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# American General Education Series

EDITED BY

MALCOLM S. MACLEAN

*Director of the General College  
University of Minnesota*

## **American General Education Series**

*Under the Editorship of*

*Malcolm S. MacLean*

*University of Minnesota*

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INCOME AND CONSUMPTION

ROLAND S. VAILE and HELEN G. CANOYER

# *INCOME and* **CONSUMPTION**

*By*

**ROLAND S. VAILE**

*Professor of Economics and Marketing*

*and*

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*Instructor in Economics and Marketing*

**UNIVERSITY OF MINNESOTA**



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## EDITORIAL FOREWORD

NEARLY every day you and we, each of us, buy something. It may be five gallons of gas; a new tie, hat or pair of shoes; an ice-cream cone, a hamburger, or a slice of steak and some string beans for supper; a copy of *Collier's*, *Esquire*, or *The Saturday Evening Post*; a pair of tickets to a movie or a symphony; a picture or a set of books; a collegiate "jallopy" or a swift new sedan; a summer shack or town house. Nearly every day we swing into some kind of activity to serve ourselves or others. We sell things or labor or advice. We work for wages. Nearly everything we do has its economic aspect whether we visit the sick with a book or flowers, study for an examination, fish or play golf, or vote for a mayor or President. The sum of what we buy and sell and do is the sum of our economic activity. The sum of what each of the two billions of us, who inhabit the earth today, buy and sell and do is the sum total of the world's economic activity.

We buy and sell and do these things each day for two reasons. We want to keep alive. And we want to satisfy as many of our desires and ambitions as possible. The jobless, or the very poor, buy and sell and do just to subsist. But once a minimum point is reached—and it is probably a different point for each of us—we develop a mass of wants which, like bodily hunger, keep us restless and seeking until they are satisfied. Not all of these desires ever are satisfied even for the most fortunate. We die, finally, still wanting to do and to be. As an ancient wise man once remarked, "Happiness lies not in *being* but in *becoming* what we want to be." Perfection does not exist nor will ever exist in our management of our economic affairs either personal or national.

But there is a vast gap between what we can get of life's satisfactions if we are awake, alert, or intelligent about what we and others buy, sell, and do to attain them, and what we can get if we are blind, deaf, and ignorant in these matters. In the

field of our economic activities there is no slogan more stupid and harmful than that which says "What you don't know, won't hurt you." Economic ignorance can and does every day interfere with our happiness in a thousand ways. It makes us wasteful. It robs us of many of the satisfactions we most want. It lays us wide open to "chiselers" and "gyppers." It leads us to buy and sell the wrong things or right things at the wrong time and the wrong price. It makes us mistrust the only specialists who know enough to get us out of economic troubles when we get ourselves into them. It causes us to blame our political and economic leaders for troubles that rise straight from our own individual and mass stupidity.

In consequence, whether we are driven by our own thoroughly selfish wish to live better, have more things and more pleasures, or by a keen social conscience and desire to see to it that all our fellow beings fare well and that none are "ill-clothed, ill-housed, ill-fed," we need to become daily less illiterate, more wise in our economic life. In our buying and selling and doing it is not "fun to be fooled"; it is only "fun to know." Towards knowing, therefore, we study economics. And for such study Professor Vaile and Miss Canoyer have written this book. They have set up some of our economic problems as buyers and sellers and doers. They have stated these problems in everyday terms so that we may see them clearly. They have analyzed many of our daily activities and shown us their economic meaning. They have given us some few essential tools for our thinking about ourselves, and what we want, and how to get it.

Sometimes the authors startle us out of our previous notions on some things. Some readers, for example, will scarcely believe, until they have read carefully, that from one point of view their income is not what they *make* but what they *spend*, not what they get but what they use. Others have never thought of what might happen to children's and young people's wants and to the markets that supply them if Dr. Townsend's Plan had been tried on a national scale for a while. Others who have been talking earnestly or glibly about the "need for economic security" will, perhaps, discover in these pages that such security is not what most of us really want at all, but that insecurity may be highly desirable. Others may suddenly

realize that it might be best to train women more than men in consumer economics since the women do the lion's share of the buying in the United States, and that the schools may have, therefore, a responsibility they have hitherto neglected. By these interesting means they clarify problems about which we have had some wrong ideas because we did not know enough, and they call sharply to our attention personal problems that are always present but that we do not always recognize.

Professor Vaile and Miss Canoyer have written of these matters in plain language. They have purposely avoided formal and abstract statements of economic principles. They have instead illustrated some of the tendencies and the operation of some of the laws that control our economic activities in present-day United States. They have not tried to train us in a rigid and exhaustive course in Principles of Economics to become professional economists, but rather they give us as students and laymen the chance to become more alert and awake in the management of our economic thoughts and acts. They do not intend the book to be more than an introduction to the problems of Income and Consumption since to treat even these adequately would take a "five-foot shelf" of books. As they suggest here and there in the present volume and in the outline in the Appendix, our economic wants as consumers are complexly based on biology, neurology, psychology, esthetics and many another field of special knowledge.

But the authors have answered and clarified many of our most intimate, pressing questions about our economic life as makers of income and consumers of goods and services. They have given us some objective measurements of income in the United States both from the standpoint of each one as an individual and of all of us as a people. This serves as a sort of yardstick or scale against which we can set our own accomplishments in comparison with others. They tell us of what income consists. They tell us why our incomes are always smaller than we should like to have them. They sketch out for us the many things that finally determine what share of the total national income goes to each of us. They show the tried and proven ways by which total income can be increased. They analyze with extraordinary fairness and clarity the different

proposals and plans for distribution of income such as Townsend, share-the-wealth, public ownership, and co-operative.

The writers tell, with ample, clear, concrete illustration, what consumption really is and what use is now actually made of money incomes by each of us and our families. They show how our standards of consumption vary from time to time, how they differ when we are children, youth, adults, and aged. They also show how such standards differ if we live in the country or the city, the south or north, the east or west, on the coast or in the mountains. They probe into the difficult problem about which all of us have to do some clear thinking: that is, the problem as to whether those of us with very low incomes are really suffering or are living by a satisfying standard but one quite different from those of us with high incomes; whether the "rich" man enjoys and profits from life more or less than the one who is "well off" or has a "moderate income." On these and other consumer problems the authors have found and presented much interesting evidence.

*University of Minnesota*  
*June 1938*

RUSSELL A. STEVENSON  
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*Part I*

**THE EXISTING ECONOMIC ORDER**



## CHAPTER 1

### INTRODUCTION AND SCOPE

**E**CONOMICS has been defined as “a study of the price and value aspects of human activities and institutions.”<sup>1</sup> This definition suggests that the study include: 1. A listing and evaluation of what people want and hope for in ways of working, recreation, and general living both as individuals and as groups; 2. A survey and analysis of institutions through which people have tried to satisfy their wants; 3. A measurement of the extent to which people have been able to satisfy their desires; 4. An estimate of the effect of changes in economic institutions, such as banks, railroads, stores, and even governments, on human well being.

It is a common assumption, and one which we accept, that individual people want to “get all they can out of life.” This is, of course, an indefinite statement of human purpose or objective. It is, however, one which anyone will accept, provided each can be his own judge of wherein lie the greatest satisfactions. For the moment we shall not attempt to put specific content into the concept of “abundant life”; each reader will have some ideas on the matter, while later on we shall undertake some discussion of what constitutes wealth, on the one hand, and illth,<sup>2</sup> on the other, at least as indicated by what people have chosen to do.

In the effort to accomplish this broad objective people have sailed uncharted seas, built railroads through the wilderness, planted crops, organized governments, invented machines, domesticated the horse, cow and hen, prospected for gold, established rules for the ownership and orderly transfer of property, built factories, formed labor unions, painted murals, founded

<sup>1</sup> Garver and Hansen, *Principles of Economics*, Rev. Ed., Ginn, 1937, p. 5.

<sup>2</sup> Illth—a word derived from ill and meaning a disastrous or hurtful condition; the antithesis of wealth.

hospitals, and written symphonies. In all these matters people have sought to combine their own ingenuity, strength, and skill with the natural resources of land, water, minerals, plants, and animals to the end that their desires might be fully satisfied.

Throughout the years men have attempted to develop rules and methods in accordance with which people might work together for greater mutual benefit. Many of the rules have become formalized into laws, administered and enforced by governments. Many of the methods are carried out by institutions, recognized by governments as being desirable and legal, such as corporations, trade associations, labor unions, and the like, to which certain rights and privileges have been given. Among the most basic rules of government are those establishing standard weights and measures, monetary units of exchange, and rules of property ownership, use, and transfer. It is unthinkable that any considerable number of people could live together in a community or a commonwealth without rules covering such matters as these. Certainly there is no recorded history of such an accomplishment, but the extent and form of the rules have differed widely. In the democratic countries of today individuals are free to do as they will within the limits imposed by the laws which their representatives have enacted. Moreover, they are free to urge any change of the laws which seems desirable. Finally, they are free to exchange goods and services with each other within the limitations imposed by law, and such exchange is simplified by a legally established monetary system. This combination of free exchange, on the one hand, with legal regulation, privilege and limitation, on the other, results in an economic order based on specialization or division of tasks; in fact, division of labor or of tasks is, perhaps, its most conspicuous character. It frequently is called the system of *individual exchange-co-operation*.

While there are some important differences among different countries in the relative strength of legal control, on the one hand, and freedom of individual choice, on the other, this general economic system is the prevailing one throughout the present-day civilized world. The differences are clearly illustrated, for example, in a comparison of the totalitarian states,

such as Germany and Italy, with the United States and Great Britain. In the former, the powers of the dictatorial leaders are very great; they conscript men for the army, they banish or even kill those who oppose the central authority, they control the press, in considerable measure they dictate the quantity of production in some important lines. Nevertheless, they permit some freedom of individual choice in consumption; people may eat, dress about as they please and their choices are influenced, as will be explained more fully in the next chapter, by prices that are free to move up or down in response to changes in either supply or demand. Even in Russia, the soviet government relies to some extent on changes in the relation among prices to influence people's choices of specific goods and services. In the Scandinavian countries, the development of Consumer Co-operative societies provides a different balance between the forces of law and organization, on the one hand, and of free choice influenced by price, on the other, from that prevailing in Germany, Russia, or the United States. In each of these cases, therefore, the differences in the forces controlling individual action are, first of all, differences in *degree* between free, individual choice and centralized, dictatorial authority exercised by one individual or group. Then, second, there are differences in the *form* of such political control as does exist; personal dictatorship in Germany, representative democracy in the United States, consumer co-operation in Sweden, soviet communism in Russia.

It should be remembered, however, that even in its purest state, any system of individual exchange-co-operation is based upon man-made laws; that, in fact, no aspect of work or property is ever wholly unregulated by law. The broad questions of political economy largely turn, therefore, upon the proper balance between the forces of law and of individual choice. The test of the "proper-ness" of this balance would be, of course, the extent to which it permitted the engineering, industrial, and liberal arts to provide the things most wanted by the people.

The science of economics furnishes tools for the analysis of *any* kind of economic order. Ability to use these tools can be attained only through thorough technical training in colleges,

professional schools, and in business or industry itself. An introduction to the study of economics cannot go far in this technical training. It can, however, as groundwork for further study, describe existing economic conditions, ways in which these conditions are changing, and some measures that are being proposed to modify or control these trends. Such an introduction should give any student an appreciation of the difficult but interesting problems involved in the satisfying of human wants. It also should give him some basis for judging how practical and consistent are the proposed solutions to these problems. It may, finally, encourage some to continue the study of economics until full competence in the use of the tools of economic analysis is attained.

No one who reads these words will have been satisfied with his lot throughout the preceding year; none will have had everything he dreamed of and desired. All but the most naive, fatalistic, or credulous will have asked *why* they can not have what they want, when they want it, and enough of it.

The attempt to answer these inquiries leads one into a perplexing maze; at times the path seems straight and brilliantly lighted, while at other times it is lost in an infernally complex pattern that leads nowhere unless in circles; at times the substance of the maze is pleasant to the senses, while at other times it appears harsh and bruising and a stench in the nostrils. Clearly, improvement is to be sought, if at all, in many fields; partly in better understanding and practice of engineering, plant breeding, chemical industries, and the like; partly in better understanding of human psychology; partly in greater personal integrity, intelligence, and industry; and partly in an improved system of political, financial, and industrial organization that would lead to wiser choices in the use of our human and natural resources.

Economic society surely presents a complex pattern. No easy formula describes it. To begin with, philosophers do not agree (much less do ordinary folk) on the rating or ranking of satisfactions—that is, on the judgment of what we *want* most or least, and what we *need* most or least. How do we rate, for example, the emotional strength or the social desirability of the thrills that come from a fast automobile ride, an

evening of Wagnerian opera, or the phantasy of an opium dream? Or how do we value any of these thrills compared with the satisfactions to be gained from wearing a comfortable pair of shoes, or a coat in the latest fashion? Perhaps some day psychologists and philosophers will give us a complete and scientific method of making these comparisons, but the nearest approach we have at present is in the relative prices we are willing to pay either in money or in time and energy. Certainly at any one moment each person has a somewhat different ranking of satisfactions from any other person. Consequently, the composite pattern of society becomes a statistical pot-pourri or, what is worse, a statistical kaleidoscope with its ever-changing relationships. This is one reason for the complexity of the maze.

Another difficulty lies in our failure to be precise, clear, and consistent in definition and use of terms. For example, certain groups have urged that "equality of educational opportunity" should be available to every youth. These groups have not always taken pains, however, to make clear what is meant by "equality of opportunity." In practice this ideal has sometimes been interpreted to mean "*identity* of exposure to educational processes," or exactly the same kinds of schools and courses for everyone, which is not necessarily "equal opportunity," and which may even be quite undesirable; it is by no means certain, for example, that boys in a farming community should be given the same training as boys in an industrial community. Or again, the term "profit" is used in so many ways that much fine print could be used just in listing them. Many of our quarrels over the "necessity for," "desirability of," "justification of," "inequity" or "iniquity," as you will, of profits, settle themselves when a definition is agreed upon.

And still further, the different individual ways of looking at things add to the confusion because each of us is likely to feel that whatever is in our interest, or that of our group, is "right," while everything else is "wrong." We attempt to "maximize social income" by improving our *own* economic position: if we enjoy football games more than symphony concerts we feel that there "should be" many such games available at low admission charges; on the other hand if we enjoy sym-

phony concerts and detest football games, we want many low-priced concerts. Through pressure groups, such as chambers of commerce, labor unions, the Grange, parent-teachers associations, and the like, we constantly attempt to modify the distribution of income and its satisfactions among individuals; farmers urge crop control so that their income will be increased; while labor unions fight for shorter hours and higher wages.

Frequently in these adjustments we apply the formula "from him who has in accordance with his ability and to him who has not in accordance with his need"; but we have grave difficulty in defining either "ability" or "need" because each of us wants them both defined in our personal interest.

