foreign capital in amounts necessary to rapid industrialization, or of making effective use of large foreign loans, if she had them, are not promising. As an alternative China might endeavor to emulate the Russian achievement in the conversion of a peasant, agricultural economy into an economy of collective farming with a rapidly expanding industrial superstructure. Soviet Russia accomplished this with a minimum of outside capital but not without an all-powerful and all-pervasive government.

India has reserves of coal, iron ore, and other minerals—not so great in relation to the population, probably, as those of China, but great enough to permit expansion not only of her light manufacturing industries but also of some heavy manufacturing. India's exports, although small in relation to her size, have been materially larger and more varied than those of China. More than two-thirds of her exports are raw materials and foodstuffs, such as rice, tea, hides and skins, cotton, jute, wool, rubber, mica, manganese ore, tungsten and other ores, oil seeds, and shellac. India produces coarse cotton goods, jute burlaps, logs, and rugs for export, but the value of her imports of other types of textiles is almost as great as the value of her textile exports.

India can make economical use of large amounts of capital equipment in decades ahead, provided she can develop technical and business leadership and political stability necessary to the efficient operation of capital-using industries. The withdrawal of the British and the setting up of two nations—India and Pakistan—have introduced new uncertainties into an old problem. If the new nations can work together on their joint economic problems and if native business leaders develop, industrialization might move forward, especially if foreign capital is forthcoming. Without cooperation and leadership the great masses of the Indian people would appear to be doomed to continued extreme poverty and misery.

The future of both China and India as markets for the products of Western industries depends on the growth of productivity and purchasing power in those countries. In the past neither foreign loans in China nor foreign loans plus British rule in India have been able to break the vicious circle of poverty, low productivity, and political instability. This fact has profound significance not only for China and India but also for Western countries with capital to lend. These countries are attempting to promote world economic and trade expansion by facilitating industrial development in backward countries. Thus they hope to ease the stresses and strains incident to economic maladjustment and political unrest in a world disorganized by war and divided by conflicting ideologies. The capitalist nations of the mid-twentieth century will need new techniques and policies in their dealings with China and India if they are to avoid the impasse inherited from the past.

LATIN AMERICA

South of the United States is a land area about the size of the U.S.S.R. and almost three times the size of continental United States. The population of this area (South America, Central America, West Indies, and Mexico) is upward of 130 million. The comparable figures for the U.S.S.R. and the United States are upward of 170 million and about 140 million, respectively.[27] These regions to the south of the United States have little coal resources, but they have water-power resources, petroleum, iron ore, and other minerals in addition to forest resources, agricultural land, and a diversity of climatic conditions. The area in question is divided into some 20 independent nationalities [28]

[27] League of Nations, *Statistical Yearbook,* 1941–1942, and *Statistical Abstract of the United States,* 1946.

[28] See HARRIS, SEYMOUR E., *et al., Economic Problems of Latin America,* p. 455, McGraw-Hill Book Company, Inc., New York, 1944, for names of countries with population and area statistics for each country.

and a number of dependencies of Great Britain, Netherlands, and France. Manufacturing has been slow to develop in the Latin-American countries, and the political systems of many of them have experienced numerous upheavals in the course of the past century.

During the interwar period many of the Latin-American countries borrowed foreign capital and moved forward in the application of improved techniques of production. Furthermore, a number of these countries prospered during the Second World War through the sale of raw materials and foodstuffs to belligerent nations. In spite of recent advances, however, it is unlikely that any of the Latin-American countries will experience during the next few decades manufacturing expansion comparable in rate and relative magnitude to that experienced in the U.S.S.R. during the interwar period or that experienced in Germany or in the United States during the three or four decades prior to 1913.

Argentina. More than four-fifths of Argentinian exports (in value) consisted of raw materials and foodstuffs both in 1927 and in 1937. These exports were such commodities as wheat, corn, oats, barley, rye, cotton, chilled and frozen meat, hides and skins, wool, grease and tallow, linseed, quebracho logs, bones, small amounts of lead and tin ores, canned meats, meat extract, butter, lard, casein, flour, and bran. Manufactures constituted a large part of the imports. In 1937 more than one-half of Argentinian imports (in value) were manufactures, such as textiles, paper, petroleum products, iron and steel goods, electrical goods, motor vehicles, machinery (including agricultural), and chemicals. Among the nonmanufactured imports were fruits and vegetables, coffee, coal, rubber, tobacco leaf, crude petroleum, and wood of various kinds.[29]

Argentina's principal manufacturing industries produce foods and beverages, textiles, paper, chemicals and drugs, rubber goods, petroleum products, leather goods, some metal goods. Finished manufacturing and the processing of primary goods for further manufacture expanded in Argentina during the war years, 1939 to 1945.[30] Over a period of decades manufacturing in Argentina may be expected to expand, but during the early postwar years readjustment in domestic manufacturing to meet foreign competition will be called for unless Argentina

[29] SOURCES: *Foreign Commerce Yearbooks,* 1930 and 1938. See Sintesis Estadistica Mensual de la Republica Argentina, Estadistica y Censos, Buenos Aires, Argentina, for postwar foreign trade statistics of Argentina.

[30] See HUGHLETT, LLOYD J., *Industrialization of Latin America,* McGraw-Hill Book Company, Inc., New York, 1946.

should develop a more rigorous policy of national self-sufficiency. Inasmuch as Argentina's comparative advantage is largely in agricultural production and foodstuffs industries, such a policy would work against the interests of dominant economic groups in the country. In view of the sparse population (12 or 13 persons per square mile), her wealth of agricultural resources, the lack of coal for heavy metallurgical industries, and the absence of a large reservoir of skilled manufacturing workers, there is little reason to anticipate a rate of industrialization in Argentina comparable with that of nineteenth-century United States or that in Russia during the interwar period. There is little reason to expect a rate of industrial expansion in Argentina sufficient to absorb, economically, great annual amounts of foreign capital that might be available if an effort were made to divert a large flow of foreign loans from Europe to less industrialized parts of the world after reconstruction in Europe.

Among Argentina's principal postwar economic uncertainties is the future market for her exports. There is abundant need for the goods that Argentina can produce at relatively low costs, but buying power in countries that need Argentina's products is dependent upon high-level economic activity throughout the world and absence of excessive trade restrictions. Argentina's foreign market will be conditioned by the success or failure of reconstruction in Europe and maintenance of a high level of world trade.

Brazil. Brazil, like Argentina, is a large land area with a sparse population. The area is greater than that of the United States and about three times that of Argentina; the population is less than one-third that of the United States and somewhat more than three times that of Argentina. Brazil has about 14 persons per square mile. More than four-fifths of her exports in terms of value are raw materials and foodstuffs; about one-half of her imports are manufactures. The raw-materials exports consist of such things as coffee, cotton, cocoa beans, hides and skins, canned and frozen meat, fruits and nuts, tobacco, lumber, rubber, vegetable oils, and carnauba wax. Imports that are relatively large in terms of value are machinery and hardware, manufactures of iron and steel, vehicles and accessories, wheat, chemical and pharmaceutical products, coal, gasoline, lubricating oils, paper and pulp, and copper raw materials.[31] In Brazil as in Argentina manufacturing is developing at a comparatively moderate rate. Brazil has an

[31] *Foreign Commerce Yearbooks,* and *International Reference Service,* "Effect of the War on Brazil's Foreign Trade," Vol. 2, No. 4, U. S. Department of Commerce, Washington, D. C.

abundance of high-grade iron ore, but in order to develop large metallurgical industries coal will have to be imported or the country's waterpower resources harnessed. Among Brazil's more important postwar economic concerns is the maintenance of large foreign markets for her raw materials.

Other Latin-American Countries. Brazil and Argentina are the largest Latin-American countries both in area and population. Argentina is the most highly industrialized of the group of countries; Chile and Cuba probably rank next to Argentina in percentage of gainful workers employed in manufacturing and handicraft pursuits. In all the Latin-American countries raw materials and foodstuffs are the principal exports, and manufactures bulk large in value of imports. Among leading exports of a number of the Latin-American countries, other than Argentina and Brazil, are the following: petroleum, Venezuela and Peru; sugar, Cuba; copper, Chile; tin, Bolivia; wool, Uruguay; coffee, Colombia.

For reasons cited in connection with the discussion of Argentina, industrial development is not anticipated during the next two or three decades in any of the Latin-American countries comparable with that in Russia during the interwar period or in the United States, Germany, Great Britain, and France at earlier dates. All the Latin-American countries have a large stake in the future level of demand for raw materials in the more highly industrialized countries of the world.

CANADA AND AUSTRALIA

Like Latin America, Canada and Australia are large and have sparsely populated areas. An important difference is that they are populated largely by British, French, German, and other stock from highly industrialized parts of Europe. Immigration-restriction policies are more likely to limit the magnitude of industrial growth in Canada and Australia in decades ahead than are lack of technical skill, industrial leadership, or political stability.

Canada. Canada is an area larger than continental United States or Brazil; the population density is less than 4 persons per square mile. Much of the land mass is in northern latitudes where the climate is rigorous. Nevertheless Canada has an abundance of arable land in addition to great forest areas and a variety of mineral resources. During the period 1900 to 1938 manufacturing approximately quadrupled. The rate of increase in manufacturing production in Canada during this period was greater than that of the world as a whole and greater

than that in highly industrialized countries such as the United States, Germany, the United Kingdom, and France, although much less than that of Russia or Japan. Prior to the Second World War about 18 per cent of the gainful workers in Canada were in manufacturing and handicraft industries; comparable percentages for the United States, the United Kingdom, France, Germany, and Argentina were 30, 40, 31, 36, and 27, respectively. These figures, considered in relation to circumstances favorable to manufacturing in Canada, suggest that Canadian manufacturing may be expected to continue its expansion at a rapid rate.

Canada's leading exports are newsprint paper, wheat, wood planks and boards, pulpwood and other timber products, a miscellany of foodstuffs and related products such as meats, fish, cheese, wheat flour, and whisky, and minerals such as nickel, copper, lead, and asbestos. Her leading imports are foodstuffs such as fruits, sugar, coffee, and tea; fuels; fabricating materials such as cotton, wool, and rubber; and manufactures such as textiles, rubber goods, iron and steel goods, and machinery.[32]

> Canada possesses a great abundance in a comparatively small variety of natural resources—a fact which has had tremendous influence on the country's economic development. With a prodigious productive capacity in certain specialized fields, yet lacking population great enough to constitute an adequate domestic market, Canada has to look abroad.[33]

As in Latin-American countries, a crucial postwar concern of Canada is maintenance of a high and rising level of world demand for goods and a large and increasing volume of international trade.

Australia. Basically the position of Australia in world economy is similar to that of Canada. With an area of 2,974,581 square miles (about the same as that of the United States) Australia has a population density of less than 3 persons per square mile. Australia has a warmer climate than Canada; large areas are not barred from customary Temperate Zone activities by a cold climate as is the case in Canada, but as an offset Australia has more desert than Canada. After a threefold increase in manufacturing production during the three decades prior to the Second World War only about one-fifth of the gainful workers in Australia were employed in agriculture and

[32] *Foreign Commerce Yearbooks,* and *Canadian Yearbook,* Dominion Bureau of Statistics, King's Printer and Controller of Stationery, Ottawa, Canada.

[33] Canadian Information Service, *Reference Papers, No. 1,* July, 1946, The Government of Canada, Ottawa.

about one-third were employed in manufacturing and handicraft pursuits. This occupational distribution of Australia's workers suggests that the country is highly industrialized, but the figures are somewhat misleading because of the extensive character of the country's agriculture. Wool production is among Australia's leading industries, and wool is the leading export. Raw and processed agricultural goods constitute about four-fifths of the total value of Australian exports; gold, lead, and zinc are the principal mineral exports. Australia's imports are widely diversified: processed goods (foodstuffs, refined petroleum products, textile manufactures, iron and steel goods, machinery, motor vehicles, chemicals, etc.) make up more than two-thirds of them.[84] As in Latin America and Canada, Australia's level of economic prosperity in decades immediately ahead will be conditioned largely by the level of world trade. In order to be prosperous Australia must have foreign markets for her large export surpluses of agricultural goods.