In the present book the authors undertake to straighten a few of the passages in the maze. We approach the problem from the standpoint of the consumer of goods and services rather than from that of the producer. We shall tread the same intricate system of streets, alleys, dead ends, and paths; but we believe that some of them may seem less puzzling than when first viewed from the vantage point of the producer.

The consumer is not always easily defined and separated from the producer. In our complex industrial system, the finished product of one industry may be the raw material of another; cotton thread is "consumed" in the making of sheets, and woollens are "consumed" in suits. Here, however, we confine the term "consumption" more nearly to the housewife's idea; that is, the use of goods and services for the immediate gratification of individual desire, and such goods and services will be called consumer goods. Included in this concept is the use of durable consumer goods, such as houses, and the products of governmental activity, such as schooling and highways.

Production and consumption in another sense cannot be split apart. Someone has said that he who does not get enjoyment from his work will likely get little out of life. With this we agree; that is, we believe that creative activity gratifies directly one of the deepest human desires. History is rich with stories of great happiness born of creative expression. That sort of psychic income is not included in the usual measurement of either production or consumption, but it is so clearly

a part of the pattern of life that it merits consideration in all studies of "maximum satisfactions."

In recent decades, however, the desires of people seem to have focused more and more on the "ability to consume" in the more ordinary sense. People want a higher wage or price for their product, not as an evidence that it is judged good by others, but in order that they may buy more things from others. The desire is to see the dance of the professionals rather than to join in the dance of the peasants. The ability to consume, in the market sense, appears to be a dominant motive force in individual and social activity.

And so, recognizing both the difficulty of separating production from consumption and the novelty of the approach, we turn our attention in this volume to an introductory survey of the existing economic order and what it does for each of us, as seen by people as consumers. We use this approach in full appreciation that it does not follow strict chronology; that production must occur in time *before* consumption, that things must be made before they can be used. We are told, however, that in using motion pictures of athletic performances for coaching purposes, it is often useful to run the film backward—and a jig-saw puzzle may be started with any one piece or with many at the same time, and proceed to completion. Perhaps our principal reasons for using this approach are our beliefs: (1) that the problems of consumption are more nearly a matter of universal experience than are the problems of production; (2) that, on the whole, people are more interested in themselves as consumers than as producers; and (3) that perhaps *individuals* can do more to improve their status as consumers than as producers.

This book is written particularly for those who have an alert curiosity about political-economic-social questions, but who have not yet had opportunity to examine broadly the relationships in these fields. Our purpose throughout is to state problems as clearly as possible, and to weigh evidence for and against various proposals. We believe there is seldom one completely right solution to human affairs, with all other solutions wrong, as might be the case with a simple problem in arithmetic. Consequently our aim has been to avoid indoctrination,

to encourage thoughtful consideration, and to develop tolerance.

In this survey we undertake a description and analysis of present income and its use, involving at least the following questions:

1. Of what do income and consumption consist for a nation and for its individuals?
2. How do present production and distribution of income agree with various ideals or standards of consumption?

We approach these questions under two assumptions: first, that most people in the United States and elsewhere *want* more income than they *have* and, second, that they *could* have more than they *do* have. These assumptions are borne out both by common observation and by information from many sources. In 1934 the Brookings Institution, for example, published a study, *America's Capacity to Consume*, which emphasizes the first point. In part they conclude that:

a. Vast potential demands alike for basic commodities and for conventional necessities exist in the unfulfilled wants of the masses of the people, both rural and urban.

b. The United States has not reached a stage of economic development in which it is possible to produce more than the American people as a whole would like to consume.

c. We cannot materially shorten the working day and still produce the quantity of goods and services which the American people aspire to consume.

d. In emphasizing the need of increasing consumption, we must not forget the necessity of simultaneously expanding production.

In an earlier book (1925) in which he summarizes what he terms the "tragedy of waste," Stuart Chase emphasizes our two questions, but makes clear that the second is not easy of solution.

We have assumed all along that not enough is normally turned out by way of goods and services to keep the majority of American families above the line of economic insecurity and want. We have assumed the existence of a wide margin of poverty. . . . Half and more of our man-power counting for nothing; half and more of the yearly output of natural resources heedlessly scattered and destroyed . . . a billion slaves of energy turning useless wheels, drag-

ging unheeded loads. Motion, speed, momentum unbounded . . . to an end never clearly defined, to a goal unknown and unseen. . . . As one stands on the streets of a great city like New York, dwarfed and shadowed by mighty buildings—solid as monoliths; the roar of the traffic in one's ears; brushed by innumerable passersby each intent on the next thing which must be done; subways thundering below; the shriek of the steamer whistles from the harbor—one is overwhelmed with the audacity of trying to change or to modify this stupendous reality. Waste, friction, jam? Yes . . . and what of it? See the way that cornice fits its marble wall, the precision of lintel and arch, the woven steel nicety of the naked skyscraper, the curve and flow of motor bodies, subway trains wild as stampeded elephants, yet slowing to the inch mark on the platform. Come, you measurers of lost man-power and let us see you fit one stone upon another, rivet one girder to an upright, direct one rush hour at Times Square! We may waste, but Almighty God will bear witness we can build!

Whatever may be said concerning the complete adequacy of the studies on which these two statements are based, we doubt if anyone will seriously differ from their major conclusions. Consequently a final question must be asked:

3. What can we do, either individually or in groups, that will improve the condition of the consumer?

✓ The authors have attempted to construct answers to the first two questions by assembling and analyzing information from many sources. In discussing the third question we hope we have avoided the pitfalls of indoctrination and special pleading. It has been our purpose merely to develop some degree of understanding of the present economic system, leaving the reader free to draw his own conclusions concerning both personal and public policy.

## CHAPTER 2

# THE ESSENTIAL FEATURES OF AN ECONOMIC ORDER

### INDIVIDUAL EXCHANGE—AND GOVERNMENTS

**S**OMEHOW men have never been able to discover an effortless approach to contentment. Men have wanted things that, like diamonds, first editions, and a new dress by a Paris designer, were scarce. Through the ages, they have fought each other for treasured possessions. They have seen the greener grass on the other side of the fence and have climbed over; they have heard voices calling "something lost beyond the ranges, lost and calling to you—Go!" They have tried eagerly, boldly, but perhaps not always wisely, to go and do and have.

Through the ages many systems have been tried to aid people, individually and as groups, to gain their desires. Robinson Crusoe is represented as contriving to satisfy his wants, in so far as they were satisfied at all, through the labor of his own hands working with the forces of nature. Probably many hunters and explorers have done the same for a time. In all primitive and pioneer societies there has been a high degree of this sort of individualism.

When people get together in tribes, clans, villages, cities, or nations they find that they possess different abilities and skills. One enjoys hunting wild game and excels in it; another prefers to watch the domestic flocks; another can carve wood or shape metal with extraordinary skill. As these differences are discovered men begin to specialize and to do the things for which each is best fitted; their special products are then exchanged for those of their neighbors. This process has been carried so far that, as pointed out in the previous chapter, division of tasks has become a major characteristic of economic activities. Specialization has developed both among individuals with

different abilities and among regions with different natural advantages. Certainly the well-being of people as consumers of material goods and services has been enhanced greatly by the use of machinery in the making of which some people have specialized. The health of people has been better preserved because a few men have devoted themselves to medical research and practice. Great writing and painting and music have come almost entirely from the hands and minds of men who have done little else; so have scientific discoveries and inventions. Those who specialize in growing wheat, or baking pies, or washing dishes, or building houses, or selling groceries, or waving hair, make it unnecessary for others to perform these particular tasks. The results of individual specialized labor can then be exchanged to the mutual advantage of the traders provided the occupations or products have been chosen with due regard to the desires of those with whom trading is possible. All this is commonplace, of course, but the principle of specialization plays so important a part in economic development that it must be kept constantly in mind.

So long as men are free to do what they will, they tend to do the things that give them the greatest power of exchange. Today some men are doctors, others are engineers, others invent new gadgets, and still others teach school; and each has chosen his particular task largely because he believed when he started that it offered the most remunerative opportunity open to him. In general men are free today to choose what they will do in life in so far as they have the necessary abilities, but we shall see later that this is not entirely true. In Part III we shall discuss, also, some of the possibilities of wiser choices in both personal and geographic specialization.

Occasionally in history a single individual has appeared who was stronger, or smarter, or more ruthless than his fellows. He has seized power and has told others what to do. And so we have the occasional great dictators of history. Sometimes one group of people, rather than an individual, has obtained power over other groups, and varying degrees of slavery have resulted, as in the case of the Negroes in the South before the Civil War. Some of the individual and group dictatorships have lasted a long time. Certainly we are never entirely free

from some degree of control that has been given to certain people by law and that is not associated directly with the ability of individuals to make or do things that other people want. Nevertheless, during the past several centuries individuals have co-operated to increase their own and each other's satisfactions through an informal, spontaneous system of production and consumption, effected and regulated *in the main* by free exchange between individuals and non-political groups.

Many things have been done to facilitate the processes of specialization and exchange; transportation systems that reach to the ends of the world, communication devices that make possible conversations between individuals anywhere at any time, and long-distance transmission of power are significant examples. Among these things perhaps none is more important than the establishment, facilitation and regulation of a monetary system by means of which exchanges may be carried out. Time was when goods were bartered directly against goods; a primitive method to which there was some little return in the depths of the great depression and which is still found in some isolated communities. Later, various clumsy media of exchange were tried; large stones and salt, for example. It is a far cry from those units to paper money in convenient denominations, personal bank checks, and drafts or bills of exchange that may be sent by telegraph any distance almost instantaneously.

Modern banks are an important part of the present mechanism of exchange. They furnish the consumer a safe and convenient place to deposit his funds until he needs to use them and, then, a convenient way to transfer them to anyone else. Through their savings departments they provide opportunity for one person to place funds in safe-keeping with the bank, and then permit someone else to borrow and use these funds, payment for this use going, in part, to the depositor. Through their trust departments banks undertake to manage and conserve investment funds for individuals so that their income from property ownership in its various forms may be maintained. Of course bankers make mistakes in these matters occasionally, but many small investors find them a most useful and reliable source of advice on many financial matters.

Discussion of the many present media of exchange and their specific uses, advantages, and limitations is outside the scope of this book.<sup>1</sup> It will be pointed out in the next chapter, however, that money serves not only as a medium of exchange, but also as a measure of value; that is, it permits direct comparison of the relative worth of different goods and services to people. In this capacity, as will also be pointed out more fully, no monetary system has yet been devised that is entirely satisfactory.

The present economic order of exchange-co-operation has been as good, perhaps, as any other that has been tried. Working under it, however, people have not yet been able so to pool their resources and their efforts that everyone could satisfy all his desires; in fact, very few have ever had all they wanted. Moreover, even those who appear to be able to satisfy their every want, those who are called rich and are often the envy of the rest of us, are never entirely sure of their position. Constant vigilance, accompanied by continuous worry, is often their lot, so that they have little time or energy left to enjoy the things their money might buy. And "shirt sleeves to shirt sleeves in three generations" appears to have been the rule more often than not.

And so it behooves us as citizens and as consumers to examine the methods by which we now co-operate in order to discover wherein they are weak or inefficient. Then we may well turn our attention to the ways to improve co-operation for mutual benefit. No one can judge proposals for reform unless he understands what systems have been tried in the past, the working of the present system, and has accurate knowledge of past and current results. Moreover, no one can take full advantage of the present system for either his own or public benefit without such understanding and knowledge. The subject matter of this book as a whole is designed to aid the student in these directions.

<sup>1</sup> Readers who are interested in material on these matters are referred to: O'Leary and Patterson, *An Introduction to Money, Banking, and Corporations*, Macmillan, 1937; or Luthringer, et al., *Money, Credit, and Finance*, Little, Brown and Company, 1938.

## THE PRINCIPAL TASKS

Any system by which the activities of men are modified, regulated, or controlled must provide a more or less orderly method of arriving at certain basic decisions. Some of the fields in which these decisions must be made will first be indicated; then the problems concerning each field will be elaborated and illustrated.

The principal tasks with which any system of political economy must be concerned are:

1. The rationing of limited supplies of goods and services among those desiring them.
2. The determination of what shall be produced from the available supply of natural resources, with the aid of human effort.
3. The determination of the particular tasks to be performed by each individual.
4. The determination of the rate at which capital plant shall be built as an aid to future production and consumption; the rate, that is, at which new factories shall be built, machinery installed, land cleared for farming, oil wells drilled, and so on.

Each of these fields is of direct concern to the individual because it affects both the total income of a group of people and the share of this total that goes to each individual.

1. *Rationing of Limited Supplies.* As already suggested, the supply of many things is insufficient to satisfy the desires of all people. Consequently, things must be rationed to those who are to use them; that is, the amount of the limited supplies that each person may have must somehow be determined. Of course some things are so plentiful relative to their usefulness as to be a nuisance; weeds, for example, or mosquitoes, or noise. Such things call for no rationing and enter the economic system at all only when effort is necessary to remove or avoid them. Other things are so plentiful that no single unit of them is important, but they are never particularly in the way; no one is concerned, for example, about any particular cubic yard of air, although one may be concerned about getting air into certain places like tunnels or deep mines. Such things, also, are outside any system of political economy, but there are not many such. Most things of which we are conscious at all are limited in supply and must be rationed; this

applies to our supplies of food, clothing, housing, and so on.

There are many ways in which rationing might be carried out. Most of these ways have been tried and are still used under special circumstances. During emergencies created by war or famine, for example, dictators dole out shares of essential commodities in accordance with their own interpretation of need or desirability; whether the distribution is beneficent or not depends upon the total supply that can be distributed and upon the temper of the dictator; even democracies have their bread lines. Under very primitive social conditions, the physically strong take what they want and leave the remainder to the weak as do wolves and some other wild animals. Ancient patriarchs, absolute monarchs, medieval barons, each have had their ways of rationing through the use of a high degree of centralization of the power of decision.

During the nineteenth century and so far in the twentieth, rationing has been accomplished, in the main, by the mechanism of price. A rise in price discourages consumption, on the one hand, and encourages production, on the other. A fall in price has the opposite effects. When prices are free to move, they *tend* to adjust to that point where the available supply is just taken from the market and where the cost of producing the supply for the immediate future is just met. Price is a simple and efficient mechanism for equating demand and supply; in the process it rations the supply to those who can and will pay the price.

Early in the use of the price system, however, it was decided that this form of rationing did not always bring the desired results. For example, it came to be believed commonly in the United States many years ago that the youth of the country should receive more chance for schooling than they or their parents could or would pay for. Education at public expense, without direct cost to the individual receiving it, was the result. The postage-stamp method of payment for mail service is another illustration of departure from rationing through the mechanism of a price that is nicely adjusted to cost; if prices that covered the costs of specific services were charged, mail might never be sent to some remote places. Tariffs, subsidies, sales and excise taxes, and many other devices are employed

to modify both the kind and the amount of goods and services used by individuals. Social considerations other than the ability and willingness of the individual to pay a price set by cost, clearly enter into these cases of rationing and the number of such cases has grown to large proportions through the years.