CONCLUSIONS

Deliberations of many nations in the preparation of the articles of agreement pertaining to the International Bank for Reconstruction and Development, the International Monetary Fund, and the proposed International Trade Organization have given full recognition to the fact that economic prosperity in any one country in a community of trading nations reacts to the mutual advantage of all. In view of this fact and of the devastation wrought during the Second World War in the intensive manufacturing centers of Europe and Asia, the problem of reconstruction in these areas is widely recognized to be a problem of primary importance not only to the devastated countries themselves but to other countries as well. When the industries of Europe have been restored to a basis of efficient operation, European exports may be expected to increase. Unless, at that time, world expansion in production and trade can be maintained, far-reaching structural adjustments will be called for in the United States and other countries whose industries were not seriously damaged by bombs and invasion during the war. These countries experienced an abnormal foreign demand for their goods during the war period and, to date, have experienced abnormal postwar demand for their exports for reconstruction and relief. After reconstruction, a slackening in European demand for exports of

[84] *Foreign Commerce Yearbooks.* League of Nations, *Industrialization and Foreign Trade,* International Documents Service, Columbia University Press, New York, 1945.

creditor countries and greater competition of European goods in the domestic market of creditor countries might cause widespread depression. Postreconstruction problems of this kind may be eased somewhat if a rapid rate of industrialization in backward regions should occur simultaneously with the completion of European reconstruction. Skillfully timed foreign loans to backward regions might achieve these results. Timing necessary to a successful diversion of foreign loans from the more highly industrialized countries of Europe to highly productive ones in industrially backward regions elsewhere may prove, however, to be a delicate operation.

The sketches in preceding sections of the present chapter suggest the fact that many countries can benefit from enlargement of their manufacturing superstructures, improvement of production facilities in their primary industries, and expansion of world trade. These sketches suggest also that political instability and absence of unified purpose may be important deterrents to rapid industrialization in a number of the larger backward countries—China, for example. Inescapable is the conclusion that international cooperation, a larger and freer flow of world trade, and an extension of improved techniques of production are the most promising means of improving the economic circumstances of millions of needy men and women all over the world. Unfortunately the easy conclusion that a large volume of postwar foreign lending will ensure these desired ends does not necessarily follow. In addition to such short-range problems as ensuring that loans be used for productive purposes and preventing serious business depression, there are long-range problems to be solved if liberal international lending is to contribute to higher living standards in poor countries. For example, population in some countries tends to multiply as fast as production and existing living standards permit. In this case the principal result of foreign lending and greater production might be an intensification of demand on the part of low-standard countries for additional living space. Sooner or later people in densely populated countries with high population growth rates must realize that politically encouraged multiplication will not be recognized by nations that maintain higher living standards as an excuse for demanding control of additional resources. The "have" and "have-not" argument propagated by Italy, Japan, and Germany during the interwar period as an excuse for military and economic imperialism has been, for the time being, exposed and refuted. This kind of problem and argument cannot be dismissed, however, in a world of limited resources where the populations of some

low-standard countries increase in number about as fast as production increases, while other national groups achieve relatively high living standards by increasing production and limiting numbers. This kind of international friction should not be overlooked in plans for the encouragement of rapid industrialization in backward countries.

CHAPTER XXVII

INTERNATIONAL INVESTMENTS

Attitudes in the United States toward foreign lending are confused. Since the end of the Second World War the need and desirability of large-scale foreign lending by the United States have been widely discussed on radio programs, in daily newspapers, in the financial press, in periodicals for general readers, in economic journals, and in economics treatises. Loans to accomplish this or that purpose, believed by some individual or group of individuals to be crucially important, have been advocated vigorously. We have read about the imperative necessity for loans to reconstruct Europe and Japan; to foster the stabilization of foreign exchanges; to maintain a high level of United States exports; to prevent mass unemployment in the United States; to give this country access to strategic raw materials; to bolster democratic political systems abroad; to stop the westward spread of Russian communism; to facilitate industrialization of backward regions; to increase world production and trade; and to raise standards of living abroad. In the literature of the 1930's one finds numerous discussions of foreign debt repudiations, sins of dollar diplomacy, evils of imperialism, advantages of national self-sufficiency, and risks incident to investing abroad. It is not easy for a reader to keep his bearings and maintain objectivity with regard to the nature and the advantages and disadvantages of international investments in view of the galaxy of arguments, pro and con, presented by rhetorical advocates.

TYPES OF INTERNATIONAL INVESTMENTS

For convenience in exposition and analysis, international investments may be classified into broad categories based upon the duration of loans, the form of investment, the types of borrowers and lenders, and the currency in which the obligation is expressed.

On a basis of duration of the loan international investments may be classified as long-term, medium-term, and short-term loans. Long-term investments ordinarily run for many years or decades. The credit period of medium-term and short-term loans customarily is measured

in months or a few years.[1] The credit period may be defined as the time elapsing between the date when a loan is negotiated and the date when final interest and principal payment is made. Interest is due and payable annually or at more frequent intervals. Principal may be repaid in a lump sum at the end of the credit period, or provision may be made for amortization of principal payments along with interest.

Long-term credits are sometimes classified as direct investments and portfolio investments. Expansion of United States business enterprise in foreign countries, as establishment of foreign branch plants by United States manufacturers; acquisition of oil companies, copper mines, timber tracts, or plantations by United States companies; construction of American-controlled railroads, telephone systems, water works, and electric plants abroad; and the location of American-controlled retail stores abroad are examples of direct foreign investments. United States corporations ordinarily have a controlling interest in the management of foreign enterprises financed through direct United States investments. Examples of portfolio investments are foreign bonds publicly offered in the United States or taken privately in this country in large blocks, shares of foreign corporations purchased by United States citizens or financial corporations on the stock exchanges, and bonds of United States subsidiaries of foreign corporations. United States portfolio investments are held primarily by individual investors resident in this country and by insurance companies, investment trusts, and other financial institutions. The foreign security holdings of industrial and commercial corporations are customarily considered as "direct investments." A distinguishing characteristic of direct investments is an element of proprietorship.

Differentiation by types of lenders and borrowers is in part a basis for the direct vs. portfolio classification. Government loans vs. private loans is another important classification based on type of lender or borrower. A subclassification of government loans into categories of "productive" or "nonproductive" in years ahead may become more important from the point of view of United States investors than was the case in past generations. Consumption loans are customarily referred to as "nonproductive" as distinct from commercial or industrial loans the proceeds of which go into business enterprises that directly increase the borrowing country's output of salable goods and services.

[1] Short-term credits ordinarily run for less than 12 months; medium-term credits from 1 to 5 years.

Finally, international investments may be classified in accordance with the currency stipulated in the contract, *viz.*, dollar bonds, sterling bonds, etc. Long-term loan contracts are sometimes drawn in terms of dollars, sterling, or other currency of a specified gold content.[2] Short-term commercial credits also are drawn in terms of a particular currency, *viz.*, the currency of the exporter's country, that of the importer's country, or that of some third country—dollars, pounds, francs, etc.

ARGUMENTS FOR FOREIGN LENDING

Diplomatic Arguments. Examination of the historical records of foreign lending indicates that an inextricable connection has existed at times between international investments and international diplomacy. French loans to Czarist Russia, prior to the First World War; British outlays for control of the Suez Canal; United States investments in the Panama Canal Zone; German investments in the Berlin-to-Bagdad railway project; Japanese investments on the Asiatic mainland; Italian investments in Tripoli before the First World War and in Ethiopia after it; and Rhodes's exploits in South Africa at an earlier date, all are examples of foreign investment activities that were governed by the political motive more than is ordinarily the case. The greater part of all international investments during the last century or more (war loans and war-initiated transfers such as lend lease excluded) have been made by private agencies. The dominant motive has been profit seeking. Investors' governments have been appealed to in some cases for enforcement of property claims abroad. Examples are the blockade of Venezuelan ports by German and British cruisers in 1902 to enforce payment of private German and British loans, and United States intervention in Haiti in 1915 to enforce settlement of debts involved in the construction of a Haitian railway by United States private interests.[3] In a few cases governments have induced private interests to invest abroad for diplomatic reasons,[4] and in many cases governments have made use of foreign investment connections in the furthering of diplomatic objectives. Because foreign investment is a

[2] Inasmuch as it is a principle of international law that no sovereign may be sued in a foreign court without the consent of that sovereign, the "gold content" clauses are not necessarily guarantees against losses incident to *de jure* reduction in the gold content of a currency.

[3] STALEY, EUGENE, *War and the Private Investor*, pp. 130–135, Doubleday & Company, Inc., New York, 1935.

[4] Italian extension of financial aid to Albania in the 1920's is an example, *ibid.*, pp. 235–248.

means of spreading a nation's culture, its language, art, literature, and knowledge of its institutions, and of opening channels for the spread of a nation's influence abroad, political implications of foreign loans are always important. Nevertheless, such loans have been made, in a great majority of cases, by private individuals or groups of individuals who were seeking profits. The motto of Cecil Rhodes in South Africa is said to have been, "Imperialism is all right; imperialism plus dividends is better." [5]

Diplomatic arguments for foreign lending are even more difficult to evaluate now than in earlier decades because of the emotional impact of the clash between the Russian system and the systems to which countries in Europe, North America, and elsewhere had become habituated prior to the Russian Revolution. Without attempting to evaluate the importance of trying to stop the spread of Russian communistic philosophy and practice, one can draw a number of conclusions concerning foreign lending for diplomatic reasons—conclusions that rest on solid foundations both economic and political. Loans that cannot contribute to increase in the productivity of the borrowing country by an amount sufficient to enable that country to discharge its interest and principal obligations had better not be made. This conclusion does not imply that subsidization of weak countries to prevent their conquest by some unfriendly power is undesirable. It means merely that subsidization in the form of a contractual obligation that the receiving country cannot honor and does not expect to honor is a possible source of future misunderstanding, antagonism, and international ill will. Such subsidies had best be made with mutual understanding concerning their nature in both the lending and the borrowing countries.

Philanthropic Argument. A currently important reason for international lending, which is closely related to political motives, springs from a humane desire on the part of people in a prosperous country to assist neighbors abroad who may be in dire need of the elemental necessities for life, health, and a chance to improve their economic circumstances. This motive is praiseworthy; the ends are highly desirable. Nevertheless, if such transfers do not increase productivity in the receiving country by an amount sufficient to enable that country to discharge the accompanying interest and principal obligations, the nature of the assistance is not accurately described by the term "loan."

Profit-motive Argument. The fact that foreign investments may be profitable investments is suggested by differences in interest rates in

[5] FEILER, A., "International Movements of Capital," *American Economic Review*, Supplement, March, 1935, p. 66.

different countries. Where capital is plentiful in relation to labor and natural resources, interest rates tend to be relatively low. In other regions, where undeveloped resources and labor are relatively more plentiful than capital, interest rates tend to be high and opportunities for profit making incident to the assumption of risks may be very large. International differences in interest rates or in yields are not necessarily accurate measures of international differences in productivity of capital or profit possibilities. Nevertheless comparisons of yields on comparable types of investments at home and abroad do suggest a difference in investment opportunity and a reason for international migration of capital that is seeking higher rates of return. Bonds issued by national governments probably are as nearly comparable a type of investment in different countries as one can find. Average yields on government bonds of a number of highly industrialized nations of Europe and a number of industrially backward nations of Asia and South America for the period 1901 to 1913 were given in Table 7, page 117. During that period bond yields in the less industrialized poorer countries cited in the table were substantially higher than those in the more highly industrialized, wealthier countries. Unfortunately more generalized, trustworthy indicators of profits realized from foreign ventures as compared with those realized from domestic undertakings are not available. The fragmentary historical records that are available show that some foreign ventures have been enormously profitable while others have resulted in great losses. The records do not yield a net figure for on-balance profit or loss on the aggregate of all foreign ventures. The records do lead to the conclusion that desire for high rates of profit has been an important motive for international investing during the long period of industrialization in Western countries.