In such cases government, local, state, or national, steps in to modify the rationing. Thus we illustrate the dual system of control, partly economic and partly political, justifying the term "Political Economy." Once the use of these two forms of control is started there is no *logical* proportionality between them. Neither is there any final *legal* limit to the extent of political control. The division becomes a matter of social expediency, or of what people believe will work the best, and it is constantly being shifted. In spite of much controversy over the form of control, the major task remains, however, and must not be overlooked; limited supplies must be rationed. The details of the rationing will depend on the character of those handling the dual controls and may be either beneficent or selfish, merciful or ruthless, stable or vacillating, co-operative or dictatorial, wise or foolish.

2. *Determination of What Shall be Produced.* Before goods can be consumed they must be produced. Before we can eat our Thanksgiving plum pudding, for example, many people will have performed many tasks; farmers will have planted and harvested wheat, currants, sugar cane; plows and stoves and steam kettles will have been fashioned; flour mills, packing plants, and iron mines will have given employment to men. Someone will have decided to do each of these things and some of them will have been decided long before our pudding appears. The decision to do them will have been based, in part, however, on the expectation that we will demand our pudding when the day arrives. In other words, anticipation of the pattern by which consumer goods and services will be rationed determines what will be produced. Since all the activities necessary to produce the pudding—or any other good—proceed somewhat continuously, it may be said that in a sense the Thanksgiving Day demand directs and pays for all the steps.

In a price-controlled society, each step in the complicated

process of production receives a portion of what people are willing to give for the finished good. If the amount is sufficient to interest the producer, human efforts and natural resources continue to be devoted to this activity; if insufficient, the producer turns his attention elsewhere and produces other things.

Perhaps an illustration will make the point clearer. The large meat packers are said to base their purchases of beef cattle on the equation of costs and probable selling prices each day. Their calculations proceed somewhat as follows:

Start with today's selling price of beef cattle	_____
Add—estimated cost of processing	_____
Subtract—estimated value of by-products	_____
Remainder—estimated cost of dressed beef	_____
Compare with—today's market price of dressed beef	_____

If the comparison shows that the market price of dressed meat is above cost, the packers purchase cattle; if not, they delay purchase until either (a) the price of beef cattle goes down or (b) the price of dressed meat goes up. Thus they permit price relationships to shape their decisions and to govern their production. If packers persist in their restriction of purchases of cattle, farmers, in turn, will reduce their cattle-feeding and -breeding programs. Similar calculations are made throughout industry wherever society is organized under a price economy.

A perfectly free operation of the price mechanism would give a quite accurate reflection of people's willingness and ability to pay for any particular use of energy and resources; it would be a highly democratic form of control. That is, under such conditions, whenever a person spent \$5.00 for a pair of shoes, for example, he would express his personal choice in favor of shoes and against any other possible use for that particular \$5.00; and the choice would carry the full authority and responsibility of a voluntary exchange of purchasing power. The person who sold the shoes and received the \$5.00 could then use it to pay his clerks, his landlord, and the manufacturer of the shoes. The latter would distribute the portion he received between the laborers in his factory and the people from whom he purchased his raw materials. Finally a part of

the \$5.00 would go back to the tanner, the meat packer and the stockman. The amount of activity at each point in this long chain of enterprises would be determined by the number of pairs of shoes that consumers elected to buy and the prices they actually paid. If too few shoes were made to meet the demand—if, that is, there were not enough for all the people who were willing and able to pay the planned price—the price could be raised, in which case some consumers would decide to use their money for other purposes. The higher price would be unusually favorable to sellers, however, and consequently more people would be attracted into this particular line of business. Thus the supply would increase to equal the demand at a price that was neither more nor less attractive to producers than those prevailing in other fields of activity.

This condition that tends to develop under freely competitive enterprise is called both an *equation of supply and demand*, and an *equilibrium point*. It is called an equation of supply and demand because the price paid by consumers just *equals* the costs incurred by producers; it is called an equilibrium because there is no immediate urge to change the employment of people or the use of natural resources.

Such a condition of equation and equilibrium is the reflection of personal choices in the market places of the world. When these choices have been freely made, and when shifts in occupations and uses of resources are unrestricted, the equation of supply and demand at an equilibrium point indicates that men and resources are being used in the most effective manner so far devised by human ingenuity. Any shift in production would result in some shortage or excess of product relative to demand; that is, people would be unwilling to pay the full costs of producing some goods, but would be willing to pay more than the full cost of producing other goods. Consequently profits and losses would appear in business which would lead, in turn, to further shifts in employment. No more completely democratic way of determining what shall be produced has ever been formulated than that of a freely competitive price system.

It must not be inferred, however, that the authors, or anyone else for that matter, believe that a freely competitive price

system is in operation anywhere in the world today. The truth is quite the contrary, and always has been; the price mechanism has been "frozen" and "set" at many points so that it is quite incapable at those points of expressing the democratic choices to which reference has just been made.

Restrictions in the freedom of competitive price movements have had two general origins, namely: (1) governmental control; and (2) private action which has resulted in some degree of monopoly, which has, that is, permitted some individuals or limited groups to prevent an increase in the supply of a particular good or service in response to the willingness of consumers to pay a price that more than covered producers' costs.

Among the important cases of governmental control may be mentioned the regulation of railroad freight rates, the bureaucratic decisions concerning the amount of new highway to be constructed, and the licensing of physicians, as illustrations of three different types of interference with individual freedom to "vote with dollars" in directing production. In the first case, the *price* of the service is set by government and it tends to be inflexible; in the second case, the *amount* of a good (highways) available for use is determined *for* consumers rather than *by* consumers and is made available without reference to a price to be paid directly by the users; in the third case the *number* and *quality* of people admitted to a profession is determined by arbitrary standards, and the price of medical service is influenced by this determination rather than by free entry into the field on a competitive basis.

Illustrations of private action that has resulted in monopolistic control over supply are equally easy to cite. Large corporations, such as the American Aluminum Company, the United States Steel Corporation, or the Standard Oil Company, have come to own or control so large a portion of the total supply of certain goods that their single decision to curtail production has had an important effect on the total supply of goods available to consumers in their respective fields. This control of supply frequently has been used to the benefit of the owners and against the interests of both consumers and employees. (See Fig. 1.) Trade unions, also, have been able to limit membership and thus to control the supply of certain

**INDICES OF PRODUCTION AND PRICE  
TWO GROUPS OF COMMODITIES  
(1923-1925=100)**

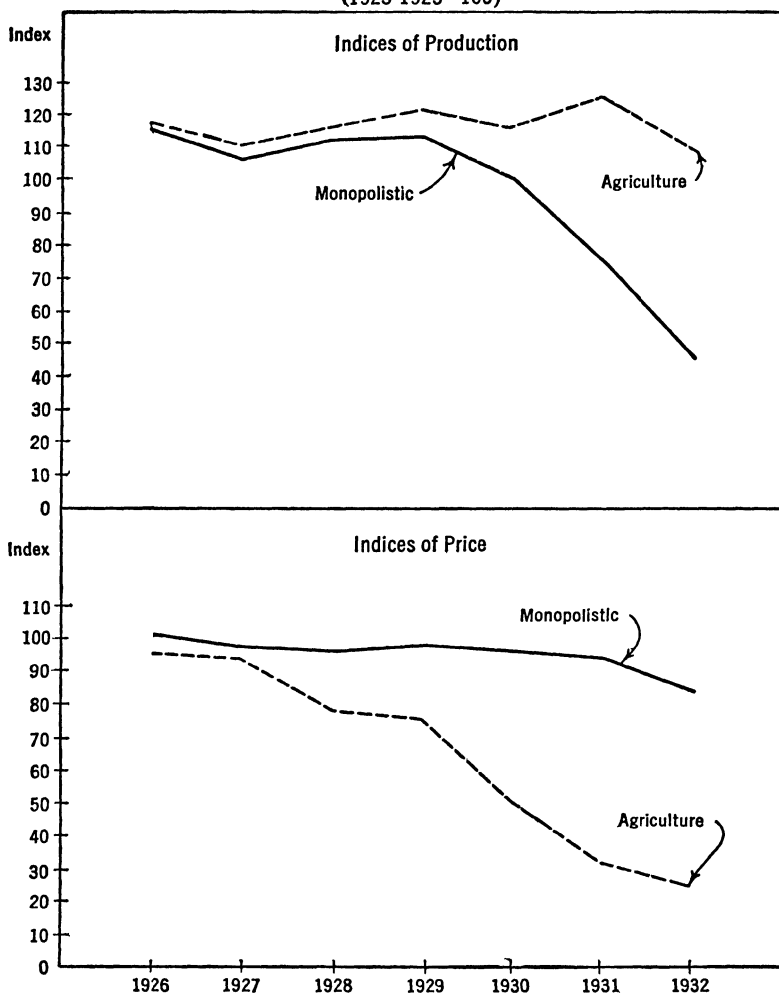


FIG. 1. When there are only a few producers in any industry it is possible for them to restrict their output so that they receive relatively high prices per unit; when there are many producers, such restriction of output is less likely to occur. During the depression years, 1930-1932, for example, the producers in several industries with small numbers of operators did curtail prices as shown above. As a result, the prices of their products remained nearly constant at a time when prices in general were falling drastically. Production of farm crops produced on many farms, in contrast, remained nearly constant, while prices fell severely. (Source: Vaile, R. S., *Overhead Costs in Agriculture*, in Carver Essays, Harvard University Press, 1935.)

types of skilled labor, such as printers, master plumbers, and electricians. As a result, the wages of members have been higher than would have been the case under freely competitive entry into the particular trades.

Patents and copyrights have given the holders legal privilege of limiting output without fear of immediate competition. This gives something of a combination of governmental and private activity in restraint of free choice and trade. Even when full governmental protection is not afforded by patent or copyright, many manufacturers have branded their goods and have attempted to convince consumers that their brands were superior to all others. In many cases sales promotion has resulted in distortion of the consumer's judgment and, thus, has led to his willingness to pay a high price for one brand, such as Camel cigarettes or Florsheim shoes, without intelligent regard to competitive opportunity.

Even though the price system does not move freely in control of economic production, decisions concerning what to produce, and when, must still be made. The introduction of other methods of deciding these matters appears to be based on the assumption that some particular individual or group should make decisions for the rest of us, either because the central authority will be wiser than democratic choice or because some one or more groups stand to benefit at the expense of others. Certainly no one imagines that we shall ever have a society regulated entirely by the price mechanism, but the balance between the different types of control will be a continuous source of debate and experiment. Some of the possibilities of increasing human well-being by specific changes in balance will be discussed in Part III.

3. *Determination of Occupations.* There are many different things to be done in the world. Particular tasks often require special abilities and carry special satisfactions to individuals or to groups. If all tasks were equally useful to others, each of us could do whichever ones we enjoyed the most or disliked the least. The results of individual activity are not all equally appreciated, however, by the rest of society. Someone might get great personal satisfaction, for example, out of throwing stones through windows, but the rest of society would

not pay the individual for that activity. Much arduous preparation and many sleepless nights are included in the life of a physician, but society thinks so much of the results of these efforts that the income of a good physician is relatively large and, consequently, a considerable number of people clamor for admission to medical schools; the cost of the preparation in money, time and energy may later discourage all but those whose interests and abilities especially fit them for this type of work.

In general, people are free to choose their occupations, within the limitations of their interests and abilities, on the basis of the expected income to be derived. There are, however, some important exceptions to this rule, namely:

a. Perhaps the first limitation on the freedom of young people to choose their occupations is the influence of parents. Frequently a boy is expected to enter the firm or profession of his father without regard to his own desires or abilities. In other cases parents want their children to enter a different line of work and perhaps a different stratum of society than their own. This has led to overemphasis on the desirability of white collar jobs and perhaps of professional and college education. In many instances it has resulted in frustration and maladjustment on the part of the individual.<sup>2</sup>

b. Even in a new and democratic country like the United States there are social groups, and it is difficult for individuals to get started in any occupation which traditionally "belongs" to some other group. This difficulty is much greater, of course, in an older country like England or India.

c. Some occupations can only be undertaken by people who possess some money or other capital resource. It is much more difficult in this country, for example, to start independent farming than it was 50 years ago because of the price of land. The same difficulty is even more pronounced in many lines of manufacturing in this era of large-scale industry. It is much easier, financially, to enter the fields of grocery retailing or shoe repairing as an owner-manager than those of automobile manufacturing or railroading. In fact, it is easier, financially, to enter almost any particular field as an employee than as

<sup>2</sup> See Williamson, E. G., *Students and Occupations*. Holt, 1937.

an employer. The professions require longer and more expensive preparation than most of the trades, while the trades require more than common labor. Since these things are so, some people with first rate ability doubtless are kept from undertaking important things, for which they could be fitted and which they would really like to do, by lack of funds. Of course people with ample funds often make a wrong choice of occupation for the other reasons suggested in these paragraphs.

d. Frequently people do not know their own abilities, nor do they have any easy way to find out what they might do well. Psychologists are making important progress in adapting tests of interests and abilities that will forecast for young people the lines for which they can expect to develop aptitudes, and while pretesting of interests and abilities is not yet perfected, yet a more general use of the present tests probably is to be recommended. It is still true, however, that many young people never do get started in the thing for which they would be best fitted, because they do not know their own abilities.

e. It is often true, also, that people misjudge the opportunities in various occupations or specific jobs. A fairly obvious and simple case might be that of the professor in a mid-western college who is offered \$1000 more salary at a large eastern university. The higher salary leads him to accept, only to find after moving that the higher cost of living in the eastern city approximately offsets the increase in salary. A more complicated case—and perhaps more typical—would be that of the girl who accepts employment in a poorly lighted tailor shop at a wage which is, perhaps, adequate for the weariness of the day, but which in no sense compensates for the eye strain and future semi-blindness that results. Certainly the degree of freedom to choose one's occupation that is available here and now does not guarantee wisdom of choice from the standpoint either of the individual or of national economy. Some of the chances for wiser choices are discussed in Part III.

4. *Determination of the Rate of Capital Accumulation.* Perhaps the outstanding characteristic of twentieth-century life is the large accumulation of capital goods of all sorts—factories, stores, railroads, telephone and other communication systems, motorized farms, highways, public buildings. All

these things are designed to make production both easier and greater in the future. These accumulations were accomplished only through some temporary reduction in immediate consumption, for it is not possible to produce as much for immediate consumption when a part of the total energy available is devoted to the making of capital goods. Russia has found this strikingly and, perhaps, bitterly true ever since she started her rapid development of industrial plants. In the long run the ability of Russia to produce for immediate consumption may be greatly increased by the enlargement of capital plants, but during the construction period the people have gone without many things they might have enjoyed in order that they might build power dams and airplanes or tractor factories.