Favorable-trade-balance Arguments. Another group of arguments for foreign lending center about maintenance of a creditor country's export trade balance. Foreign loans create borrower-country buying power in the lending country. This buying power contributes to increased merchandise exports on the part of the lending country. When a creditor country's payments balance status is such as to cause reduction in its favorable trade balance, importers, exporters, workers, and others who might be adversely affected by the trade balance shift are likely to be susceptible to arguments for more foreign loans to prevent, for a time, the trade balance from shifting. At best, these arguments are confusing; at worst, they are economically erroneous and thoroughly obnoxious. It is easy for vested interest groups to sponsor gov-

ernmental loans for the purpose of maintaining a large favorable trade balance, thus to postpone, more or less indefinitely, measures necessary to the correction of economic maladjustments in a creditor country.[6] These objectives are economically unsound.

The nature and gravity of some of the trade balance dislocations caused by the Second World War—dislocations that will be sources of difficulty for years to come—have been discussed in earlier chapters of the present volume. Agricultural production capacity expanded in the United States to supply a devastated Europe with foodstuffs will not be needed and will not be able to survive in the face of lower cost competition when Europe gets back into production. The same conclusion applies to other lines of production in the United States—manufacturing lines and raw materials such as coal. Foreign lending may cushion the shocks of readjustment and ease the solution of readjustment problems by opening alternative avenues for employment of production factors to be squeezed out of these overbuilt industries and by extending the adjustment period. International lending cannot eliminate the necessity for such readjustments.

Greater world production and trade imply continuous change in the pattern of world-wide territorial specialization. Production specialization and trade require a sufficient degree of flexibility in each national economic system to permit its continuous adaptation to industrial developments in other countries. This is the experience of more than a century of industrial growth in countries with free-enterprise systems. The fact that economic systems may be in process of evolution does not change this basic conclusion. Economic collectivism, for example, can-

[6] Sometimes proponents of the favorable-trade-balance argument go so far as to insist that the loans be "tied"; *i.e.*, that the borrowers be forced to agree to spend the proceeds of the loans upon goods purchased in the lending country. A tied dollar loan to Great Britain, for example, might contribute to an increase in exports of American cotton and wheat to that country. If the loan were not tied, Great Britain might use the proceeds to purchase wheat in Argentina and cotton in Brazil. Argentina and Brazil, in turn, might use the dollar exchange acquired from Great Britain in the purchase of machinery and automobiles in the United States. In either case the loan would tend to increase United States exports, but in one case United States wheat and cotton farmers would export more farm produce whereas in the other case United States manufacturers would export more machinery and automobiles. Another possibility is that if the loan were not tied, the British might use dollar exchange acquired through it to purchase French goods and France, in turn, might use the dollar exchange to pay interest owed United States holders of French bonds. The "tying" of foreign loans may serve to benefit some economic classes in the lending country more than others.

not eliminate the necessity for changes required to adapt a national economy to developments beyond its political borders without loss in terms of production advantages to be had from international specialization. Nor can partial control measures achieve the benefits of trade in the absence of the readjustment costs of trade.

A version of the favorable-trade-balance argument, which is closely related to but somewhat different in emphasis from that concerned with interindustry shifts in labor and capital, is the oversaving, gap-filling argument. If investment opportunities and investment at home are insufficient to maintain full employment of valuable production factors, why not invest the excess savings in foreign countries and maintain full employment by selling more goods and services abroad? This kind of argument is an important issue in the United States at the present time. The argument is to the effect that huge foreign loans for reconstruction in war-damaged areas and industrialization in underdeveloped regions will cost the United States nothing, even though interest and principal pertaining to such loans are never collected. Such arguments are fallacious. As Buchanan has phrased the idea, "This is not an argument stemming from Portia's discourse on 'the quality of mercy.'" [7] It is based on the *economic stagnation* thesis. This thesis is to the effect that populations in wealthy, mature economies like the United States, tend to save more capital than can find profitable investment outlets at home. According to this theory, lack of investment opportunities at home is due to regressive rates of population growth, disappearance of frontiers, technical improvements requiring less capital equipment per unit of output, and various other circumstances. Because investment opportunities tend to fall short of the amount of savings people wish to accumulate, employment and national income fall, according to this theory, until savings are reduced to a level consistent with investment opportunities. As a result, the economy is supposed to operate much of the time at a lower level of employment and income than it is capable of achieving. Whatever may be one's predilections concerning the oversaving, underconsumption theory of the business cycle,[8] the solution to business depression in the United States is not huge foreign loans followed by mass default on the part of foreign borrowers. This theory is doubly absurd if the loans are made during a period of high-level employment in the United States when foreign credit expansion augments inflationary pressures.

[7] BUCHANAN, NORMAN S., *International Investments and Domestic Welfare*, p. 125, Henry Holt and Company, Incorporated, New York, 1945.

[8] See Chap. XV.

The idea that governmental spending may be necessary to prevent mass unemployment in free-enterprise countries in periods of deep depression is accepted by many economists. This fact does not necessarily lead to the conclusion that such spending should take the form of foreign loans or gifts. Government expenditures at home might reduce domestic unemployment as much or more than equivalent expenditures abroad. Furthermore the domestic expenditure might result in higher levels of consumption at home than would occur as a result of equivalent expenditures that took the form of dubitable foreign loans or of gifts to foreign countries. Evaluation of the relative economic advantages and disadvantages of government expenditures at home to create domestic employment and foreign loans to create domestic employment is an involved subject. First are considerations of payments balance problems incident to collection of service charges on the foreign loans. Second are considerations of business cycle multiplier and acceleration principles and estimates of the probable size of the magnifying effects of additional expenditures. Foreign loans that give rise to merchandise exports, government public-works expenditures, private investment expenditures, and other types of expenditure in periods of slack employment may operate with magnified effect in the direction of creating additional employment. This employment leverage may be a result of secondary consumption expenditures (multiplier principle), of derived investment expenditures (acceleration principle), or some combination of the two.

An increase of 10 per cent in demand for shoes, for example, may give rise to an increase of 100 per cent in demand for shoe machinery. This is an example of the acceleration principle. If consumption expenditure remains constant, investment expenditure for replacements only may be required. If consumption expenditure increases, investment for machinery replacements plus investment for additional new machinery may be required. Suppose, for example, that 1,000 shoe machines are used to produce 1,000,000 pairs of shoes annually and that the average useful life of a shoe machine is 10 years. If demand for shoes is 1,000,000 pairs a year, 1,000 machines are used continuously and 100 machines are replaced each year. If demand for shoes increases 10 per cent, *i.e.*, to 1,100,000 pairs, 1,100 machines are required. The initial effect of the increase of 10 per cent in demand for shoes is to double the demand for shoe machinery; *i.e.*, to increase the demand for shoe machines in the period of 1 year from 100 to 200 machines. This is an example of the so-called "acceleration principle" applying to business cycle phenomena.

Another employment-multiplying effect of increased expenditures in periods of slack employment is referred to as the "multiplier principle." This principle relates an increment of expenditure (government public-works expenditure, foreign loans that give rise to merchandise exports, or private investment expenditure) to consequent increments of consumption expenditures. Let us assume, for example, that a million dollars is expended in the United States by the American Telephone and Telegraph Company for the building and equipping of new plants. The investment funds thus released may be received initially by contractors, who, in turn, pay out a part in wages and salaries, a part in the purchase of materials from materials-producing concerns, and a part to other individuals and agencies. Recipients, in turn, pay out a part of the monies received to wage earners, salaried workers, suppliers, etc. In case of each series of expenditures a part of the payments is spent by the recipients for consumer goods. The multiplier principle is concerned with the cumulative effect of the initial expenditure on resulting expenditures for ultimate consumer goods. All of the initial million dollars of private investment is not respent immediately for ultimate consumer goods. A part may be applied to debt payments; a part may find its way into idle bank balances, and a part may be spent on other capital goods. Thus leakages occur in the amount of the initial million-dollar expenditure that is respent immediately for ultimate consumer goods. The magnitudes of these leakages determine, in last analysis, the secondary effects of the initial million-dollar expenditure upon the volume of expenditure for ultimate consumer goods.

A second round of multiplier calculations starts with purchase of ultimate consumer goods with initial receipts derived from the initial million-dollar expenditure. These consumer goods purchases set in motion a new round of payments necessary to the production of such goods or replacement of stocks of such goods. The process continues into the future. Each consumption expenditure is smaller than the preceding volume of purchases by the amount of the leakages involved. Depending upon the percentage of leakage involved and the period over which succeeding calculations are made, the initial expenditure of a million dollars may give rise in the aggregate and in time to more than a million dollars of ultimate consumer goods purchases. Thus the multiplier principle, as well as the acceleration principle, has a bearing upon the amount of secondary employment that an initial investment may give rise to in a period of slack employment.

Further amplification of the acceleration and multiplier ideas is not

necessary to acceptance of the conclusion that calculations of the possible effects of expenditures on employment are subject, at best, to possibilities of large error.[9] Without going into the highly theoretical and uncertain arguments concerning the possible employment effects of domestic versus foreign expenditures under varying circumstances, one can draw with reasonable assurance the following conclusions concerning the argument for foreign loans to maintain domestic employment.

1. During periods of mass unemployment, prior to the rounding of the lower turning point of the business cycle,[10] larger expenditures for investment would be made if more opportunities for profitable investment existed. Loans to foreign countries to induce export surpluses of merchandise might constitute a temporary escape from this dilemma. The exports would give rise to domestic employment. Furthermore, export surpluses might be dumped abroad at prices below those maintained for similar goods in the domestic market, thus minimizing or delaying domestic deflation.

2. An export surplus fostered by foreign loans and accompanied by merchandise dumping would be likely to create resistance in the form of retaliatory trade restrictions. Also, such a policy would tend to create domestic resistance to the eventual acceptance of imports necessary to the servicing of foreign loans.

3. A policy of making foreign loans for the maintenance of an export trade balance—with or without merchandise dumping—would merely postpone the domestic adjustments necessary to internal equilibrium or would call for continuous "lending" that would tend to become the equivalent of giving.

4. Policies for relief or prevention of depression unemployment probably can be devised that are more appropriate than the extending of foreign loans or gifts for the primary purposes of maintaining export surpluses.

Possibly some kind of internationally coordinated antidepression policy, which is jointly and simultaneously pursued by all or many of the more important trading countries, can be developed and implemented under the auspices of some such agency as the United Nations. Such a policy might involve foreign loans but, if successful,

[9] See, for example, MACHLUP, F., *International Trade and the National Income Multiplier,* The Blakiston Company, Philadelphia, 1943; HANSEN, ALVIN H., *Fiscal Policy and Business Cycles,* pp. 265–274, W. W. Norton & Company, Inc., New York, 1941.

[10] See Chap. XV.

it necessarily would be very different from a unilateral policy of lending abroad on the part of one country for the primary purpose of maintaining its favorable trade balance.

Conclusions. In so far as foreign lending contributes to increases in world production and world trade, all countries—lending countries, borrowing countries, and others—may benefit. Such benefits may be realized year after year for long periods of time, provided the initial impact of the loans is not such as to cause serious and unmanageable business depression later.[11] A foundational purpose of the International Bank for Reconstruction and Development is extension of loans to facilitate reconstruction in war-devastated countries and extension of capital and production know-how to industrially backward regions. The economic soundness of this type of objective is substantiated by experience, theory, and the considered judgment of professional economists, industrialists, bankers, and statesmen. The scale upon which such an undertaking can be expected to succeed is subject, however, to uncertainty. Furthermore, the gravity of problems incident to adjusting the internal economies of lending countries to a changing pattern of international geographical specialization in production is subject to different appraisals by the best informed specialists. Trial, error, and correction may be the only final means of arriving at correct judgments pertaining to these debatable issues. No far-sighted economic policy as large in scope as the policy that the International Bank was founded to execute is free of risk, or errors that must be corrected, or losses along the way. The important thing is the development and implementation of policy with potentialities for constructive results great enough to offset errors of execution and accompanying losses. International investment through the instrumentality of the Bank is believed to be sound policy, so defined.

Foreign loans are not all long-term loans of the type referred to in foregoing paragraphs. The International Monetary Fund facilitates international lending among its member countries. The principal function of the Fund is stabilization of foreign exchanges. The country with a passive payments balance may need time to bring about adjustments of its internal economy necessary to a balancing of its international sales and purchases of goods and services, or the Fund may need time to promote internal readjustments in a scarce-currency

[11] For a discussion of British foreign lending experience and its implications, see JENKS, LELAND H., "British Experience with Foreign Investments," *Journal of Economic History*, Supplement, December, 1944, p. 68.

country—adjustments necessary to prevent exchange depreciation elsewhere. Short- and medium-term loans are extended by the Fund in the sense that weak-currency countries are permitted to purchase foreign exchange from the Fund with their own currencies, in excess of their quotas. Temporary adjustments between the aggregates of money owed by the people of a particular nation to foreigners and money owed by foreigners to them may be made by short-term loans. Likewise short-term loans serve a useful function in the financing of export and import trade. This subject was discussed in Chap. XIII of the present volume.

Short-term international investments have been a recognized part of the machinery of international trade for hundreds of years. Short- and medium-term loans are not exempt from international complications. If a scarce-currency country should continuously exercise its prerogative of advancing loans to the Fund in place of readjusting its internal economy to absorb more foreign goods and services in relation to its exports of goods and services, short-term Fund loans could degenerate and become long-term loans with many of the implications of long-term lending cited in foregoing paragraphs. Likewise continued extensions of overdue commercial loans can partake of the nature of long-term financing. In the 1930's standstill agreements involving, in part, overdue commercial credits were made. In other cases payments of commercial debt were defaulted through the use of foreign exchange restrictions. Short- and medium-term international loans involve risks, but the basic principles upon which these types of foreign lending rest are generally accepted. The useful functions that short- and medium-term loans perform in the current handling of merchandise and service transactions are among the important reasons for international lending.

REASONS FOR FOREIGN BORROWING

The more important reasons for foreign borrowing have been suggested in the discussion of arguments for foreign lending. The country with a large population or large supplies of natural resources in relation to its capital facilities may improve its economic position by borrowing for the purpose of facilitating the development of improved techniques. The U.S.S.R. improved its production techniques at a phenomenally rapid rate during the period 1925 to 1940 without the aid of large foreign loans but at the expense of low living standards. Had Russia been able to borrow extensively abroad during this period,

her achievements in the direction of industrialization and increased production might have been greater than they were. An important reason for long-term foreign borrowing is rapid development of production improvements.

A reason for short-term foreign borrowing is the usefulness and economy of credit in current trading transactions. Open book accounts, bills of exchange, and letters of credit are examples of short-term international credit instruments employed in the conduct of international trade.

Other reasons for foreign borrowing are temporary drains on a country's monetary reserves, crop failures, earthquakes and other national disasters, and a variety of political motives. Turkish and Greek borrowing from the United States in 1947 are examples of the political motive.

A large part of the world's 2 billion or more people live in extreme poverty. This statement applies particularly to China's 400 or 500 million and additional millions in Japan, the Middle East, Europe, Russia, and Latin America. As a rule, people living in extreme poverty do not hesitate to borrow or to beg in order to acquire consumption goods. Unfortunately, world production is not sufficient at present to provide all of the world's population with goods necessary to a decent standard of living. In so far as international loans can contribute to increased production in poor countries, they may contribute to improvement of living standards of the underprivileged masses—provided that populations do not increase so fast as production. It is well to remember in this connection that annual savings in the wealthier countries of the world compared with consumption needs in the poorer countries are so small as to be almost negligible if employed directly for the purpose of increasing consumption of low-income groups.

THE MAGNITUDE OF INTERNATIONAL INVESTMENT

Is the volume of international investment large? The answer to this question is "Yes" or "No," depending upon the data used as a basis for comparison. Many estimates pertaining to the volume of international investments have been made. Some are fragmentary, covering only investments of particular types or of particular countries; others are world-wide and more or less inclusive of all types of long-term investments. At best, such estimates are subject to wide margins of possible error because the records upon which they are based are incomplete. Among the foreign investment estimates fre-

quently cited are those of Herbert Feis,[12] Eugene Staley,[13] and the Royal Institute of International Affairs.[14] Staley estimated the world total of long-term international investments outstanding in 1929 at about 50 billion dollars.[15] This figure represents the net result of investments and retirements over a century or more. Since 1929 the world has experienced the most severe economic depression and the greatest war in the history of civilization. During the 1930's many international bond obligations were in default as to interest or as to both interest and principal. During the Second World War properties representing direct investments were destroyed or seriously damaged in many areas, and large amounts of portfolio investments were repatriated by nonbelligerent countries. Furthermore, changes in prices and in foreign exchange rates during the past two decades have been so great as to make estimates of 1929 erroneous in terms of present values. Nevertheless, it is interesting to observe that if Staley's estimates have significance for the period represented, suggestions that the United States lend abroad some such sums as 5 billion dollars a year for a period of years involve magnitudes that are large in terms of past experience. United States foreign investments constituted about 15 billion of Staley's 50 billion dollar estimate for 1929, and British overseas investments constituted about 18 billion of the 50 billion dollar total. The remaining 17 billion dollars, more or less, were the foreign investments of many countries: France, 3 to 4 billion; Holland, Switzerland, and Belgium, about 2 billion each; Germany and Japan, about 1 billion each; other countries, some 3 to 5 billion dollars in the aggregate. A trustworthy estimate of the aggregate current amount of international investments is not available.

Foreign Investments of the United States. Estimates of United States long-term, private investments in foreign countries in 1939 totaled around 12 to 13 billion dollars. A comparable figure for 1946 was about 15 billion dollars. These data together with estimates of foreign-owned assets in the United States are given in Table 31.

In 1939 the net creditor position of the United States (on both long-term and short-term, private and government accounts) was about 1

[12] FEIS, HERBERT, *Europe the World's Banker, 1870–1914,* Yale University Press, New Haven, Conn., 1930.

[13] STALEY, *op. cit.*

[14] HENDERSON, H. D., *et al., The Problem of International Investment,* A Report by a Study Group of Members of the Royal Institute of International Affairs, Oxford University Press, New York, 1937.

[15] War debts were not included in Staley's estimates.

TABLE 31. ESTIMATED CREDITOR-DEBTOR POSITION OF THE UNITED STATES, AS OF THE END OF 1939 AND 1946 *

(Millions of dollars)

Type of asset	American-owned assets in foreign countries		Foreign-owned assets in the United States		Net creditor (+), debtor (−)	
	1939	1946	1939	1946	1939	1946
Private accounts:						
Short-term assets:						
Deposits	$ 400	$ 450	$ 3,400	$ 5,130	$−3,000	$−4,680
United States Treasury Certificates	.....	.....	10	1,630	− 10	−1,630
Acceptances, notes, etc.	650	760	360	330	+ 290	+ 430
Currency	.....	.....	220	620	− 220	− 620
Total short-term assets	1,050	1,210	3,990	7,710	−2,940	−6,500
Long-term assets:						
Interests in controlled enterprises	6,750	7,700	2,600	2,440	+4,150	+5,260
Securities:						
Bonds	2,600	3,050	700	800	+1,900	+2,250
Stocks	1,700	2,500	3,100	2,970	−1,400	− 470
Total securities	4,300	5,550	3,800	3,770	+ 500	+1,780
Interests in estates and trusts	150	200	900	800	− 750	− 600
Miscellaneous	1,650	1,750	1,550	1,450	+ 100	+ 300
Total long-term assets	12,850	15,200	8,850	8,460	+4,000	+6,740
Total private accounts	13,900	16,410	12,840	16,170	+1,060	+ 240
Government accounts: †						
Loans and credits	40	4,100	‡	‡	+ 40	+4,100
Miscellaneous	.....	750	‡	300	.....	+ 450
Total all types	$13,940	$21,260	$12,840	$16,470	$+1,100	$+4,790

* SOURCE: U. S. Treasury Department, *Census of American-owned Assets in Foreign Countries*, 1947, p. 9. More detailed explanation of the data may be found in the foregoing publication, notes to Table I, p. 9.

† Exclusive of obligations arising out of the First World War and unsettled lend-lease accounts. Lend lease, to the extent of the negotiated settlements, is included.

‡ Assets in the United States, such as deposits in American banks, owned by foreign governments, are included in the figures given above.

billion dollars. The comparable figure for 1946 was about 5 billion dollars. United States government loans were responsible for the increase.

Customarily, United States private investments in foreign countries are widely dispersed geographically. This fact is suggested by the estimates of geographical dispersion of United States long-term investments abroad for the year 1940, Table 32.

TABLE 32. UNITED STATES LONG-TERM INVESTMENTS BY TYPES OF INVESTMENTS AND GEOGRAPHICAL AREAS, 1940 *

(Millions of dollars)

Area	Direct investments	Portfolio investments	Totals
Canada and Newfoundland	$2,065	$1,675	$3,740
West Indies	755	79	834
Central America and Mexico	650	26	676
South America	1,615	898	2,513
Europe	1,370	636	2,006
Asia	460	160	620
Oceania	135	98	233
Africa	105	19	124
Other international	25	.....	25
Totals	$7,180	$3,591	$10,771

* SOURCE: *The Balance of Payments of the United States, 1940*, p. 52, U. S. Department of Commerce, Washington, D. C.

British Overseas Investment Position. In 1939 British overseas investments were about 4 billion pounds sterling (16 to 18 billion United States dollars). From the beginning of the Second World War to June, 1945, the value of the British overseas investments declined about 1 billion pounds sterling through sale of marketable securities for war financing; in addition losses were incurred incident to war damage to foreign properties. Inasmuch as foreign-owned sterling balances increased 2 to 3 billion pounds during the war period and the British Government borrowed more than 1 billion pounds sterling between the end of the war and 1947, Great Britain appeared, on balance, to be a foreign debtor in 1947.[16]

[16] In 1947 Kriz estimated the total postwar foreign indebtedness of Great Britain to be about 7,250 million United States dollars. KRIZ, MIROSLAV A., *Postwar International Lending*, p. 9, Princeton University Press, Princeton, N. J., Spring, 1947.

Current Outlook for Foreign Lending. Aside from countries that had claims to sterling balances accumulated in Great Britain, the United States, Canada, Sweden, Argentina, and Switzerland were the principal foreign investing countries in the early postwar period. As of December, 1946, outright foreign credits that had been granted by Canada, Sweden, Argentina, and Switzerland (exclusive of sterling balances) are estimated to have totaled about 3 billion United States dollars. About two-thirds of the total were Canadian loans.[17]

The United States is generally recognized to be the wealthiest country in the world and the one most able to extend foreign loans for relief, reconstruction, industrialization of backward regions, and other purposes. Nevertheless, it is well to keep in mind the fact that some of the current theorizing about the magnitude of lending that this country can do or should do is more comparable to the magnitude of the Second World War financing than to past experience in the extension of international loans for productive purposes. In contrast with certain current suggestions to the effect that the United States lend abroad 5 to 6 billion dollars or more annually for a period of a decade or more, an article in *Barron's National Business and Financial Weekly* suggests that 1½ to 2 per cent of this country's national income may be all that we can lend abroad each year without lowering the standard of living in this country.[18] A somewhat similar figure was arrived at by Buchanan, who suggested 2 to 3 billion dollars annually as an upper limit of reasonable expectations for United States foreign loans.[19]

ECONOMIC RESULTS OF INTERNATIONAL INVESTMENTS

Foreign investing is not a new phenomenon. Since the end of the Middle Ages Italy, Spain, Portugal, Holland, France, England, and the United States have been centers of international financing at one time or another. Furthermore, the historical sketches in Chap. IV of the present volume suggest that interregional financing within the confines of far-flung empires and international financing for the extension of trade beyond the confines of the lending country's political control were not unknown practices in ancient times. A reasonable assumption which may be drawn from this long span of historical

[17] *Ibid.*, p. 2.

[18] HIRSCH, JULIUS, "How Much of a Load Can the United States Carry?" *Barron's*, Vol. XXVII, No. 22, June 2, 1947.