Our purpose here is not to discuss the wisdom or the hardship associated with the Russian decision to put tremendous effort into the construction of capital plants, but rather to point out that some decision concerning the rate of capital development must be made in some manner by every social group. Under private capitalism the decisions have been left to individuals, and personal savings have been invested on the expectation that consumers would pay enough for the goods made in the plants to repay their original cost; otherwise the plants would not have been built.<sup>3</sup> In Russia the decisions have been made by the central soviet on the expectation that the final result will be good for Russia. But in any case the decisions must be made.

These four basic tasks are the essential parts of any economic order. Later on in this book we shall examine some of the results, good and bad, that have accompanied recent methods of making the necessary decisions in these four fields. Finally we shall consider some of the many suggestions that are current for other methods of directing economic activities to see how they might affect total consumption and the lot of the individual consumer.

<sup>3</sup> Perhaps it should be pointed out, however, that after a corporation has been organized and has attained considerable size, it often is the *management* rather than the full group of *investors* that determines the rate of expansion or contraction of capital in a single plant.

## THE BASIS FOR DECISION

Individuals in this country are free to spend whatever income they receive, with some exceptions that will be noted later, in almost any way they like; they may choose among the wares of all the merchants in the country, they may engage in any form of recreation, or they may invest in any enterprise designed to yield income in the future. The array of choices so made becomes the evidence on which the decisions just discussed are founded.

To be sure, governmental agencies take some of our income through the medium of taxation—about 20 percent on the average in this country at present—and expend it in accordance with a centrally determined program, but aside from this, individual choices dominate the field of consumption. In general, however, each individual does those things which, within the limitations of his income and his tastes, he believes will give him the greatest satisfaction and permit him most completely to avoid pain and suffering. We wear leather shoes rather than wooden ones because we believe them more comfortable and better looking; we spend more money in this country on cigarettes than on symphony concerts because fifty cents spent for cigarettes gives enjoyment to more of us than does fifty cents spent for symphony tickets. And so with all our choices; in each one we try to get as much satisfaction out of any one dollar as out of any other. Of course it often is difficult to make direct comparisons between the satisfactions gained from two different acts of consumption, but the continued repetition of purchases by many people becomes realistic testimony of personal judgments in the mass.

Not only do individuals want to maximize their personal satisfactions, but groups and nations likewise strive to gain the largest possible group or national consumption. Whether the sum of “best” uses of income by individuals gives the “best” use for an entire country is a moot question that need not detain us long at present. We may repeat, however, that as a nation we decided long ago that everyone should consume certain things regardless of their ability or willingness to pay the cost. As already pointed out, it was decided, for example, that

all the youth of the country should have an opportunity for education regardless of the financial status of individual families, in the belief that a high degree of literacy was a desirable social end. Moreover, adequate supplies of pure water and the sanitary disposal of sewage are considered so clearly in the interest of general welfare that they frequently are furnished by communities without reference to individual ability to pay. These cases are illustrative of the important program of "enforced consumption" that is undertaken by representative governments and that is paid for through our system of tax collections without allowing chance for personal choice in the matter. The existence of such items is evidence that the group has decided that greater good will come to the commonwealth if part of the pattern of consumption is centrally planned and administered.

In any program of socially planned consumption, questions concerning both the *willingness* and the *ability* of the individual to pay are involved. At most points in our present system of taxation and governmental expenditure, people with large financial ability are expected to contribute more liberally than those with less ability, regardless of the personal use made of the particular governmental service. This arrangement is based on the belief that the welfare of the community as a whole is important both to the earning power and to the enjoyment of every citizen in it. Generally speaking, this position is accepted by those who are fortunate enough to have high purchasing power, but there are variable limits beyond which they will not tolerate taxation in the interests of others; one of the important problems of political economy is the wise adjustment of taxes to those limits.

Another reason, or justification, for socially planned consumption, effected through taxation and public expenditure, is often advanced. Individual incomes do differ markedly, and there is a feeling that people with very large incomes do not get as much satisfaction out of any particular dollar's worth of consumption as do individuals with small incomes. The corollary is that if some dollars are taken away from those with large incomes and given to those with small, the total well-being of the nation will be increased; under this reasoning it

would reach a maximum only when all incomes were equal. This is not the place to attempt a justification of inequality of incomes, nor should we ever undertake to justify in its entirety the present distribution, but we should point out that just as there are differences of ability in other respects, so there doubtless are differences in ability to gain satisfactions from consumption. Probably ability to gain title to a share in the world's production is not precisely correlated with ability to appreciate the fine things of life in consumption; that is, a man who has made himself rich through great ability and untiring effort may not appreciate the things his money can buy such as travel, books, music, and art as much as might some other who has not the ability to earn the money for these things. With at least equal assurance we can say, however, that there is fairly strong evidence that the ability to earn and the ability to appreciate do go together. To the extent that this is true, unequal distribution of income available for consumption will tend to maximize the well-being of a nation. It will readily be admitted by all students of the matter that, as yet, there is no direct and scientific measurement of the well-being of a nation, but perhaps we may go so far as to say that, in general, when society gives to its most talented people relatively large rewards in terms of income, freedom to experiment and to use their imaginations, comfort and recreation to keep them fresh and strong, these able people will lead the way to a better society, in which there will be more comfortable shoes, safer highways, finer music, more adequate medical care, and a better five-cent cigar.

Exact measurement is one of the basic requirements of any science, but in order for measurement to be useful at least three things are necessary:

- a. Definition of the characteristic to be measured.
- b. A unit of measurement.
- c. A standard of comparison.

The social sciences are full of difficulties of measurement. Too frequently there is lack of definition of the characteristic to be measured; more frequently there is lack of satisfactory units of measurement; most frequently, perhaps, there is lack

of adequate standards of previous performance for purposes of comparison.

It is said that in Persia distances between towns often are measured by the time required to go on horseback from one to the other. This would be a satisfactory measurement provided time of travel for approaching horseman, friend or foe, is the important characteristic to be described and counted; it might not do at all for the purpose of estimating the cubic yards of concrete required to surface a road, or the distance in terms of airplane flight. Or you may have heard of the wartime rabbit pie made, so it was said, half of rabbit and half of horse meat—that is, at least, one rabbit to one horse. The single animal as a unit might be all right for some purposes, but it hardly would be considered accurate in describing a meat pie. Nor is it possible to know whether the athlete has made a good jump unless one knows how far other men have jumped.

Similarly in our problem of measuring the well-being of individuals and nations. We have wide differences of opinion concerning the relative values of specific consumer goods and we are slow in developing precise methods of comparison. There are at least two general reasons for this situation, namely:

1. We lack any clear understanding of what reactions or satisfactions different people really want. Do we want a nervous thrill or serene complacency; is contract bridge a fine matching of wits or a stupid bore; is Roquefort cheese a delicacy or something rotten; is comfort or appearance to be rated highest in the selection of a pair of shoes?

2. We lack specific knowledge of the relative quality of different goods by which they can yield the services we have agreed upon. Is oak a better wood than walnut; is 100% wool better than 75% or 50% wool mixed with cotton; is a Ford better than a Plymouth, or a Camel than a Chesterfield?

At present there is neither right nor wrong answer to these and countless similar questions; they are matters of individual judgment. When individual choice prevails each person generally can answer them in his own way, while any other method of decision leads to some sort of compromise based on “average” or “authoritarian” opinion.

People are looking constantly for better ways to make all the

decisions that are necessary in a complex society. This is no simple task. To this end it is important that each of us know as much as possible about our social institutions, how they work, and what they have accomplished for us. Only when equipped with that knowledge are we in a position to consider the possibility of improvements.

#### SUMMARY

In this chapter attention has been called to the fact that, in present-day society, there are two forms of control of economic activity. In the first place, there is the inner urge that leads each person to do certain very specific things. These things may differ widely among people and even for the same person at different times. The weather, last night's party, the state of one's bank account, a good book or a sermon or a school lecture, may have an important influence on individual action. In the second place, there are customs, regulations, laws—and policemen to enforce them—that direct some parts of economic behavior. The exact form of legal control and the balance between it and personal freedom to do as one pleases are constantly changing in some degree; but the two forms of control are always present.

Four principal fields in which decisions must be made, either by free personal choice or by governmental edict, have been outlined. These are (1) what shall be done and made; (2) who shall do and make each specific thing; (3) who shall have and use the things that are made; (4) what machinery and other capital shall be built for future use.

In the search for better methods of making these important decisions it is necessary that we try to measure the well-being of individuals and of groups of people. To do this it is necessary that we do certain things, including: (1) define the characteristics we want to measure; (2) agree upon units of measurement; (3) establish standards of comparison. These things have been done only imperfectly as yet in economic science. In following chapters the effort is made to measure as accurately as possible the progress that has been made in the production and use of income for personal consumption.

## CHAPTER 3

### SOME BASIC CONCEPTS WITH WHICH ECONOMICS IS CONCERNED

**I**F YOU would talk with me, define your terms." Perhaps under some conditions "a rose by any other name would smell as sweet," but if, while talking about roses, one insists on calling them skunk cabbages some of one's listeners are sure to form a wrong impression of their fragrance. In order to minimize such misunderstandings it is desirable that we spend some time at the outset on definitions and the statement of a few basic concepts.

In any economy regulated by individual exchange-co-operation, *markets* and *marketing* must play an important part; the *income* of the individual limits his share in the total of economic goods and services; the *rights* of individuals concerning ownership and freedom to act contribute to his well-being. *Price* and *group action* (political or corporate) are the dual controls of economic activities. No study of the consumer and his problems can proceed far without use of these terms and, unfortunately, each of them is used loosely both by economists and others to mean quite different things at different times. It is essential, therefore, that we set out these differences as clearly as possible and that we be constantly on watch to see which meaning is intended in each separate context.

1. *Markets and Marketing.* Nowadays nearly everything from which consumers draw satisfactions is sold at least once before it is consumed. Some things are sold many times over, with more or less important changes in form each time. (See Fig. 2.) One may purchase a pair of shoes today from a retailer, but sometime earlier these shoes were sold by a wholesaler, or perhaps the manufacturer, to the retailer. Still earlier, leather was sold by a tanner to the shoe manufacturer, hides were sold by a packer to the tanner, cattle were sold by a

farmer to the packer. A similar list of transactions takes place with every commodity; with some the series is more complicated than the one just outlined, while with others it is more direct. Perhaps it will be worth while to take a particular consumer good—bread, for example—and “revolve the consumer’s dollar backward” to see just who does get its various parts.

PHYSICAL MOVEMENTS OF GOODS

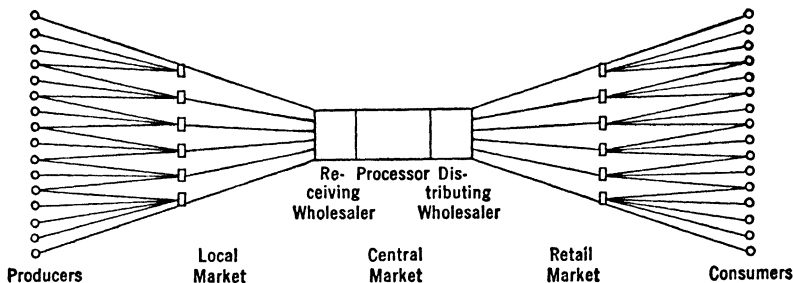


FIG. 2. The above generalized diagram illustrates two typical movements; the *concentration* of wheat, first in the local, then in the terminal elevators and mills; and also the *dispersion* of the processed commodity, flour, to a few wholesalers, to a great many retailers, and finally to a vast group of consumers. In the converging movement, the raw materials usually concentrate first in “local” or “producers’” markets and finally in “central” or “wholesale” markets. In the dispersion movement, the goods may successively travel through a wholesale and a retail, or consumers’, market. Any commodity on its way from producer to consumer may, of course, travel any one of a multitude of courses that are considerably more complex than the above. (Source: Vaile and Slagsvold, *Market Organization*, p. 56, Ronald Press, 1930.)

Three hundred pounds of baker’s bread are commonly made from one barrel of flour which, in turn, is made from 4.6 bushels of wheat. In a recent year, bread was selling at retail for 10 cents a pound, or \$30 for 300 pounds. Data are available on the average cost of the processes involved in changing farmer’s wheat into consumer’s bread, to permit the division of this \$30 in various ways with reasonable accuracy. In Table 1 the points of sale are indicated, together with the total amount retained at each stage in the flow of wheat from the farmer through the various processes until it appears as bread on the consumer’s table. (These data are averages for the conventional channels of sale to the consumer by the retail grocery store.)

TABLE 1

## TOTAL SALES AND MARGINS ON 300 POUND LOAVES OF BREAD FROM FARMER TO CONSUMER

	<i>Total Sales</i>	<i>Gross * Margin</i>	
Retailer .....	\$30.00	\$ 6.00	(\$2.98 spent
Baker .....	24.00	14.60	for ingredients
Flour mill .....	6.42	2.09	other than flour.)
Elevator .....	4.31	.86	
Farmer for wheat ...	3.45	....	

\* The difference between the price paid for the raw materials or goods at any one stage in the processing, and the price at which the article is sold by the same processor; sometimes called "value added" by the process, or "gross profit." This sum is used for such things as wages, rent, cost of power, and net return to the proprietor.

This example suggests the necessity for selling contacts at many points in the chain of activities that finally result in one's possession of a loaf of bread. The data are not arranged to show the total cost of market operations, but they do show that retailing alone absorbs 20 percent of the consumer's dollar. The cost of selling at each of the other points adds materially to this percentage. Other illustrations of "revolving the consumer's dollar backward" are shown in Fig. 3.