[19] BUCHANAN, *op. cit.*, p. 209.

experience is that, on balance, advantages from the lenders' point of view must have outweighed lender losses, else the practice of foreign lending would not have survived on so large a scale for so long a period.

The principal sources of capital for international investment during the nineteenth century were Great Britain, France, and Germany. Germany's foreign loans were comparatively small prior to about 1880 or 1890. The aggregate of Germany's foreign investments in 1913 was less than the comparable figure for France, and the total of French foreign loans outstanding in 1913 appears to have been less than half the comparable figure for Great Britain.[20] Great Britain was by all odds the greatest supplier of international loans during the century that immediately preceded the First World War. During this period British capital was invested in the British Colonies and Dominions, in the United States, in Latin America, in Europe, and in various other parts of the world. In 1913 nearly one-half of the aggregate of British overseas investments was in the Empire, a fifth in the United States, a fifth in Latin America, and the remainder in Europe and elsewhere.[21]

Large-scale international investment appears to have had a constructive role in the economic progress of the nineteenth century. The intensification of manufacturing in Great Britain, France, Germany, and Belgium; the development of a large volume of international trade based on geographical specialization in production; the supplying for world markets of foodstuffs and industrial raw materials by industrially less advanced countries; and the amazing growth of population, industry, and wealth in the United States, all were facilitated by international lending. During this period British loans were made under favorable circumstances.

1. A substantial part of the British loans went to British dominions and colonies and to the United States where European populations and industrial leadership had been established and where the uses to which borrowed capital was put could be influenced by British engineering and management experience and the requirements of basic English law.

[20] In addition to references already cited the following are important secondary sources of data pertaining to international investments prior to the First World War: CHARLES KENNETH HOBSON, *The Export of Capital,* Constable & Company, Ltd., London, 1914; and LELAND HAMILTON JENKS, *The Migration of British Capital to 1875,* Alfred A. Knopf, Inc., New York, 1927.

[21] HENDERSON, *op. cit.,* p. 144.

2. The British home market was in position to absorb increasing quantities of foodstuffs and fabricating materials produced in the industrially less advanced, borrowing countries.

3. The nineteenth century was a period of migration from Europe to the United States, Canada, Australia, New Zealand, British South Africa, and other countries where British capital was invested. Technical ideas, plus management know-how, plus immigrants, plus British capital, plus a European market for raw commodities, all contributed to increased production in overseas areas to which British capital migrated in the nineteenth century.

Accurate evaluation of average yields on British overseas investments prior to the First World War and the aggregate amount of principal losses as compared with the aggregate of principal invested is not possible. Nevertheless, such fragmentary records as are available point to the conclusion that nineteenth-century British overseas investments were subject to smaller percentages of principal losses and yielded higher percentages of annual income than French investments in Russia prior to the First World War and United States investments in Europe during the interwar period. A similar conclusion probably can be drawn for British overseas investments prior to the First World War as compared with United States investments in Latin America during the interwar period.[22]

In 1914 about 25 per cent of the long-term foreign investments of France were in Russia, 35 per cent in other parts of Europe, and 40 per cent widely scattered in French colonies, Africa, North America, Latin America, and Asia.[23] A substantial portion of the Russian and other European investments were lost as a result of the First World War.

Prior to that war the United States was an international borrowing country, on balance. After the war the United States became for a time the leading creditor nation. Losses on United States foreign investments during the 1930's were severe but probably not so severe as current accounts of losses during the depression years may have caused many people to believe. Data published by the U. S. Department of Commerce indicate that the United States foreign investing experience (debts of the First World War omitted) was about as suggested by the figures in Table 33.

[22] See HENDERSON, *op. cit.*; MADDEN, JOHN T., *et al.*, *America's Experience as a Creditor Nation*, Prentice-Hall, Inc., New York, 1937.

[23] HENDERSON, *op. cit.*, p. 123.

TABLE 33. UNITED STATES FOREIGN INVESTMENT EXPERIENCE, 1920 THROUGH 1940

(Billions of dollars)

1. What the United States put in:		
Estimated investments abroad 1919	$ 6.5	
Net new investments abroad, 1920 through 1940 (gross new investments abroad of 11.8 billion dollars, less amortization receipts on foreign dollar bonds and net resale of foreign securities to foreigners of 4.9 billion)	6.9	
Total		$13.4
2. What the United States got out:		
Value of investments abroad at end of 1940	$ 9.8	
Income payments received on investments abroad from 1920 through 1940	13.9	
Total		$23.7
3. Excess of what the United States got out over what the United States put in		10.3

The computed net return to American investors as a group from foreign investments [Table 33] is in contrast to the losses suffered by many individuals, especially those who bought foreign securities shortly before the wave of defaults in the early thirties. The "average" investor with well-diversified holdings abroad not only got his money back but also a substantial sum in addition.

The record with respect to our total long term holdings abroad stands despite the original unsoundness of many of the investments and despite the extremely adverse conditions for servicing them during the 1930's. It may be noted that service was maintained throughout the depression on approximately two thirds of our total foreign bond holdings.

The record with respect to United States direct investments abroad considered above, is one of generally high returns as measured either by total earnings or earnings transferred to the United States.

During the period 1920–29 (for which no remittance data are available) and in 1938–40, total earnings on direct investments averaged 6.9 per cent and 7.4 per cent, respectively; during the years 1930–40 earnings remitted to the United States averaged 4.3 per cent. . . . These returns are the more remarkable since no allowance was made in the computations for inactive investments yielding no return, or for investments in projects not yet developed to a productive stage and since they include the relatively low returns from investments in public utilities.[24]

[24] The data in Table 33 and the quoted analysis that followed were taken from A. Maffry, "Foreign Trade in the Postwar Economy," *Survey of Current Business*, November, 1944, p. 11.

What the advantages or disadvantages of these investments from the point of view of borrowers may have been is a difficult question to answer. United States capital that went to Latin America and Canada and some of the direct investments that went to Europe and Asia probably contributed to greater production in these regions. Possibly, also, the portfolio investments that went into German bonds during the 1920's contributed to reconstruction in Germany, but in view of the recent war, a value judgment concerning the advantage to Germans of assisting them to rebuild their industries after the First World War is not within the professed technical qualifications of a mere economist.

CONFLICTING TENDENCIES AFFECTING PROBABLE AMOUNTS OF INTERNATIONAL INVESTMENTS IN YEARS AHEAD

Writing toward the end of the 1930's after a decade of postwar depression in Great Britain in the 1920's and after several years of depression in all the leading commercial nations in the 1930's, Henderson and his colleagues in the Royal Institute of International Affairs [25] were inclined toward a pessimistic outlook for international investments in the future. They found the tendencies unfriendly to a further expansion of international division of labor. This conclusion was attributed to advantages from territorial specialization less conspicuous than formerly and to a disposition on the part of nations to subordinate economic considerations to those of national security. Nevertheless, the fact was recognized that "so long as some countries are rich and highly developed while others are poor and ill-equipped with capital, international investment will have a valuable and constructive role to play." [26]

A more optimistic point of view might take into account such conditions as (1) improvements in communication and transportation that permit increasingly effective control of large capital investments from a distant management center, (2) advances of techniques that call for more capital equipment per worker, and (3) types of production that require the assembly of a greater variety of fabricating materials. As aggregate production and the variety of products increase, the need for reaching out to every part of the world for its unique contributions becomes even more important than in the nineteenth century. Furthermore, present-day international investment is more than a one-

[25] HENDERSON, *op. cit.*
[26] *Ibid.*, p. 109.

way stream of capital moving from the highly industrialized countries to the industrially backward countries that supply fabricating materials and foodstuffs. American motor-vehicle companies establish branch plants in Ireland or England, and British oil companies establish distributing outlets in the United States. In the past, international capital movements between highly industrialized nations, like international trade between such nations, have tended to grow as industrialization progressed and as nations became more prosperous. Continuation of this tendency is likely but by no means certain for a number of reasons: (1) the possibility that national-defense considerations may assume such preponderance over desire for increased production, increased trade, and higher living standards as seriously to curb the economic forces working toward international specialization in production; (2) the possibility that higher levels of production may be sacrificed in attempts to gain greater national economic stability.

Political Instability. British experience in the nineteenth century and United States experience during the interwar period suggest that international loans have been most successful when associated with political stability abroad, able management, technical supervision, and a unified desire on the part of the people in control in the borrowing country to achieve the ends for which the loans were made. At the present time political systems in many of the countries that need capital are highly unstable, and the likelihood of greater stability in the future is not assured. Furthermore, types of political imperialism that might ensure stability necessary to successful business ventures in backward countries may be less prevalent in the future than was the case in earlier centuries.

Importance of Industrial Drive in Backward Areas. Availability of foreign exchange is not all that is necessary for the development of highly productive industries. Buchanan [27] suggests that possibly as much as one-half (in terms of value) of all productive capital goods in a highly industrialized country consists of buildings and other types of construction. Some of the materials for such construction may be imported, but a greater portion ordinarily comes from domestic sources. Foreign loans may facilitate the building or rebuilding of industries and related transportation and communication facilities by providing consumer goods and thus releasing workers for construction projects. Unless, however, the borrowing country has strong leadership that is

[27] BUCHANAN, *op. cit.*

favorably disposed to the utilization of foreign capital for the establishment of productive industries, and unless it can contribute to the desired end from its own savings, losses that the lenders may suffer can be enormous.

Industrialization of backward regions calls for the training of a labor force, the training of engineers and other skilled professional groups, and the learning of management techniques by the high-income groups in the borrowing country. A willingness on the part of savers in borrowing countries to invest their savings in industrial ventures and a unified urge on the part of all classes to change long-established customs, habits of thought, and modes of living are also necessary to successful industrialization of underdeveloped regions. Industrialization is not something that can be thrust abruptly upon a people from without unless it is done by force. Colonization by European emigrants, with the use of force where opposition was strong, laid the foundations in earlier centuries for industrialization in North America and elsewhere. Such mass migration is not a part of current proposals to facilitate industrialization in backward regions through capital loans to them.

In view of the wide discrepancies between standards of living and levels of well-being in different countries and in view of the demonstrated effectiveness of improved techniques in the direction of increasing per capita productivity in the wealthier countries, the need for an extension of foreign loans and technical methods appears to be almost limitless. It must be remembered, however, that loans and willingness to share technical know-how are not sufficient to achieve the desired ends, provided these ends are the raising of living standards and levels of well-being for all. A willingness and ability to curb population growth rates, to extend opportunities and educational facilities to all classes of a population, and to change customs and habits deeply rooted in centuries of history are more important factors in the improvement of living conditions of underprivileged masses than the acquisition of a little more capital from abroad. Extension of capital loans to backward countries is but a part of a great sociological development which, at best, must unfold slowly.

Obstacles Incident to Changes in Industrial Structures. In making the transition from largely agricultural economies to largely industrial or mixed economies, undeveloped countries have tended to expand their fabricating materials industries—mining, lumbering, etc.—and their consumer goods manufacturing industries—textiles, leather goods,

household utensils, etc.—before developing the manufacture of complicated capital equipment. In attempting to balance international payments through the simultaneous extension of loans for reconstruction in war-damaged areas and loans for industrialization in underdeveloped areas, a consideration of types of goods demanded for import and available for export is important. If European countries and Japan develop a large volume of production of consumer goods for export at the same time that underdeveloped areas are becoming more self-sufficient in these lines, a situation of relative overproduction in these particular industries may occur. If Europe produces a large volume of mass-production metal goods for export, they may compete in foreign markets with the output of export industries in the United States, industries overdeveloped during the period of European reconstruction. No country produces all the machinery exports, all the textile exports, or all the exports of other kinds of manufactured goods. Specialization tends to develop by qualities and types of goods within classifications and subclassifications, but the successful meshing of production and trade of many countries is a slow process of trial and error. For this reason a too-impetuous and too-rapid promotion of new industries all over the world, with foreign loans, may result in unnecessary losses not only to the lender but to the borrower as well.