The term "market" is used in connection with this complicated process with several meanings. (a) Sometimes it is used to designate the place where the sale is made—a market house or market place. Sometimes it is used in reference to the area in which a particular supply generally is sold, such as the urban market for the whole milk furnished by the Twin Cities Milk Producers' Association. Both of these uses involve a geographic meaning of the word.

b. The particular organization that carries out the marketing process may be called a market. We say that a market is highly organized or relatively unorganized, depending upon the degree of regulation and regularity connected with transactions in it. As already pointed out, goods may be sold many times before they reach the ultimate consumer (see especially Fig. 2). At each of these points of sales there is a salesman, a store, a broker's office, or some agency that makes it possible for the buyer and the seller to get together and transact their

business. In some cases buyers and sellers may meet quite casually and conduct their business in whatever way pleases

ANALYSIS OF THE CONSUMER'S DOLLAR

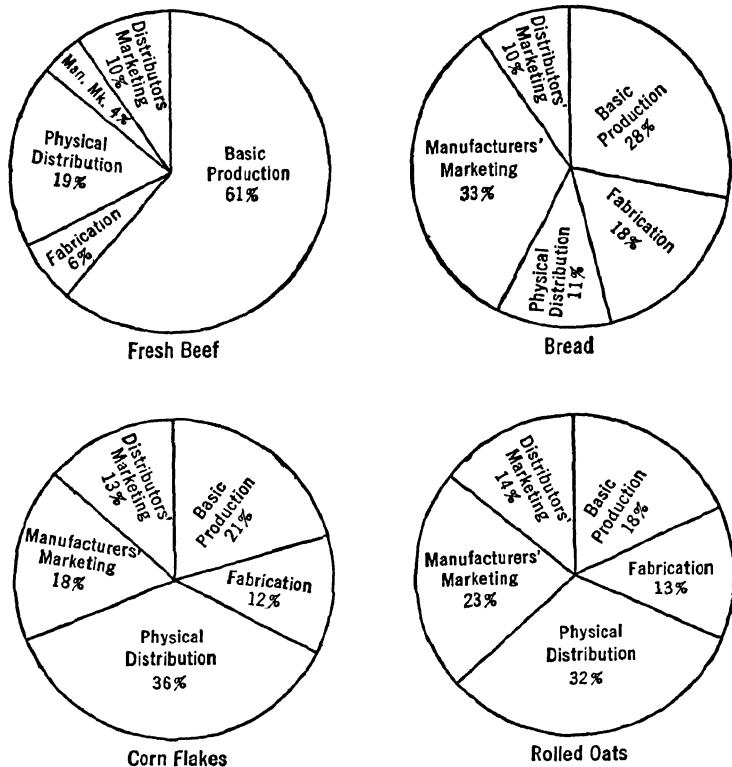


FIG. 3. Marketing costs are an important part of the consumers' dollar for most consumer goods. In three of the four food commodities analyzed in the figure above, more than half of the price goes to those who perform the acts of physical distribution and of sale, leaving in two cases only one-third of the price for those engaged in production of the raw materials and fabrication of them into the finished goods. The relatively low cost of marketing beef is exceptional among consumer goods. (Source: Borsodi, Ralph, *The Distribution Age*, p. 56, Appleton, 1927.)

them. In other cases like the grain exchanges, central cattle markets, and wholesale fruit auctions, there are elaborate formal rules that govern the conditions of trading.

The sale of different commodities is very differently conducted in another sense. There are cases in which business is

integrated; that is, the same people or closely affiliated corporations conduct several business processes, thus avoiding the necessity of any sale between the various steps. For example, the Ford Company owns some iron mines, steel plants, glass factories, and other industries supplying part of the raw materials out of which they manufacture Ford cars. If these factories and plants were owned by unrelated corporations, as is often the case, the Ford Company would need to purchase its raw materials, but under its existing form of organization no sale or purchase is necessary. (See Figs. 4 and 5.)

The differences in the degree of integration or separateness of ownership of the various stages of production call for a definition of the term *market demand*. It will be clear to anyone who considers the matter that there is a market demand, in the sense of someone ready to buy, for such materials as raw cotton, iron ore, wheat, crude rubber, tobacco leaf, and similar raw materials. This market demand for raw materials is called *derived demand*; that is, it exists only because it is expected that final consumers will want the products that can be made from these raw materials. The market price of the raw materials is a reflection of that part of the consumer price for the finished good which is not absorbed by the costs of processing; this market price or value may be imputed even to those materials that are not actually sold, but are used in integrated industries.

Because of this "round-aboutness" of production, it is useful to clear thinking to divide economic goods into two general groups, namely, consumer goods and producer goods. Consumer goods are those that result directly in satisfaction or enjoyment on the part of the user. There are, of course, consumer services as well as goods. Shoes and other clothing, prepared foods, houses, automobiles, movies, permanent waves, books, and cigarettes are all illustrations of consumer goods and services. Producer goods fall into two major classes which should be distinguished at this point, namely, raw materials and capital plants. The finished product of one non-integrated industry may become the raw material of another industry. Wheat, for example, is the finished product of a farm but is the raw material of a flour mill. Even flour is a

# ANACONDA COPPER MINING COMPANY AND SUBSIDIARIES

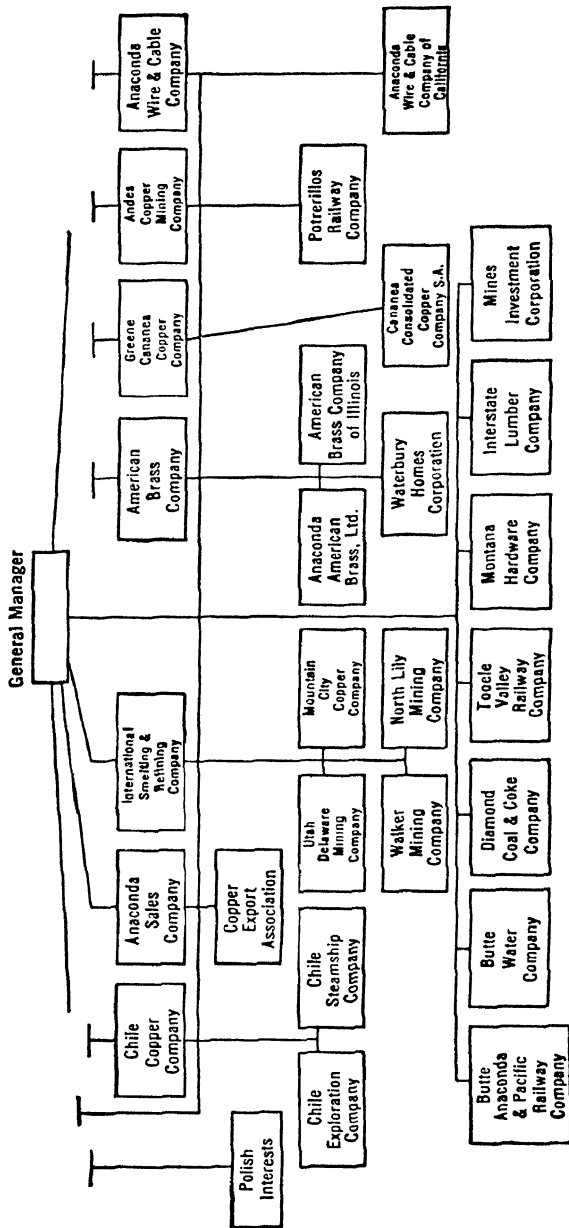
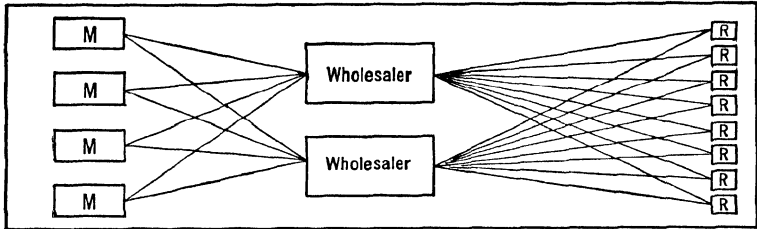


FIG. 4. The organization of the Anaconda Copper Mining Company and its subsidiaries illustrates the types and the degree of integration that are common in many large industries. Many different processes are linked together under one management. For example, mining of copper ore, smelting, refining, production of brass, wire, and other semi-finished goods, coal mines, railroads, steamship companies, export sales organization, are knit together for the common purpose of converting deposits of crude copper into income. (Source: *Fortune Magazine*, January, 1937, p. 76.)

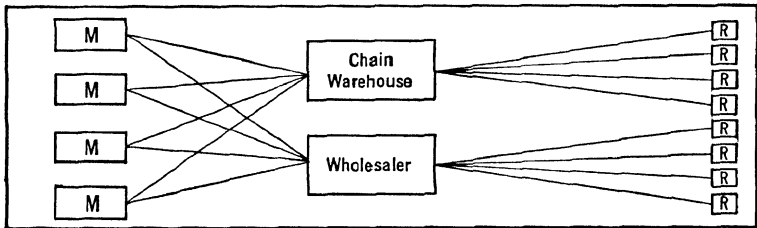
raw material for the baking industry, both commercial and household. Raw materials are clearly connected with the finished consumer good and the process of fabrication or refining is obvious to anyone who observes an industry. It may be pointed out again, moreover, that all of the stages by which a raw material is transferred into a consumer good may be under

### MARKETING CHANNELS FOR CONSUMER GOODS

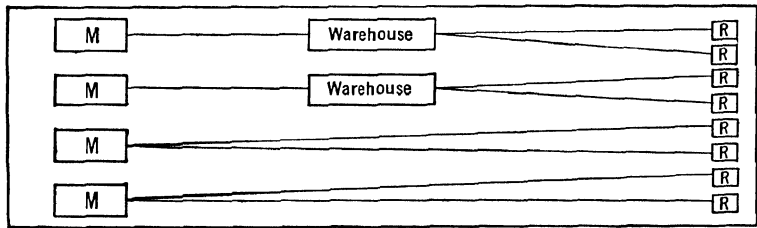
#### a-Conventional



#### b-Chain Store and Voluntary Chain



#### c-Manufacturer's Chain



M=Manufacturer

R=Retailer

FIG. 5. There is a tendency for marketing channels to become more direct, and this is accomplished by a form of integration. It used to be that competing manufacturers sold to several competing wholesalers each of whom, in turn, attempted to sell to many competing retailers. (Part a of the figure.) Chains of retail outlets, variously organized as shown in parts b and c have lessened the need for competition at the stages intermediate between the manufacturer and the retailer, but have not lessened the competition among retailers for the trade of individual consumers. (Source: Vaile and Slagsvold, *Market Organization*, p. 52, Ronald Press, 1930.)

one ownership or several, and in the latter case numerous market organizations are required. Capital plants are a somewhat different type of producer goods, including factory buildings and machinery, farms and the tools for running them, and similar things. These plants are aids in converting raw materials into finished goods, but they never enter directly into the finished product in the way that the raw materials do. They are aids in the division of labor because they make it possible for men to use power devices and precision tools. The particular types of market organization or agencies that are required or established to carry out the necessary changes in ownership of materials as they pass from their original form to the final user or consumer is referred to as the structure of the market.

c. Most basically the term "market" refers to the complex set of forces that results in a certain price being paid by consumers for a particular bill of goods. These forces include all the items that make up the cost of the goods; such things, for example, as rent, wages, and payment for wear and tear on machinery in factories, the necessary remuneration to the farmer or miner for raw materials, the transportation charges to move both raw materials and finished goods from where they are produced to where they will be consumed, and so on. These costs set a limit below which prices will not fall without a resulting reduction in supply. The market forces include also the various elements of demand. These appear to be of two general sorts, psychological and economic. The psychology of demand is concerned with the desires, whims, and vagaries of consumers. It includes insistence upon style in dresses, speed in automobiles, color in apples, as well as more strictly utilitarian characteristics. Psychology is an important factor in the demand for consumer goods, with very little direct effect upon the derived demand for producer goods. The economics of demand is concerned with the purchasing power of particular individuals and groups, which is, in turn, closely connected with income. The desires of individuals and their purchasing power set an upper limit above which price will never go. Detailed discussion of the interplay of these various factors in determining the pattern of consumption will be found in Chapter 9.

2. *Income.* As consumers we are greatly interested in our income, for the size of one's income limits the extent of one's consumption. And yet income is not easy to define. Income may be considered, for some purposes, as the total of all money and credits received. This does not serve our present purpose well, for one's gross income or receipts may be very large while the part available to spend on consumption is small. A retail grocer may have sales of \$75,000 a year, for example, but when he has paid for his stocks of merchandise, his clerk hire, his fuel and light bills, and the other necessary expenses of his business, only a small part of his \$75,000 will be left to him; perhaps not over \$1500, or \$2500 if he has been an unusually good manager. Even of this amount some may have to go for taxes, or payment of previous loans, or some purpose other than his current personal and family consumption.

The federal government and many of the states have undertaken to establish legal definitions of personal income as a basis for levying taxes. They have had great difficulty in deciding what should be counted and what not. One of the troubles has been that individuals often obtain ownership in land, or capital plant, or inventories of goods at some appraised value as part of their apparent income. Then when they dispose of their ownership they may get either more or less money for it than they expected and the question arises, "Is the gain or loss from expected value to be counted in current income?" This is but one of many complicated questions that have bothered income tax departments for many years.

One thing we can say with assurance concerning income—it is a *flow* of value and can be counted only in relation to a period of time; wealth, in contrast, is a *store* of value, existing and possessed by someone at a moment of time. In other words, what we *receive* in a particular year or other fiscal period is income, while what we *possess* at any moment is wealth. If one receives a wage for services, a price for the sale of a city lot, and inheritance of a farm or a factory, he has in this sense received an income. If he still possesses the farm or factory the next year, it is not income to him, for there has been no further flow of its ownership; it is, however, now part of his store of wealth.

Some authorities would go still further in limiting the concept of income. These would claim that people do not really receive income until they actually obtain goods and services to consume. In this sense one's inheritance of a farm is not income to him, but an increase in his ownership of wealth. One could convert this into income by selling the farm—or by borrowing on it—and using the money for a vacation trip or other form of consumption. Perhaps this is the most accurate concept of income, but it is not the most commonly used.

For our purposes it is not necessary that we choose one *best* definition, but that we understand the differences among the several definitions and that we take care to determine the sense in which the term is used whenever we see or hear it. Perhaps it will be helpful if we think of *net intake or receipts available for consumption as income in the sense of purchasing power*, and of *actual consumption as realized income*.

When we examine this last concept of income we see that, by its terms, the use of consumer goods and services constitutes the total of income. The building of factories is a necessary step towards the production of future income, but it is not income. In the process of building, however, someone is willing to pay money wages to carpenters, bricklayers, and others in anticipation of subsequent business earnings. These wages are, in the main, promptly converted into income in the form of groceries, clothing, and the other goods and services consumed by the wage earners and their families. Durable consumer goods, such as houses and automobiles, present another complication. Strictly speaking, only their depreciation is realized income, although frequently their purchase for individual use is so considered. If a house burns down or is otherwise destroyed immediately after completion, no real income was produced in its building.

Income is generally reported in terms of money. This is convenient because nearly all business transactions are completed by money payments and because money is a convenient common denominator with which to obtain the sum of satisfactions derived respectively from a new pair of shoes, a month's supply of milk, a week end at a lake resort, a carton of cigarettes, a symphony concert, and any quantity of other things.