ALTERNATIVE POSSIBILITIES FOR THE UNITED STATES

With regard to foreign loans, the United States is faced with one or some combination of a number of alternatives. If the political reasons for foreign loans or the philanthropic motives are sufficiently strong, the United States government may tax its citizens and transfer sums of dollar exchange equivalent to the tax revenue to foreign countries. In this case, exports of goods and services will tend to increase in relation to imports. Goods might thus be transferred from United States citizens to people in foreign countries. If the United States government transfers dollar exchange to foreign countries without receiving a return payment and without levying taxes to offset the transfer, the net result will be an increase in this country's national debt by an amount equivalent to the dollar exchange transfers. The unlikelihood of a consistent and long-continued government policy of transferring large sums of money to foreign countries without a *quid pro quo* of one kind or another is suggested by the Johnson Act of 1934. This act made it unlawful for individuals or institutions in the United

States to make loans to any foreign government that was in default on its obligations to the United States government.

Another possibility is that private citizens of the United States may invest abroad. The possibility of errors in judgment on the part of United States buyers of securities floated to facilitate reconstruction in Europe is suggested by losses sustained by purchasers of German bonds in the 1920's. Prospective yields on loans to European countries again may be overestimated because of institutional circumstances in the borrowing countries. Much of the capital transferred to Europe for reconstruction uses may have to be written off as lost because the expected interest and principal cannot be collected. There are three reasons for this possibility.

1. The loans may not, in a period of a few years, bring the war-devastated countries back to a level of production and well-being above that experienced in the past. Until past levels of production and living standards are reached, the people who accept aid willingly in time of dire need may not be inclined at a later date to undergo the sacrifices in living standards necessary to payment of loan obligations.

2. Internal economic readjustment problems of large magnitude will have to be solved before the lending countries can absorb the goods and services necessary to payment of loan obligations incident to reconstruction.

3. National-defense considerations may retard industrial adjustments in the United States necessary to absorption of service charges on loans in the form of goods and services. In this connection let us consider ocean shipping as an example of an industry affected by national-defense considerations.

Prior to the First World War the United States merchant marine had about 12 per cent of the world's tonnage of merchant vessels of 1,000 tons and over. The comparable percentage was 28 in 1920. From this higher level both the absolute volume and the percentage declined gradually throughout the 1930's.[28] Between 1939 and 1946 the gross tonnage of seagoing merchant ships of 1,000 tons and over operating under the United States flag increased from around 8 million tons to about 35 million tons. In 1946 the gross tonnage of seagoing merchant ships of 1,000 tons and over operating under the United States flag amounted to about 50 per cent of the world total of such tonnage. The comparable percentage for 1939 was 14 per cent. In addition another

[28] *Statistical Abstract of the United States*, 1946, p. 539.

4 to 5 per cent of the world tonnage of seagoing ships in operation in 1946 were ships owned by the United States government and operated under foreign flags.[29]

Merchant shipping is an industry in which the United States operates at a comparative disadvantage because of our relatively high wage rates. Prior to the Second World War the United States merchant marine was assisted by the Federal government through mail contracts, shipbuilding subsidies based on construction of special types of vessels, and operation of United States government lines. Whereas merchant shipping is an industry that, from a purely operating cost point of view, might economically be developed abroad, the United States is likely to subsidize the maintenance of a large merchant fleet for many years for strategic and other reasons. Payments on debts with shipping services might be economically feasible for European countries, but such an arrangement is likely not to be acceptable to the United States for strategic reasons. This type of strategic problem, along with traditional protectionist policy, is likely to be a serious obstacle to industrial readjustments necessary to absorption by the United States of goods and services in volume required for collection of service charges on huge reconstruction loans.

A suggestion has been made to the effect that the United States government stock-pile huge stores of strategic raw materials that are scarce in this country and can be obtained abroad. Such government purchases would provide dollar exchange for use by the supplying countries. Even if a policy of this kind were adopted by the government, the likelihood of purchases in magnitude and duration sufficient to offset service charges on huge reconstruction loans is dubious.

Large foreign loans and other types of capital transfers probably will be made and probably should be made by the United States government and private agencies for reconstruction, for industrialization

[29] SOURCE: BUTLER, HUGH D., ARTHUR B. FRIDINGER, and MARGARET E. DOWDEN, "Comparison of Merchant Fleets of the World Pre-war and Present," *Miscellaneous Economics and Statistics,* multigraphed, U. S. Maritime Commission, Washington, D. C., Oct. 16, 1946. In June, 1946, the world total gross tonnage, seagoing merchant fleets (vessels of 1,000 gross tons and over), was 71,000,408; operating under United States flag, 35,363,598; owned by United States government and operating under foreign flags, 3,223,481; world tonnage Sept. 1, 1939, was 58,270,374; United States tonnage, Sept. 1, 1939, was 8,125,756.

The percentages that United States merchant shipping were of the world total, prior to the First World War, for 1920, and for 1939 are not strictly comparable, but sufficiently so for the purpose of showing significant changes in the position of the United States in world shipping during this period.

of underdeveloped countries, and for political reasons. If so, caution is called for lest too precipitate a foreign loan policy lead to excessive lending on the part of the United States in the absence of preparations for absorption of service charges in the form of goods and services later on. Excessive foreign lending by the United States might lead to a paralyzing industrial depression if, for one reason or another, service charges on the loans were not collected and, in consequence, the annual outflow of funds from this country should be suddenly and drastically reduced.

CHAPTER XXVIII

CONCLUSIONS

PERSISTENCE OF INTERREGIONAL TRADE

Economic advantage associated with territorial division of labor is a principal reason for interregional trade. For thousands of years particular kinds of goods have been moved from regions of relative abundance to regions of relative scarcity. Fascinating tales of adventure in distant lands in pursuit of gold and other precious metals are to be found in prehistoric mythology; for example, the Grecian tale of Jason's adventures in pursuit of the golden fleece. In ancient times silks and spices moved from the Orient westward. Phoenicia, Greece, and Rome reached out and across adjacent seas for supplies of wheat and other goods that could be had from abroad more readily than they could be produced at home. Quest for precious metals had an important role in the European conquest of the Americas, and trade in more prosaic goods played an important part in the colonization of the New World. Interregional trade is a phenomenon as old as history and of increasing importance. Many influences have contributed to an increasing volume of interregional trade, such as localization of mineral deposits, peculiarities of climate and soil, differences in population density, and lack of geographical uniformity in the development and adaptation of improved production techniques. Interregional trade may be either intranational or international.

In recent times as in the past, production advantages of international trade have been among the influences responsible for an ever-changing complexity of international political relations and imperialist expansions. Whenever and wherever the people of one area have greatly coveted the products of another area, their choices of action have ranged between the extremes of peaceful interchange of goods and of armed conquest. The economics of international trade is an important element in the present-day struggle between the political philosophy of world domination by a single totalitarian power on the one hand, and, on the other hand, a philosophy of cooperation among nations enjoying greater or less degrees of national self-determination. Whatever the political outcome of these struggles may be, interregional

trade is unlikely to cease to be a vital factor both in the economics and in the politics of the future. This conclusion rests on a factual basis of physical production requirements and on a less materialistic foundation of deep-rooted custom.

Interregional trade is a conception that has the attributes of historical persistence and the qualities of future permanence. The master-race philosophy of Hitler's Germany was one of conquest, political domination, and intraempire trade. The current Russian philosophy of economic and political relations among peoples is difficult to interpret, but there can be no doubt about the Russian desire to gather together the products of many regions. The Japanese dream of a Greater East Asia Co-prosperity Sphere included the mobilization of the resources of vast areas in Asia and Oceania. The dominant world trade philosophy of English-speaking peoples has long been one of international cooperation and international trade. It is not beyond the range of possibility that current events may be drifting toward some kind of universal state. The philosophy and the cultural pattern of English-speaking peoples are affiliated with ancient Hellenic society, and Hellenic society culminated in a universal state: the Roman Empire. This fact, if history should repeat itself, might be a guide to the present drift in Western democracies. Possibly the current maneuvering of the United States, on the one side, and the Union of Soviet Socialist Republics and its satellites, on the other, is the prelude to a great struggle to determine whether Russia or a union of English-speaking nations is to be the cohesive center of a modern universal state. However, even if the whole world could be bound within the framework of a universal political state, problems of interregional trade would still persist—problems similar in many basic respects to those of international trade. Even under this extreme assumption and with an added assumption of socialism in place of free enterprise, existing interregional trade theory, distilled from long ages of experience, would not be deprived of all practical value. A more likely assumption, for the immediate future at least, is a drift toward some kind of world organization embodying a central authority capable of preventing extreme manifestations of political and economic nationalism without depriving the several parts of opportunities for the development of unique cultural and economic patterns. In such a world, the pressure for wider markets, the problems of economic stability, the possible effects of trends toward socialism, and the policies of national protectionism are important considerations.

ECONOMIC PRESSURE FOR WIDER GEOGRAPHICAL MARKETS

Pressure for wider and ever wider geographical markets has been a persistent force for many centuries. The part that intercity trade and trade between city and country had in the breakdown of manorial economy in the Middle Ages is familiar to students of economics. In the course of time many small city-states in Western Europe were welded together to form national economies. During the mercantile period national economies in various stages of development were more or less protected, by a multiplicity of trade restrictions, from the competition of other such economies. At a later date, international trade contributed to the breakdown of mercantile restrictions, particularly in Great Britain. A drive for wider geographical markets tended to parallel the advance of the Industrial Revolution in technologically forward countries. In Germany and the United States industrialization in the nineteenth century was accompanied by a growth of national customs tariffs, but this fact does not contradict the foregoing conclusions. The *Zollverein* preceded Germany's political unification. German industrialization was accompanied by an expansion of the free-market area within the political boundaries of the future empire. In the United States, industrial expansion was accompanied by territorial expansion on the North American continent. In 1800 the area of continental United States was 892,135 square miles; in 1900, it was 3,026,789 square miles.[1]

Extreme nationalism, protectionism, and geographical restriction of markets were dominant features of the interwar period. However, the Second World War, to which these practices contributed and for which they were in some degree a preparation, and existing postwar tendencies appear to refute the idea that the long-sustained technological drive for wider and ever wider geographical markets was permanently reversed after the First World War.

Logical reasons for wide markets in a power-machinery economy are not difficult to find. The external and internal economies of mass production are dependent on wide markets and mass sales. Furthermore, raw materials utilized in the mass-production process are available in proper quantities and diversities in no one country. They must in fact be assembled from all parts of the world. These circumstances give rise to powerful drives on the part of industrially advanced countries for trade expansion beyond the confines of particular

[1] *Statistical Abstract of the United States*, 1946, p. 4.

political boundaries. Motives of no less importance exist for market-expansion urges on the part of peoples in industrially backward countries. In such countries per capita production and living standards are relatively low. In most such cases, industrialization is necessary to sustained upward trends in per capita production. The sale of raw materials abroad and the purchase of machinery and equipment from technologically advanced countries facilitate industrialization in the laggard countries. Infant-industry tariffs and other protective measures may be used to foster new industries in backward countries, but this fact does not imply that an underlying drive for wider markets is not present both in the early stages of industrial development and in the later stages of industrial expansion. Paralleling the rise of the power-machinery economy, trade increased enormously between industrialized and unindustrialized countries and among the more highly industrialized countries. Production factors are so unequally divided that every country has a comparative advantage in the production of some goods and operates at a comparative disadvantage in other lines of production.

Technological improvement in production methods is the most characteristic feature of nineteenth- and twentieth-century economy. Continuous development and spread of improved production methods is the one hope for raising living standards all over the world. There is little or no evidence to suggest that desire for material well-being is not sufficient to induce the greater part of the world's population to strive with varying degrees of vigor for improved production methods and more production. Inasmuch as technological improvements, power machinery, and wide markets are functionally related, there is little reason to anticipate a permanent disappearance of the drive for wide markets even though contracting tendencies of one kind or another—preparation for war and attempts to minimize economic instability, for example—may from time to time obscure the more persistent underlying forces working in the direction of trade expansion.

PROBLEMS OF ECONOMIC INSTABILITY

The forward sweep of technological improvements is destructive. It destroys obsolete methods of production, the values of superseded capital equipment, the usefulness of some kinds of patiently acquired skills, job opportunities in some lines of activity, and the economic equilibrium of the *status quo*. Technological developments in Western democracies have been the products of free-enterprise economic systems. Large rewards for successes have been measured in pecuniary terms;

losses arising from ineffectiveness, chance, or misfortune have been measured in similar terms. Introduction of technical improvements in methods of production that have lowered costs of familiar goods and brought new goods to the market have gained for a few fortunate enterprisers enormous profits and vast fortunes. The prizes for exceptional successes have been so large as to induce the assumption of great private risks and to stifle the discontent arising from innumerable small losses.

Technological advancement has been described as a process of "creative destruction." [2] Power-driven spinning and weaving mills helped to destroy the handicraft system in the textile industry. Railroads undermined, in part, the usefulness of canals. Steamships put sailing ships out of business. The automotive industry restricted the opportunities of wagon makers, drove millions of horses and mules off the farms, and substituted, in part, gasoline power for hay power in agriculture. The old-time blacksmith shop has all but disappeared. Electricity has retired the oil lamp in many areas. A multiplicity of improvements have ushered in a multitude of new goods and retired a few old ones.

The Industrial Revolution substituted roundabout methods of production for more direct methods. The farm family is no longer a nearly self-sufficient unit that makes its own clothing and purchases almost no food at the town store. Millions of workers have specialized employment in factories, mines, transport systems, stores, and financial institutions. The whole complicated system of production and trade has become so interdependent that if any one part is disturbed all the other parts are affected. Introduction of technical management and other improvements into such a system causes dislocation and unemployment.

Present-day competition takes the form of price cutting, sales effort, service, quality in goods, offerings of new goods, technical research, new sources of material supply, and management innovations. In describing the processes of industrial competition Schumpeter [3] uses such phrases as the "perennial gale of creative destruction," "pressure of improved methods," "struggle for adjustment." This kind of competition thrives in a business environment where long-range forecasting and advance planning are essential. Forecasting is essential to good judgment in the making of large expenditures for fixed equipment

[2] SCHUMPETER, JOSEPH A., *Capitalism, Socialism and Democracy*, Chap. VII, Harper & Brothers, New York, 1942.

[3] SCHUMPETER, *op. cit.*, Chaps. V to VIII.

and organizational preparation for low-cost mass output. Demand for goods so produced must be estimated far into the future. The possible errors of estimate are large. Uncertainty, trial and error, risk, profit, loss, expansion, and contraction are characteristic features of competitive industry.

Some readers may question business-cycle theory which they may read into the foregoing generalizations, but none will question the fact that modern industry is subject to instability, periods of disequilibrium, unemployment, frustrations, and disappointments. The widespread interest in security—employment security, income security, and other kinds of economic security—is a testimonial to the foregoing conclusion concerning economic instability.

Insecurity is a price that is paid for material progress, individual opportunity, increased production, higher living standards. Insecurity breeds discontent in various segments of the voting population of a democratic country; it creates fertile seedbeds for the growth of antidemocratic doctrines. Security in the economic *status quo* and technological advancement are antithetical objectives. The clash between these objectives has contributed and is contributing to a growing interest in ways and means of modifying extreme free enterprise in a manner to ensure greater stability for the economic system and greater economic security for the individual members of democratic states.

The impact of economic instability is illustrated by the experience of the 1930's. Although the causes of this episode have not been unraveled and evaluated to the satisfaction of all competent economists, there is a consensus with regard to some of the consequences. The economic instability of this period contributed to a world-encompassing wave of extreme economic nationalism, to a furtherance of socialist tendencies in Great Britain and elsewhere, to a series of economic experiments in the United States, and to a stimulation of interest in the nature and achievements of Russian communism. Present-day development of international economic policy is not free from influences of this character.

POSSIBLE EFFECTS OF SOCIALIZATION TENDENCIES

The trend in political economy is in the direction of more government intervention in economic affairs, not less. This is not a new phenomenon. Adam Smith deemed the construction and maintenance of public roads, harbors, and bridges a legitimate governmental function. John Stuart Mill cited street lighting and paving, harbor improvement, lighthouse construction, the raising of dikes to keep the sea out and of

embankments to keep rivers in, as examples of legitimate governmental functions. Because "nearly all of the innumerable inventions that have given us our command over nature have been made by independent workers," Alfred Marshall found "cause for fearing that the collective ownership of the means of production would deaden the energies of mankind, and arrest economic progress." [4] Nevertheless, Marshall was willing to concede the idea that collective ownership of the means of production might not arrest increases in production if, before government assumed the ownership of production facilities, the whole people could acquire greater powers of unselfish devotion to the public good. Since Marshall's time (1842–1924), Great Britain has moved a long way toward socialization of its heavy industries and the United States government has constructed and is operating a gigantic power and drainage plant commonly referred to as "TVA." [5]

A number of able economists, whose judgments do not appear to have been biased by political or emotional predilections in favor of socialism, have developed logical grounds for conclusions to the effect that, under favorable circumstances, socialism could function successfully in conformity with the theoretical end results of a free-enterprise system in so far as considerations of production efficiency are involved.[6] One cannot safely conclude that the trends toward socialism in Western democracies necessarily need undermine the basic tenets of international trade theory. Conceivably, production in a socialist economy could be guided by consumer choices freely exercised; production factors might be apportioned among industries roughly in relation to marginal costs; international trade barriers might be reduced; international territorial specialization in production might conform to the principle of comparative advantage; international exchange rates might be stabilized; technological development might be fostered; and the geographical extension of markets facilitated.

Although similar economic results conceivably could be achieved by socialist and free-enterprise systems, realization of this possibility is unlikely. National socialism and free enterprise are so different in

[4] MARSHALL, ALFRED, *Principles of Economics*, 7th ed., Book VI, Ch. XIII, paragraph 11, Macmillan & Co., Ltd., London, 1916. By permission of the publishers.

[5] Tennessee Valley Authority.

[6] See, for example, SCHUMPETER, *op. cit.*; TAYLOR, FRED W., "The Guidance of Production in a Socialist State," *American Economic Review*, March, 1929, p. 1; LANGE, OSKAR, and TAYLOR, F. W., *On the Economic Theory of Socialism*, University of Minnesota Press, Minneapolis, Minn., 1938; LERNER, A. P., "Statistics and Dynamics in Socialist Economics," *Economic Journal*, June, 1937.

political and economic impact as to lead many economists to the conclusion that the results of the two systems are likely to be very different. The possibility that socialism and free enterprise would lead to similar results is not sufficient grounds, for example, for dismissing one's concern lest national planning to stabilize national production and maximize the individual's job security may foster the development of more international trade restrictions in place of less. One of the reasons for this conclusion is the fact that protection of comparative disadvantage industries is a tempting method of minimizing instability in these particular industries. A policy of protection for industries that are weak from a comparative cost point of view attracts the support of workers, employers, and investors in these particular industries and in many cases gains the sympathetic approval of voters in general who are opposed to policies that may involve their country in foreign entanglements.

PROTECTIONISM

Protectionism takes many forms. Customs tariffs, import quotas or prohibitions, and foreign exchange controls are the kinds of protective measures about which we hear most. Less spectacular are the restrictions based on sanitary and health measures, campaigns designed to discourage consumption of foreign goods, internal revenue laws, formalities that must be adhered to in the international movement and foreign sale of goods, and direct industry subsidies of one kind or another. Examples of restrictive rules and formalities are the regulations affecting transporting, marketing, processing, and mixing of goods. Rules and formalities of foreign trading involve, also, such considerations as valuation of products subject to duty, handling fees imposed at the point of entry, documentation, and marking requirements. It is not surprising that national minorities subject to financial losses incident to economic instability—whatever the cause—should engineer protective measures through legislation and otherwise, whenever the opportunity occurs. Equally important motives for protectionism are considerations of national security. Shipping and the manufacturing of armaments are examples of industries that are directly subsidized for national-defense reasons.

In the absence of some kind of over-all leadership capable of combating successfully extreme forms of nationalism in the interest of all nations that participate largely in international trade, there are many reasons why national protectionism flourishes. (1) Each national economy in a community of trading nations must absorb from

time to time losses incident to economic change, and there is an ever-present temptation to try to avoid these losses by resort to trade restrictions. (2) Unilateral obstructions to trade imposed by one country may aggravate losses in other countries and give rise to retaliatory measures. (3) Unless nations have reasonable assurance of security, economic gains from production specialization and trade are sacrificed to the development of protected national-defense industries. World leadership capable of preventing the development of extreme forms of nationalism in many countries is among the more important requisites of world-wide economic prosperity and world peace.

CENTRAL AUTHORITY

During the nineteenth century the unique position of Great Britain in world trade, world finance, and international politics enabled her to exercise, in some degree, an over-all regulative function. She did not have authority to exercise direct control over law-making processes in other countries, but she was in position to exercise a balance-of-power influence in international finance and international diplomacy. Great Britain's national self-interest in the nineteenth century chanced to be in harmony with international free trade, foreign exchange stability, technological advancement, and respect for international economic obligations.

The balance of international political and financial power had begun to shift away from Great Britain prior to the First World War. After that war no country or group of countries exercised leadership comparable in effectiveness with that of the British in the nineteenth century. Possibly the economic dislocations incident to the war were of such magnitude as to defy peaceful solution in the absence of some kind of world organization with a program of economic policy acceptable to such dominant powers as Great Britain, France, and the United States and implemented by their unwavering support. Possibly no international economy policy program that the leading powers would consistently support could have been devised. The one irrefutable conclusion is that the world economic system collapsed. During the 1930's every nation tried to shore up and protect its own domestic economy with little regard to the international implications of its actions.

The Second World War left an aftermath of economic dislocations greater in number and magnitude, and fraught with destructive possibilities as great as those which followed the First World War. The United States has taken the initiative in attempts to establish a world

political organization and related economic institutions capable of dealing constructively with problems that endanger the progress of economic recovery following the recent war. To date, the U.S.S.R. and the United States, the two most influential powers at the present time, have not found common grounds of agreement on basic issues pertaining to world economic recovery and the successful operation of world peace machinery. There are forebodings of a gigantic struggle between Russian conceptions of communist imperialism and American conceptions of democratic cooperation.

A STRUGGLE FOR LEADERSHIP

American and Russian conceptions of world economic development appear to be incompatible. American economic philosophy and the history of its development are recorded in a voluminous literature. The philosophy of communist Russia is not clearly understood by people outside that country. An authoritative contrast of the two philosophies, in so far as they may affect future international economic relations, is not available at the present time. Inasmuch, however, as a struggle between the United States, Great Britain, and like-minded peoples, on the one hand, and Russia and her sympathizers, on the other hand, appears to be the developing crucial issue in world affairs, a few sketchy impressions may serve two useful purposes: (1) to focus attention upon the possible bearing of this struggle upon America's economic thinking and (2) to direct the attention of students who may pursue careers of economic research to the importance of a sufficient understanding of the Russian system to make authoritative comparisons possible.

Elements of Strength in the American Position. The fact that people cherish personal freedoms, opportunities for individual self-expression, and absence of domination by minorities can be verified by a wealth of historical experience. Struggle for political systems in which the will of majorities ultimately rules has been a persistently recurrent phenomenon since the dawn of recorded history. The political ideology of English-speaking peoples—compounded of a mixture of ancient Greek philosophy, Christian religion, exaltation of the individual, and democratic aspirations—has wide appeal in theory and a high degree of flexibility in practice. Here lies one source of strength of the American position.

Another source of Western strength is the production record and the production capacity of the United States. This country occupies a leading position in technological developments. No other country has

succeeded in producing and amassing material wealth in the aggregate and per capita equal to that of the United States. Large production makes possible a high standard of material well-being for the common man, a goal almost universally desired. Furthermore, wealth and technical leadership enable the possessor to extend assistance in the form of monetary loans, capital equipment, and technological know-how to populations that desire to improve their economic circumstances through a process of emulation. Wealth and technical leadership contribute also to national power and influence in international affairs.