Money is, however, inadequate and inexact as a measure of income, for at least three reasons. First, there are many satisfactions that we receive without any monetary payment. There are the glory of the sunrise and similar beauties of nature that come to society without prices. Then, too, the flowers in a neighbor's garden, a borrowed book, an evening spent with friends, give us delight. More nearly in the economic field, there is the great contribution of the housewife to herself, her husband and her family which generally does not enter into monetary calculations of income; the tax authorities are agreed that this particular form of income is not part of the tax base. Other cases, however, are not quite so clear. If, for example, a college gives free tuition to the children of a professor on its faculty, is this part of his family income? Certainly a flow of satisfactions has been received just as surely as though the children had been sent to some other college where tuition was required. But the money wages of the professor remain the same whether he sends his children to the local college or to another, or indeed, whether he has no children at all. Money income generally fails to count special benefits or perquisites that do not involve cash transactions.

Second, it frequently is difficult to distinguish "consumption goods" from "production goods." The illustration of money expended on the building of a factory seems a clear case of production goods, while the purchase of a dinner in a restaurant is an equally clear case of consumption good; if all cases were as easily classified, a measure of monetary expenditures devoted to consumption income would be simple. When a carpenter pays for a street car ride between his house and his work, on the other hand, the expenditure seems logically a necessary "cost of doing business" and, thus, not income; when the same man takes his family by street car to the park for a picnic the carfares are as much consumption expenditures as the nickels for lemonade or peanuts for the elephants. No one would bother in practice, however, to keep separate count of such expenditures when made for the two purposes.

The third difficulty with money as a measure of income lies in the fact that the value of the dollar is not constant. By this we mean that a given number of dollars will not always

buy the same bill of goods. (See Figs. 6-9.) The converse of this is that the general level of prices is constantly changing. This fact makes difficult any direct comparison of monetary income at different moments of time. We cannot tell whether we live better or not so well as our grandfathers just by comparing our dollar expenditures with theirs.

A good many years ago a monk, who had the responsibility for making a fixed money revenue cover the expenses of his

AVERAGE MONEY WAGES PER HOUR OF EMPLOYED WAGE EARNERS  
UNITED STATES, 1929 AND 1933

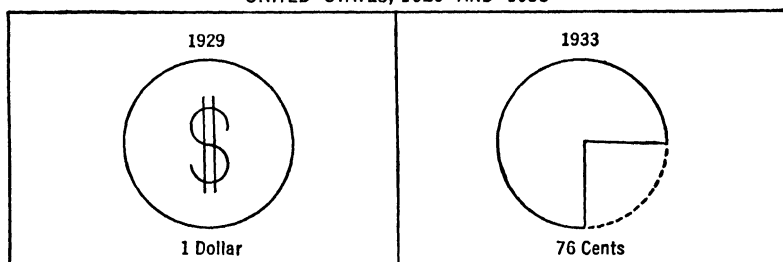


FIG. 6. In the depression year of 1933 the hourly wages of people employed in American industries averaged only 76 percent as high as in 1929. That is, any person who worked the same number of hours in 1933 as in 1929 received only 76 percent as much in money wages. It does not follow, however, that his purchasing power income was reduced a like amount.

monastery, undertook to work out a method of estimating the year-to-year changes in the value of money. He did this by noting the changes in the prices of each of the commodities and services which he had to buy and then averaging these changes. In making this average, the change in each item was given a weight equal to the ratio of the expenditure on that item to the total budget. The resulting figure we call an index of prices and it is generally reported in relative terms; some one year or period being arbitrarily taken as 100 and other years shown as percentages of that figure.

Since this method of figuring the change in the value or purchasing power of money was first thought of, many index numbers have been calculated. In Fig. 10 there is shown graphically one such index of wholesale prices in the United States for a long period of time. In recent years the Bureau of Labor Statistics has calculated and published several

**"REAL EARNINGS" OF EMPLOYED WAGE EARNERS  
UNITED STATES, 1929 AND 1933**

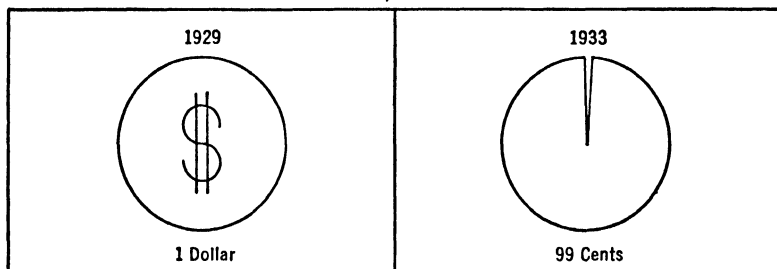


FIG. 7. When the money wages shown in Fig. 6 are adjusted for the changes in cost of living, it is found that the 76 cents received in 1933 would purchase nearly the same bill of goods as did the \$1.00 received in 1929. The calculation is as follows:

$$\frac{\text{money wages}}{\text{cost-of-living index}} \times 100 = \text{real wages; or the relative amount of goods and services that can be bought with the money income.}$$

For 1933 the figures are  $\frac{76}{77} \times 100 = 99$ , the relative real wage. (The cost-of-living index in 1933 stood at 77 relative to 100 in 1929.)

**COMPARISON OF "REAL EARNINGS" OF WAGE EARNERS AS A GROUP  
UNITED STATES, 1929 AND 1933**

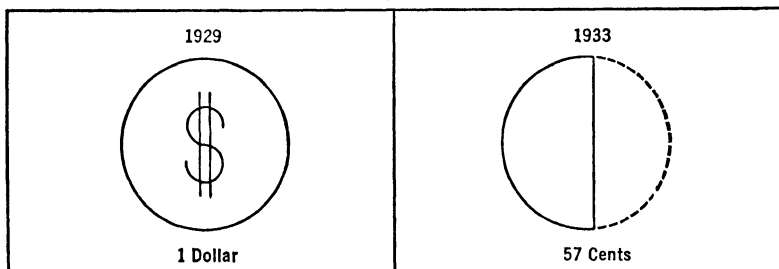


FIG. 8. Total real wages of all wage earners in the United States did not fare so well in 1933 as suggested by Fig. 7. This is due to two factors, namely: (1) a smaller number of people worked in 1933 than in 1929, and (2) those who were employed at all, worked a smaller number of hours. When allowance is made for these changes, it is found that the real wages of all people employed in 90 leading manufacturing industries were only 57 percent as high in 1933 as in 1929.

**PURCHASING POWER OF THE WAGE EARNER'S DOLLAR  
UNITED STATES, 1929 AND 1933**

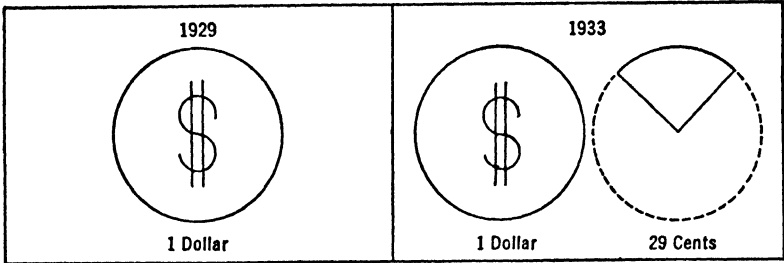


FIG. 9. Any wage earner whose money income in 1933 was the same as in 1929 would have had a purchasing power or real income equal to \$1.29 at 1929 prices of goods and services. That this fortunate result did not occur for most wage earners is indicated by the data presented in Figs. 7 and 8.

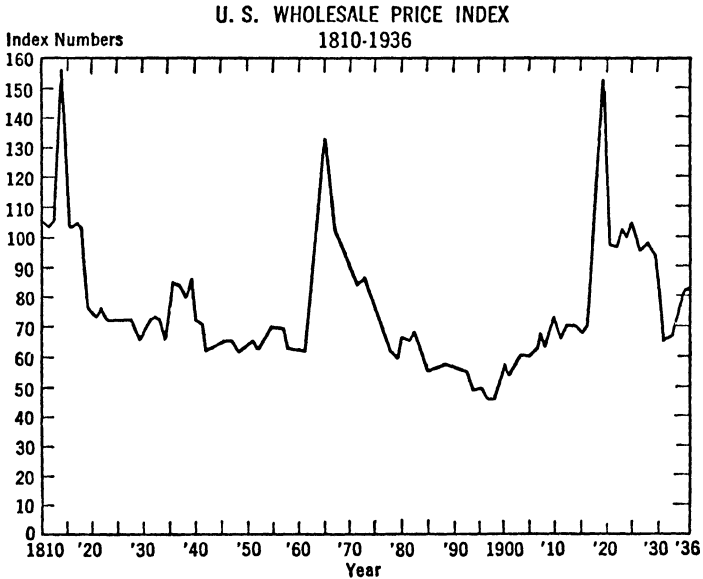


FIG. 10. This graph shows changes in the level of prices, reported by weeks, months and years, in a representative list of important commodities. The figures are shown as percentages of the average prices prevailing during the year 1926, which is called the base year and is represented by 100 percent. Note that the three violent price increases occurred during three major wars. (Source: *Monthly Labor Review*, September, 1935.)

monthly indexes of prices. The Survey of Current Business published monthly by the Department of Commerce contains the leading price and purchasing power indexes for the United States and some for foreign countries. Illustrations of some typical price movements that must be combined to form an index number of prices are shown in Figs. 11, 12, and 13.

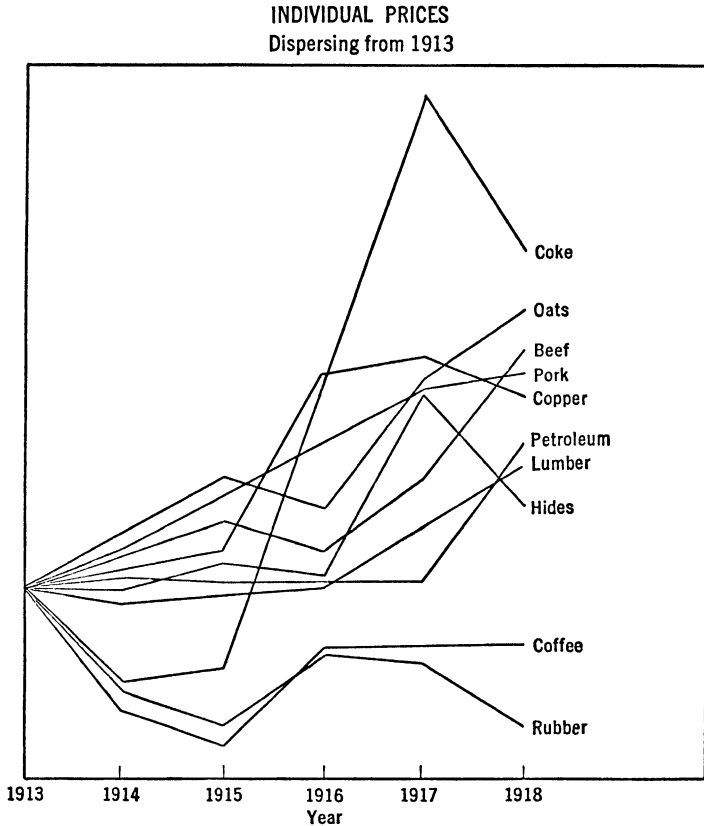


FIG. 11. This chart shows the wide dispersion of price movements of ten commodities between 1913 and 1918. In the figure the price of each commodity is shown as 100 in 1913; the prices in the subsequent years are then shown at their existing level relative to that position.

If you will imagine the movements of price in this small group of commodities multiplied by the number of commodities on the markets of the world you will have a picture of the extreme complexity of price movements which must be averaged to form a price index. (Source: Fisher, Irving, *The Making of Index Numbers*, p. 12, Houghton Mifflin, 1922.)

While there have been some refinements in the technique of weighting and averaging individual items in the making of index numbers, these need not detain us here. We are concerned, rather, with the uses to which the indices may be put, with special emphasis on the need for care in the selection of the best index for a specific purpose.

One of the important uses of index numbers has already been

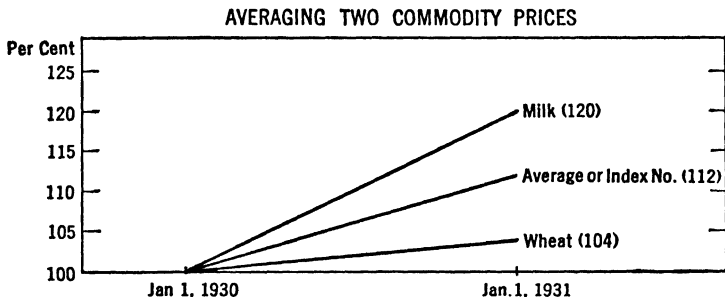


FIG. 12. The making of an index number is illustrated in simplified form by this figure. Two commodity prices only are used, although in any actual index a much larger number probably would be used. If the price of wheat were \$1.00 per bushel on Jan. 1, 1930, and \$1.04 on Jan. 1, 1931, it would have risen 4 percent. Similarly, if the price of milk were 10 cents a quart on the first date and 12 cents a quart on the second date, it would have risen 20 percent. Expressed in terms of 1930 prices as 100, the 1931 prices would be 104 and 120 respectively. The simple index number would then be an average of these two relatives; that is  $\frac{104 + 120}{2} = 112$  relative to 100 in 1930.

mentioned, namely, estimating the extent to which a money income will permit the maintenance of a customary standard of living. An index constructed for this purpose is called a cost-of-living index. It must be constructed to reflect the changes in the prices of all the items that are included in the accepted standard of living, and each item must be weighted in accordance with its importance in the standard. Many of the items that enter into standards of living, and their relative importance, are discussed in Chapter 9. Wage adjustments are sometimes made in accordance with changes in the cost-of-living index for wage earners' families.