Finally, the position of the United States is strengthened by the existence of similar political and economic institutions and a like-mindedness with respect to individual freedoms in Canada, Australia, New Zealand, South Africa, Great Britain, France, Belgium, Holland, Denmark, the Scandinavian countries, and other nations that are fearful of Russian encroachment. Fear of Russian encroachment is contributing to the development of joint support for a unified international relations policy on the part of English-speaking and other democratic nations; it is contributing also to unified support of a common foreign policy by divergent political factions in the United States.

Elements of Weakness in the American Position. The United States has not yet succeeded in discarding the shell of nineteenth-century protectionism which, like mercantilism in Great Britain, contributed to the development of a strong central government that served to solidify a loose federation of nineteenth-century American states. The transition from that protectionism to a foreign trade policy consistent with an expanding system of international economic cooperation cannot be realized without readjustments in the industrial structure of the United States and without associated political cleavages. Such cleavages tend to weaken a nation's political fabric and expose cracks that may be widened by fifth-column propaganda of foreign design. The forward drive of technological progress and the spread of improved production technology to industrially backward regions call for continuous economic readjustments in industrially advanced countries. These normal peacetime readjustments plus strains incident to the correction of war-caused dislocations have become a serious challenge to the effectiveness of the competitive self-stabilization mechanisms in the United States. Economists and statesmen have not as yet found a satisfactory solution to the problem of achieving far-reaching realignment in this country's industrial structure without mass unemployment. An automobile factory can afford to lay off the majority of its workers for a few months

while the plant is being retooled for a new model. A nation cannot afford to have 10 or 20 million workers laid off for a period of 2 or 3 years while its economic structure is being remodeled by competitive pressures. The most acute politico-economic problem in free-enterprise democratic countries in our generation is that of devising ways and means of preventing mass unemployment during periods when an accumulation of economic dislocations is in process of correction in response to a concentration of competitive pressures. Government intervention to facilitate competitive processes and to cushion the shocks is called for. The critical problem is to devise such types of intervention that will accomplish the desired ends without undermining the foundations of the system and its encompassing, political framework.

The Russian Position. Russia is a strong nation. Under the Soviet regime the Russians have made rapid progress in industrialization and technical education. Their performance against the Germans in the Second World War was evidence of productive capacity and a high quality of military leadership. This performance was also a demonstration of mass loyalty for the Russian cause, fierce pride in nationality, and purposeful determination of a quality that can carry a nation to higher and higher plateaus of greatness. Present-day Russia, with almost 200 million citizens, has a long history. The Russian people are conditioned by centuries of stern central authority. A part of the latent power of the U.S.S.R. is due to the rapidity with which an awakened, patriotic, and disciplined people can turn to their own peculiar end, production techniques already developed and to be had for the asking. Russia can be expected, for a time, to grow in population and in industrial power at a rate more rapid than that of more highly industrialized countries like the United States.

How much of the disagreement between Russia and the United States concerning basic international policy is power politics and how much is due to differences in political background and economic ideology are dubious questions. During the nineteenth century the United States was a comparatively young country with a small army and navy and little concern for Old World power politics. Barring a limited number of diplomatic clashes involving Russia and the United States—such, for example, as Russia's championship of Europe's colonial overlordship in Latin America and United States pronouncement of a Monroe Doctrine—Russo-American diplomatic relations prior to the end of the nineteenth century were comparatively uneventful. Twentieth-century developments have created a quite different situation. The two World Wars pushed the United States into a position of front-

line rivalry for world leadership. Great Britain's naval supremacy has been superseded by that of the United States. Germany and France have reverted, temporarily at least, to the rank of second-rate powers. Japan has been defeated in home territory by the armed might of the United States. Thus the United States and Russia have been brought face to face on a number of military, economic, and political fronts, in Europe, in the Near East, and in the Far East.

What does Russia want? An answer, at best, is dubitable. Nevertheless, an answer is so vital to the future course of international economic relations that the question cannot be ignored by students of international economics who desire to descend from their ivory towers and consider the realities of political economy at work. Few authorities question the conclusion that Russia is ambitious. She desires Russian-controlled outlets to the Atlantic and Pacific oceans. She wants to control, through friendly communist governments, as much of Europe and Asia as possible. Whether she aspires to domination of an all-communist world is a debatable point, but the conclusion that she desires to extend her sphere of political influence beyond its present limits is open to little doubt in democratic countries.

What is Russian communism? There are various interpretations. On the political side it appears to be a dictatorship by a minority that has kept itself in power by armed force and control of Russian news and propaganda. On the economic side it appears to be a form of national socialism founded upon Marxian ideology which, in its Russian application, is undergoing a process of subtle evolution. A foundational tenet of Russian policy appears to rest on the idea that capitalism contains the seeds of its own destruction because the capitalist class cannot adjust itself to economic change. Western democracy from a Russian point of view is not true democracy because it is an instrumentality of a bourgeoisie class. Hence, it would appear that Russia's destiny is to facilitate the overthrow of capitalism and encourage the spread of a "proletarian democracy." "The victorious proletariat [of Russia] having expropriated the capitalists and having organized socialist production at home [will] rise against the remaining capitalist world, drawing to itself in the process the oppressed classes of other countries." [7]

The strength of the Russian position is difficult to evaluate. In this connection, three considerations, all imponderable from a point of

[7] Quoted by X in "The Sources of Soviet Conduct," *Foreign Affairs*, Vol. 25, No. 4, July, 1947, p. 566, from the *Official Soviet Edition of Lenin's Works*.

view of specific evaluation, are important: (1) the problem of passing dictatorial control along to other hands without internal cleavage when Stalin relinquishes control, (2) the consideration of Russia's ability to push forward in the development and application of new techniques of production as effectively as she has emulated production methods already in use in countries to the west, (3) the willingness of people in Western countries that may submit to Russian political domination to submit also to a lowering of their living standards to the Russian level. If they will not, there is the problem of Russia's ability to raise the living standards of its own people rapidly enough to eradicate a temptation to exploit foreigners living under more favorable economic circumstances.

Western democracies are faced with a problem of solving extremely difficult economic and political problems if they are to survive without revolution. Russia is faced with a problem of solving political and economic problems even more difficult if she is largely to extend the sphere of her dictatorial domination.

THE OUTLOOK

One of three directions of development in world political economy is most likely.

1. There is the possibility of peaceful cooperation among the leading world powers in the construction and maintenance of institutions capable of ensuring world peace and of encouraging international economic collaboration. National economic systems are never identical in all respects and are seldom static. Flexibility, trial and error, adaptation, and evolution are characteristics of both political and economic democracy. Some elements of the Russian economic system may be more efficient, more acceptable to democratic majorities, and more permanent than their counterparts in free-enterprise economic systems. In this event the evolutionary process might result in retention of these elements and the discard of their less efficient free-enterprise substitutes. Under conditions of peaceful evolution many of the basic precepts of free-enterprise trade theory would be likely to survive. Territorial division of labor, allocation of production factors in relation to marginal costs, price determination in response to individual selection of consumer goods, stability of international exchange rates, relatively free access to world markets for the purchase of raw materials and sale of whatever goods a country has to offer, and equal treatment of the traders of all foreign nationalities are examples.

2. There is the possibility that countries will pull apart, develop

policies of extreme nationalism, and prepare feverishly for another world war.

3. There is the possibility of economic cooperation among English-speaking countries and other democratic countries with Russia acting independently. Prior to the First World War political and economic relations between Great Britain and the United States were not always cordial. Economic competition between these countries was sharp, and in the background was a threat of possible naval rivalry. After the First World War naval rivalry between Great Britain and the United States became a reality, and there were those who confidently predicted a war between these two powerful nations, notwithstanding kinship in blood, a common language, a common origin of basic political and economic institutions, and similarly in philosophical outlook.[8] During the Second World War the United States navy outdistanced the British navy; the United States became the greatest naval power in the world by a wide margin. The result has been closer collaboration between Great Britain and the United States, not a growing antagonism. During that war Australia, New Zealand, South Africa, and Canada collaborated with Great Britain and the United States in a war for mutual protection. There is little reason to believe that military collaboration between the United States and English-speaking parts of the British Empire will not continue into the future.

Mutual economic interests on the part of the United States and the British Empire are not so all-pervasive as national security interests. The latter, however, may exercise a profound influence over the former, particularly if world peace is threatened by a combination of powers dangerous to both Great Britain and the United States.

Similarity of British-American Economic Interests. In past periods the British Empire and the United States have encouraged technological progress, a widening of world markets, spread of technological knowledge, foreign lending, exchange rate stability, respect for international economic obligations, maintenance of economic systems in which prices were determined in competitive markets, protection of the institution of private property, and orderly legal procedures in the adjudication of disputes. At present both the United States and Great Britain are interested in furthering economic reconstruction in Europe and Asia.

For decades Great Britain and Canada have been the United States two largest export markets, and the United States has been an im-

[8] See, for example, DENNY, LUDWELL, *America Conquers Britain,* Alfred A. Knopf, Inc., New York, 1930; and DE JOUVENEL, HENRI, French delegate to the League of Nations, *New York Herald Tribune,* Nov. 26, 1927.

portant market for British and Canadian goods. Likewise trade between Oceania and the United States and South Africa and the United States has been an important factor in the economies of these areas. Great Britain imports cotton, wheat, meat, and a variety of manufactured goods from the United States. Canada, Australia, New Zealand, and South Africa import a variety of manufactures from the United States. This country imports manufactured goods from Great Britain, timber products and metals from Canada, and wool and other goods from Australia and South Africa. It is true that the wheat industries of the United States, Canada, and Australia are competitive, that copper produced in South Africa competes with copper produced in the United States, and that British and United States manufactures compete in markets all over the world. Trade with Empire countries will cause contraction in some United States industries and encourage expansion in others. This kind of competitive adjustment is not a new phenomenon; it is a price that countries have paid in the past and will have to pay in the future if they are to benefit from the economic advantages of production specialization.

Conflict in British-American Economic Interests. Acute and serious economic conflict between British Empire countries and the United States has occurred in the past and may occur in the future as a result of business depression. In periods of sustained mass unemployment the destructive impact of foreign competition upon domestic economies is magnified. Politicians tend to place responsibility for depression on foreigners in attempts to pacify domestic voters. Also national protective measures are resorted to in efforts to relieve domestic unemployment. A result is multiplication of international economic frictions and increase in their intensity. During the depression of the 1930's the United States raised her customs tariff barriers; Great Britain divorced the pound sterling from gold and negotiated a system of Empire trade preferences, and the United States followed with a dollar devaluation policy. This kind of economic warfare is destructive of harmonious political relations. A basic cause is the shock of severe economic depression. Ways and means must be found to alleviate the disruptive effects of deep depression. British Empire countries and the United States are keenly aware of this problem. Next time they may fight depression together as they fought the recent war, in place of fighting with each other.

Solidarity of English-speaking Countries. The conflicting economic interests of English-speaking countries are not such as to encourage hope for economic and political solidarity in the absence of outside

pressure. The same might have been said for the German states that became the German Empire after the Franco-German war, or for the divergent elements that were welded into a French nation, a United Kingdom, or a United States of America. In view of existing international political conditions there is reason to believe that the English-speaking countries can collaborate to the extent of becoming a center of gravity into whose orbit other democratic countries can be drawn for purposes of economic cooperation. Under these circumstances the proposed International Trade Organization, the International Monetary Fund, the International Bank for Reconstruction and Development, and other such institutions may have a chance to perform their functions successfully with or without the cooperation of Russia and her satellites. Demonstration of their effectiveness is the surest method of perpetuating political and economic institutions. A demonstration of this kind on the part of English-speaking countries, if successful, will raise the level of production in the community of trading nations above levels which have existed in the past or which may exist contemporaneously in other parts of the world. Gains from territorial specialization and trade will be divided among the participating countries, and living standards of all the people involved will be increased. Armed conflict among the cooperating countries will be prevented. These are the logical end products of the democratic political philosophy and the international trade theory of English-speaking and other democratic nations that are cooperating to reconstruct the damage wrought by the Second World War and to establish world peace machinery.

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