Another use to which index numbers are put is the comparison of the power of one group of commodities to exchange for

SUMMARY OF YEARLY CHANGES IN WHOLESALE PRICES  
UNITED STATES, 1891-1918

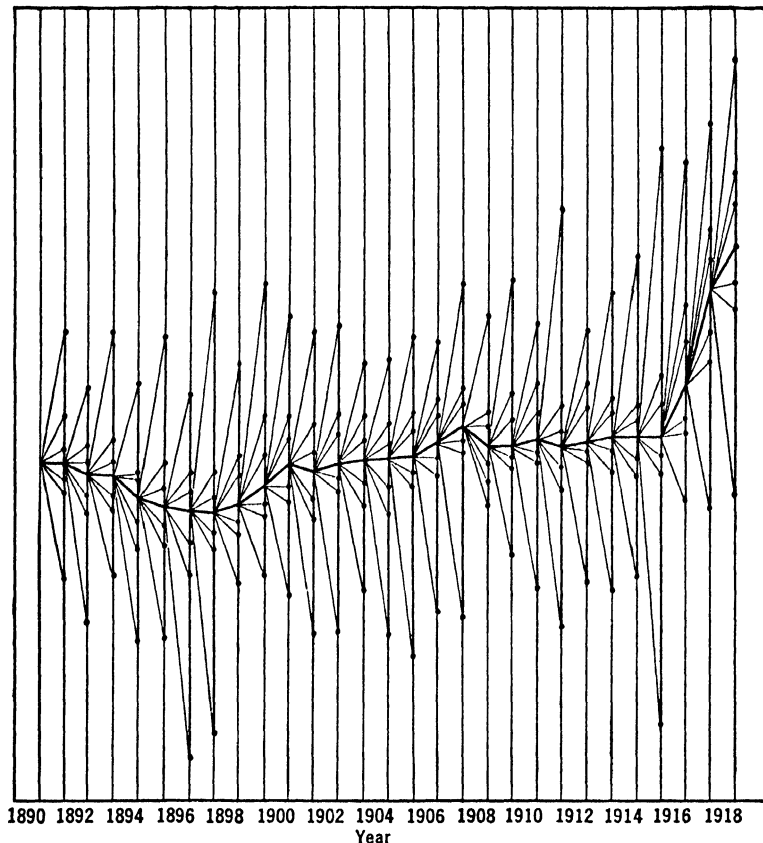


FIG. 13. This chart illustrates the diversity of fluctuations of prices of 252 selected commodities included in the Bureau of Labor Statistics index number during the period of 1891-1918. The reader will note the relative stability of the index number which is represented by the heavy center line and the erratic movements of its component parts represented by the light lines radiating from one central point each year; these lines show only 6 out of the 252 price movements, but they are chosen to show the extreme divergencies each year. The index number, as is pointed out in Fig. 12, is the *average* movement and shows the average percentage change of prices from one point of time to another.

other commodities. For example, comparison may be made between the price movements of farm products and those of things farmers must buy. Such comparisons show the changes in the purchasing power of farmers' crops and are an indication of rural welfare.

A third purpose for index numbers of the sort we are discussing is to estimate the real changes in production or sale of goods when physical measurements are not available, or when commodities are to be combined for which no common physical measure exists. It is difficult, for example, to get any direct measurement of the change in production of wheat, eggs, butter, and potatoes in a general farming area—or of shoes, hats, and cotton cloth in an industrial area—but an approximation can be arrived at by adjusting the sales value of all the items by an index of the change in prices.

Perhaps some simple illustrations will make these several uses clearer. (a) If a carpenter received \$1200 in wages in 1929 and only \$1100 in 1931, he might feel that his income had been reduced. If in fact, however, the relevant cost-of-living index had gone down from 100 in 1929 to 87 in 1931, his real income would actually have increased. The calculation would be as follows:

$$\frac{1200}{100} \times 100 = \$1200$$

$$\frac{1100}{87} \times 100 = \$1264$$

In other words, the smaller *money* income would actually purchase more goods and services in 1931 than the larger *money* income did in 1929, by \$64 worth. This relationship explains the fact that people on fixed salaries actually are better off in a depression, and suffer more in times of expansion and high prices, than those whose incomes fluctuate more in harmony with the cost-of-living index. (b) If a farmer's cash income was \$1000 in 1929 and only \$600 in 1931 the reduction would seem very great, but if the price of things farmers buy had fallen from an index of 100 to 80 the loss would not be so seri-

ous as at first appears; the \$600 in 1931 would then be worth as much to him as \$750 would have been in 1929; that is, there would have been a reduction of only 25 percent instead of the apparent 40 percent in purchasing power. The method of calculation is the same as in the previous example. (c) If the value of goods produced by a group of factories decreased from \$6,000,000 to \$4,000,000 between two years, one might assume that the output had been greatly curtailed. But if the price per unit had fallen at the same time from an index of 100 to an index of 60, the physical output would have actually increased. The calculation in this case includes two steps:

$$(1) \quad \frac{\$6,000,000}{100} \times 100 = \$6,000,000$$

$$\frac{\$4,000,000}{60} \times 100 = \$6,670,000$$

That is, the amount produced in the second year would have been worth \$6,670,000 at the price prevailing in the first year. (2) If the value the first year is counted as 100, then the relative adjusted value the second year would be

$$\frac{6.67}{6} \times 100 = 111$$

In other words, the physical output would have had to be increased 11 percent to give the \$4,000,000 sales at the reduced prices. These cases suggest some of the many ways in which index numbers make possible a more accurate interpretation of monetary measurements of income than could be made from the original dollar figures.

3. *Sources of Individual Ability to Consume.* Individuals obtain income in the sense of purchasing power in various ways. The most universal of these is as compensation for direct services performed for someone else. Such compensations may be received in the form of wages or salaries or commissions. On the other hand, purchasing power may come to the individual in return for the use of land, capital goods such as buildings and machines, or money, which he owns and either uses productively or permits someone else to use. If an owner

uses the capital himself, the compensation is a proprietor's return commonly called "profit." If he permits someone else to use the capital the compensation takes the name of "rent," "dividend," or "interest." In any case it is an expression of what people have considered the use of the capital worth to society, and this "worth" comes from the fact that more total consumption income is available than would be without the use of this particular capital.

These two important sources of purchasing power are indistinguishable in the case of many individuals. Farmers and proprietors of factories or stores expect to have a net balance of business receipts over business expenditures at the end of each year. This net balance is the money income resulting from their particular business enterprise. Part of it is the result of their personal effort and part of it results from the use of capital; it is impossible to distinguish directly between the two parts. An approximate determination may be made, however, by estimating the amount that someone else would be willing to pay in wages for the personal services of the laborer-manager, on the one hand, or in rent and interest for the use of the capital, on the other hand.

While the two sources of the purchasing power mentioned above are the most general ones, there are others that are important to certain individuals. These include, for example, gifts of all sorts, the most important of which are probably associated with the custom or practice of inheritance. They also include chance winnings from speculation and gambling. It is desirable that these two terms be distinguished, for properly used they refer to very different things. Speculation involves the assumption of a risk or uncertainty connected with some business enterprise. This risk or uncertainty is an essential part of the business and must be borne by someone. It arises out of the incompleteness or inexactness of our knowledge concerning either demand or the costs of supplying the demand. For example, if a farmer keeps title to his wheat for some months after harvest, he runs the risk that the price may change. The change may, of course, be either in his favor or against him. In the former case, he gains by holding the wheat, and in the latter case he loses. Had he sold immediately

after harvest someone else would have borne this risk and would have received the gain if the price advanced. Speculation also occurs in the stock market; that is, in the ownership of shares in business corporations. Here again, there is uncertainty as to whether the demand for particular consumer goods will cause the derived value of manufacturing plants to rise or fall. If the former takes place while an individual owns part of the stock of the company, he is able to sell the stock and show a speculative profit. This profit is income to the individual. Someone, of course, must own the stock at all times whether it is either rising or falling in value or remaining constant.

Gambling and betting, in contrast to speculation, may be defined as the taking of chances that are created for that express purpose. For example, it is not necessary that anyone bet on the outcome of horse races or football games, since the events are financed by admission fees and the betting has nothing to do directly with either the income or the expenditures of the management; also contract bridge and similar games may be played either with or without money payment to the winner.

Still another incidental source of individual purchasing power is found in the proceeds from robberies. There are, of course, various degrees of ruthlessness and finesse in this field. The man who holds up a bank with a machine gun, the butcher who "weighs his thumb," and the banker or trustee who manipulates accounts to his own advantage, hold somewhat different places in society although their source of income is really much the same.

In total these several sources of income are small when compared with the returns to labor and capital, but to the particular individual they may be important. A student in college may be supported almost entirely by gifts. Some professionals derive their entire income from winnings at cards or other gambling. A second-story man lives off the result of his pilfering. It should be noted, however, that each of these sources of income represents a redistribution of existing purchasing power among individuals without any net addition to total social income such as accompanies the basic sources previously discussed.

Still another part of consumption income reaches the indi-

vidual in the form of government services which he may or may not pay for personally. The head of a family in any modern city receives the privilege of education for his children, the use of streets and parks for the entire family, police and fire protection for his property, and other services quite independently of his payment for these services. Of course the entire cost of the service is paid by the people of the community collectively through the collection and disbursement of tax funds. By this process some individuals have their consumption raised above their purchasing-power income while for others the reverse is true. For the former the increase in consumption is similar to that accompanying any other gift, at least in many of its aspects. Whether the process from the point of view of the second group more closely resembles giving or robbery depends, of course, upon how the decision to furnish the services was made; under normal operation of a democratic government the contributions to common expenditures resemble free giving, while under conditions of revolution or dictatorship they have many points of similarity to robbery.

4. *Origins and Limitations of Ownership.* Statistical studies indicate that from 75 to 85 percent of the individual receipts of purchasing power are the direct payment for personal effort; <sup>1</sup> presumably this portion of the total is distributed in accordance with the ability of individuals to find ways of being useful to society. Fifteen to 25 percent is payment for the use of capital in its various forms through dividends on stocks, interest on bonds, mortgages and other loans, rents on buildings, net returns to farm and store proprietors, and the like. This share is distributed in proportion to the ownership of capital, without direct reference to the abilities of the individuals who receive it. Perhaps it is worth while to inquire briefly, therefore, into the ways in which individuals acquire ownership.

Personal ownership may come about in any of three broadly defined ways, namely, purchase, gift, or appropriation. We may discuss some of the implications of each in turn.

When one buys a farm or a store or any other item of capi-

<sup>1</sup> Discussion of data in support of this generalization is found in Chapter 5.

tal, a saving of previously acquired purchasing power must be inferred.<sup>2</sup> Such a saving could have occurred only if consumption were less than received purchasing-power income. If the latter is entirely a personal-effort income, then the individual may be said to have acquired property ownership as a direct result of his ability to serve society in production and to economize on his immediate consumption. He has deferred consumption in order that he might have larger purchasing power later; larger both by the amount others are willing to pay him for the use of his capital and, finally, by the amount for which he can sell his capital goods. Certainly in these circumstances the individual would seem "entitled" to any increase in future consumption.

When ownership has been acquired by the individual through gift, the case would appear to be somewhat different. When the government gave land that belonged to no individual, but to the people jointly, to the early railroad companies, it was done on the assumption that railroad building was in the common interest and that the land grants would result in the most generally useful development of the public domain. It may be questioned, perhaps, whether the corporation stockholders who have acquired the railroads are "entitled" to an owner's return on that portion of their present property which was an original gift, since there was no personal effort involved in its acquisition. (It should be noted, however, that the *present* stockholders have paid, in many instances, for the present full property value.) Whatever may be said about the railroad case must probably be said about the farms throughout most of the country. Land ownership was originally granted by government to individuals who made a very low payment or none at all. The sons or grandsons of the original owners have since inherited many of these lands and the income which they derive from ownership has little necessary relationship to their personal ability or effort.

<sup>2</sup> If one buys "on time" it should be noted that the income from ownership continues to flow to the selling owner in the form of a contractual interest payment. In such cases the buyer proposes to apply subsequently saved purchasing power to the fulfillment of his contract. He does not obtain the full monetary return of ownership until his payments are completed. Otherwise the sequence is identical to that accompanying a cash purchase.

What has just been said about these special cases applies, of course, to the entire institution of inheritance. Provision was made long ago for handing down property from father to eldest son, generation after generation. This provision was made on the assumption, in part, that established families have proven their ability to manage enterprises efficiently in the general interest of all the people. If history has proved—or ever should prove—this assumption false, a principal reason for inherited ownership will have disappeared. As will be pointed out later, fundamental changes in the public attitude towards inheritance have already taken place.

When personal ownership is acquired by appropriation the case is again different. If the appropriation follows true discovery—as with the prospector or the inventor—there is wide agreement that the pioneer is “entitled” to his find and to any income that may flow from it. But when the appropriation takes the form of acquiring things that are already owned by someone else, without “due process of law,” the Greeks and everyone since “have a word for it.” Clearly, the individual is not “entitled” to the flow of income from property which he has acquired through chicanery, misrepresentation, or outright robbery.

Private ownership of capital goods and of natural resources has long been considered a personal privilege and right. Time was, perhaps, when *might* was the only rule of right, but that condition has little in common with modern practice. Nowadays we pass laws, and employ police power to enforce them, in protection of the ownership rights of individuals. With limited exceptions, the individual may dispose of his property as he sees fit, even to the extent of willing its ownership and dictating its use after his death.

And yet the rights of ownership are never complete or absolute. One may appear to have full ownership in a pair of shoes, but he may not legally throw them through his neighbor's window. One may own a city lot, but he may not use the portion of it devoted to public sidewalk for any other purpose and, if it happens to be zoned for residential purposes only, he may not use it for a factory. You must keep your cow out of your neighbor's cornfield; a canning company is permitted to

operate only if it disposes of its wastes in prescribed manner; a railroad company must maintain certain specified services and may charge only certain rates if it is to keep its franchise. Ownership rights are restricted in many ways by common consent and by legal action of properly constituted authorities. And it may be pointed out that there is no *logical* stopping point in the curtailment of individual control that accompanies ownership.

Individual rights are limited not alone in ownership, but in practically all other fields as well. The rights to "personal liberty and the pursuit of happiness" are granted to us only in so far as we do not interfere seriously with the rights of others; and what constitutes interference is subject to constant change in definition. We cannot practice law or medicine without a license, speed laws may prevent our getting our full thrill out of fast driving, we may not keep a cow in the city to supply our family with milk, the maximum amount we can charge others for the use of our money is set by law. These are but illustrations of the many ways in which individual freedom is curtailed and, here again, there appears to be no logical limit to the use of group action in limiting personal liberty. Conflict would seem to be inevitable and continuous between those who, on the one hand, wish to limit the freedom of others in their own selfish interest and those who, on the other hand, seek to curb the power of certain individuals in what they believe to be the interest of the general public.

5. *The Function of Price.* Within the limits set by the rules of the game, as they are set at any particular moment by custom and legal act, price operates as an important guide to individual action. Other people offer to each of us individually a price for our personal service or for the use of our capital. The upper limit of the price bargain is set by what the buyer believes the service or use of capital will be worth to him, either for personal consumption or as an aid to further production. The lower limit for an effective price offer—that is, one that will result in a deal—is set by our willingness to do the job or to dispense temporarily with the use of our capital. The interplay of judgment of buyer and seller finally results in a price somewhere between these two limits at which a trade is made or

a deal consummated. If the good or service is reproducible like cans or cars rather than non-reproducible like the painting of a master, and if the price agreed upon is satisfactory enough to the seller, a supply will continue to be forthcoming. Similarly, if the satisfaction the buyer gets from his cans or cars is of the sort that bears repeating and if it proves equal to anticipation, demand is likely to continue.

Broadly speaking, this mechanism of decision operates throughout the entire field of economic activity; it is present in the bargaining for labor at all the levels, in the rent of a summer cottage, in the sale of crude oil, or eggs, or watches, or scrap iron, or steam yachts, or cabbage. Perhaps, however, the mechanism is used with less precision in connection with purchases for final consumption than elsewhere. If this be true, the cause probably lies in the inability of the consumer to exercise sound judgment in balancing the satisfactions to be expected from one purchase against those that would come from some other use of purchasing power. The reality of this lack of ability, together with some of its causes, will be discussed in Part II while some possible remedies will be considered in Part III.

6. *Group Action in the Interest of the Consumer.* On the assumption that consumers are somewhat at a disadvantage in the operation of the price mechanism, organized governments have undertaken certain things in their behalf. These things fall somewhat naturally in three classes, namely:

- a. Rules and regulations
- b. Redistribution of income
- c. Public services

The rules and regulations laid down by public legislatures in the interest of consumers include such things as the pure food and drug laws, the standards of weights and measures, usury laws, prohibitions of misbranding and false description, and the like. In general, it appears that little has been accomplished in this field as yet beyond the setting of pretty low minimum standards for commodity qualities and limits for interest rates, and preventing the crudest sort of misrepresentation. The opportunities for additional group action in this

field would seem to be large; they are discussed in Part III.

Redistribution of income has been undertaken by group action, largely through the operation of the tax system. Property, income and inheritance taxes have all been used to take large amounts of purchasing power from those with large receipts and use them for the common good in police and fire protection, schools, garbage disposal, parks and playgrounds, and the like. Here again it may be pointed out that there is no logical stopping point to such a system of redistribution of income. The extent to which it has been carried and the desirability of carrying it still further will be discussed in Parts II and III.

Public services are furnished largely by means of funds collected as taxes. In normal times they have absorbed a large part of public revenue, although during the recent depression a considerable portion of public funds has been distributed directly to individuals as emergency relief. Normally about the most costly part of public service is police protection, including the national army and navy; in the depression year of 1933, "we, the people," paid about \$50 per family to the support of the War and Navy Departments. It is important that we remember, as taxpaying citizens and consumers that we "consume" battleships, airplanes, and the officers' dress uniforms. Perhaps of more immediate interest to the consumer are the schools and parks and roads that are maintained at public expense. These things constitute no small part of the total consumption of the typical citizen. They are furnished to people by group action without regard to their individual willingness or ability to pay directly for the particular commodity or service.

There are some strong advocates for further development of this type of group action in the interest of consumers. Housing projects undertaken at public expense, for which the rent paid by the user will only partially defray the costs, is one current suggestion; another includes various forms of recreational facilities, like parks and playgrounds, that may be used without direct charge. Again, there is no limit to the extent to which this form of control of economic activity may replace

the price mechanism; no limit, that is, except the ability and the temper of the people.

Group action in the interest of the consumer is not limited to governmental activity. Various other forms of co-operative effort have long existed. In their formal aspects these efforts form the Co-operative Movement which has attracted much attention here and elsewhere in recent years. Formal co-operation has developed in the fields of banking, marketing, and to a less extent, farming and manufacturing. Trade associations and labor unions are special forms of non-governmental group action. We are concerned particularly at present, however, with consumer co-operation.

Consumer co-operation is an attempt on the part of the consumers to increase their real income and improve their scale of living by reducing merchandising costs and by making available just those things which the consumer desires. Some of the important things which the co-operators hope to accomplish are given in the following list:

a. Lower the cost of living by eliminating some market operations, and by taking over others and performing them more efficiently.

b. Give the consumers more nearly what they want by dealing directly with producers and by avoiding a good deal of producers' sales promotion.

c. Enable consumers to learn more readily and more accurately the truth about all commodities so that their choices will be more intelligent.

This movement has grown to a very important size in England, Sweden, and several other countries in Europe. It appears to be somewhat of a compromise between the individual and the governmental methods of directing production and consumption.

7. *Group Action Not Necessarily in the Interest of the Consumer.* Probably one strong reason for recent interest in group action looking towards the redistribution of income lies in previous group action that tended to concentrate income in the hands of a few people. These earlier forms of group action also fall into well-defined classes, as follows:

- a. Permitting private ownership of non-reproducible natural resources.
- b. Granting quasi-monopoly privileges through franchises and the like.
- c. Legalizing of corporations with their possibilities for enormous growth and permanent life.

Great fortunes have been accumulated in private hands as the result of the rise in urban land values, the chance discovery of oil or mineral underlying one's property, and even the rise in value of farm land that has accompanied the growth of national population. None of these spectacular increases in personal wealth and income would have been possible if the natural resources on which they depended could have been reproduced at will, for then there would have been no increase in scarcity to bring about the increase in value. If everyone owned a diamond mine, then what price diamonds? Nor could the income have accumulated in private hands if the ownership of such non-reproducible natural resources had been kept by the state for the benefit of general welfare.

Railroads, electric power companies, telephone companies, and some other concerns—commonly grouped under the term "Public Utilities"—are spoken of as natural monopolies. That is, it seems to be in the nature of these industries that the cost per unit of their output, in terms of telephone calls, miles of travel, kilowatt hours of current, will continue to decrease until the entire market supply is furnished by a single company. Consequently it is common public policy to give a monopoly franchise to one company in each of these lines for each market territory. Unless these concerns are carefully regulated it is possible for them to restrict the output of their particular product, thus increasing its price and, in some cases, markedly increasing the purchasing-power incomes of the owners. Undoubtedly there are numerous cases in which individuals have been able to use the franchise given by government so as to amass great personal wealth.

Corporations *permit* a widespread ownership of public utility and other large-scale enterprises, but they appear to *actually result* in a high degree of concentration in the ownership of producing capital. This, in turn, results in a high concen-

tration in receipt of that portion of total income which comes from capital ownership. Corporations other than those operating public utilities have, at times, been permitted to become so large that they dominate production in certain fields. This fact gives them some opportunity to buy up new patents which they may hold out of use and thereby delay competitive improvements, and in other ways to restrict production. This, in turn, permits the raising of prices and results in increasing the income of the owners. The extent to which this is done seems directly against the interests of the average consumer.

Government, somewhat belatedly and ineffectively perhaps, has undertaken to prevent injury accruing to consumers through these monopolistic tendencies. In other words, at this point government is attempting to make the price mechanism operative in the control of production and consumption, while at some of the points discussed in the section above the attempt is to avoid the working of the price mechanism in the distribution of real income among consumers.

We have tried to make it clear in this section that the problems of political economy as they affect the consumer are not simple. The destinies of the individual are subject to two sets of forces: (1) The mechanism of a price system through which each individual may democratically express his own choices, and (2) the centralized decision of either the bureaucrat or the captain of industry. These two parties that are privileged to make centralized decisions frequently are motivated by different objectives and it is by no means certain which one of them will, in the long run, best serve the consumer. The balance of control between the three forces—consumers, bureaucrats, and industrialists—represents many nice problems, an intelligent appreciation of which will be of great value to the average citizen and, through him, to the commonwealth.

#### SUMMARY

It is essential to the study of any field that terms be clearly understood and precisely used. This chapter has been introduced at the beginning of the book in order to avoid some of the confusion that might result from a mere misunderstanding of words. Of course the chapter does not include all of the

technical words and concepts employed in economics, but it does include many of those that are important to this preliminary excursion into the field. Such a chapter as this defies true summary, for to summarize would be to repeat the definitions and definitive comments. The authors hope, however, that the book will be more easily read and more generally useful because of this chapter.

## CHAPTER 4

### HOW RISK AFFECTS CONSUMERS<sup>1</sup>

#### UNIVERSALITY OF RISK

**U**NCERTAINTY exists in practically all our relationships. Some degree of risk attends every aspect of our daily lives. This always has been so and doubtless always will be. The extent of risk and the forms it takes vary, to be sure, with the stage of civilization and the type of society in which we live. Our Neanderthal ancestors realized that they had mastodons and other dinosaurian monsters to cope with, but the dread fear of unemployment or depreciation of property value never entered their minds. In contrast, an individual living in the United States today has nothing more ferocious than deer or an occasional bear or wolf to hunt as big game. Yet he worries about inflation, technological unemployment, ruthless or unfair competition, misbranded goods, reckless automobile drivers, and other hazards arising out of the specialized, interdependent, money economy in which we live. In recent years new hazards have come to the people of the United States in the form of tropical diseases brought in by boat or airplane, of which amebic dysentery is a serious example. Likewise, the Japanese beetles, the Mediterranean fruit fly, and other insect pests and plant diseases have been introduced accidentally from abroad and have done serious damage to commercial crops or have entailed large expenditures for their eradication. At the same time we have scientific explorers hunting grasses in Siberia that will help hold the soil in our "dust bowl" in place, and others looking for all sorts of parasites that will destroy insect enemies.

A citizen of Soviet Russia may escape the hazards that are the direct result of the competitive organization of society;

<sup>1</sup> C. O. Hardy defines risk as "uncertainty in regard to cost, loss, or damage." *Risk and Risk Bearing*, p. 1.

those hazards, that is, that are associated with uncertainties concerning qualities and prices of the things he buys or sells. Unless he completely pleases "the party," however, he appears to face political dangers that are just as real. In any case one does not escape the many physical and biological hazards, no matter what political or economic order is in force; the political system does not prevent grain rust, or tuberculosis, or traffic accidents, although group action may be used to reduce or control the causes of such misfortunes. Clearly, wherever man exists there are uncertainties the outcome of which may bring loss, damage, or sudden death.

Risk is often thought of as pertaining particularly to business, that is, to undertakings in production. But it actually affects all aspects of our lives, influencing us in our role as consumers just as truly as in that of producers. We cannot be all-knowing as consumers any more than in any other field. In fact, there are reasons why we generally are less so. Under modern conditions of specialization, each person may become quite expert in some one narrow field of production and, consequently, the uncertainties to him in that field are reduced to a low point. A jeweler, for example, may know practically everything about precious stones, or an electrical contractor may know almost everything about electric wiring, but who can possibly know all about the qualities of all sorts of consumer goods and services, the best places to buy them, the best way to use them, the proper price to pay, and so on?

In order to get a fuller understanding, then, of our economic environment and of our possible adjustment to it as citizens and consumers, we must examine in some detail this ever-present element of risk.

Uncertainties that affect the economic side of our life at all may do so either by sending our income up to new heights or down to new depths, or by changing our consumption habits. Generally they do both. Physical hazards and perils, for example, when permitted to result in a broken leg, blind eyes, or shattered nerves, may decrease our power to earn money or may affect the faculties with which we enjoy goods and services. If a man's foot is cut off as the result of an industrial accident, for example, he not only may have to take another job at less

pay, but he may also have to buy a wheel chair and an artificial leg, perhaps, instead of the purchases he would otherwise have made. Moreover, he probably will never again use certain commodities such as tennis racquets and ice-skates.

We have always given attention to the effects of uncertainty and misfortune on our money income because they are so apparent and real to us. They modify our consumption directly since the size of our income determines how much we can consume; whenever fortune affects our income our spending is changed correspondingly. The second type of effect has, perhaps, received less thoughtful attention, but it is equally real. Even though the man with the artificial leg should have the same purchasing power after his accident, his *pattern* of consumption would have changed; that is, he would buy different things and different services than formerly.

If we could perfectly forecast the future we could, in a sense, play safe, but even when we foresee risks and attempt to safeguard ourselves against them, they affect the volume and nature of our consumption. To secure ourselves against future fluctuations in our income, we save part of our money income in savings accounts, investments, or insurance, thus cutting down our present consumption. In trying to have protection against fraudulent and harmful goods, we buy trademarked and branded goods of well-known manufacturers instead of unknown products. To guard ourselves against the whole array of present-day risks we buy such devices as burglar alarms, safety glass, and lightning rods, or we carry insurance of various sorts to compensate us if the unpredictable event, such as a fire or burglary, occurs; and we go without some things we might very much enjoy such as movies, books, new clothes, and the like to pay for insurance and protection.

Since risk ramifies so widely, we must examine its several aspects; the causes from which it originates, the forms and ways in which it confronts us, and, lastly, the methods we have developed for dealing with it.

#### CAUSES OR ORIGINS OF RISK

Any classification and analysis of the causes or origins of risk will be both abstract and arbitrary. Basic causes are not

always obvious in the form of the risk as it confronts the individual. For example, a physical or emotional injury in childhood may not show up for years and its delayed results may then be blamed on some recent happening.

Moreover, the causes are frequently multiple, complex, and interdependent. To take a single spectacular example, we might say, perhaps, that among the reasons the Lindbergh baby was kidnaped were: (a) Colonel Lindbergh had been the first to fly the Atlantic solo; (b) as a result he was headlined and became wealthy, which brought him to the attention of criminals; (c) Hauptmann had been mentally warped by his experiences as a machine gunner in the World War; (d) other recent kidnapings had been successfully carried out; (e) and many other complex, and interdependent causes. Each of these things contributed to the risk that the baby would be kidnaped; no one of them alone was the cause, but jointly they led to the unfortunate event.

In spite of the complexity and vagueness of the origins of risk it is worth while to consider the outstanding types or classes of causes.

1. Perhaps the most obvious cause of uncertainty in our lives is the working of natural events. Fires and floods, for example, are catastrophes which can alter drastically our consuming and wage-earning activities. The recurring floods on the Ohio and Mississippi Rivers, with their large death tolls, destruction of property and upheaval of industry, are a vivid illustration of this type of risk. Some "Acts of God," such as famines, are perhaps less real risks today than in past years which did not have the benefits from some of our techniques, such as fast transportation, refrigeration, and soil conservation. But this belief should not be accepted too wholeheartedly; our drought of 1935 did not cause a general famine, but its effect on some of our food prices was marked. Moreover, large sections of the world—one has only to think of China—meet with this peril perennially. So far we have not developed a device to control the weather! However, we can say that our technical developments have decreased the dangers from many natural phenomena such as landslides, floods, and soil erosion. So perhaps we can say that this is one cause of risk which

touches the individual less directly and less frequently today than formerly.

2. A second source of risk is the unknown character of the materials which we consume, or with which we work. Industrial accidents are often caused by the worker's unfamiliarity with his machine and equipment, even though these appliances may not be harmful in themselves. In occupational diseases, also, the harmful and even deadly quality of the materials used has not always been known or fully comprehended by either the workers or the employers. White phosphorus, which was used for many years in match-making, was finally prohibited by a federal law when it was proven that the workers handling it developed "phossy jaw." The fatality attached to using radium in watch-making is another vivid example of this type of occupational hazard.

The individual also faces risks in the commodities that he consumes. These may not only be risks of physical injury, but also of paying more than the value of the satisfactions that he receives. The faddish use during the last decade or so of certain reducing salts, eyelash beautifiers, and hair removers, for example, has carried grave danger to health. Moreover, certain goods, while not fraudulently harmful, present a risk in the way in which we use them. The excessive use of otherwise harmless products such as aspirin, for example, or the improper use of explosive home cleaning fluid, make these riskful commodities. The deception involved in colored oleomargarine and walnut veneer furniture and "jerry building" of homes are examples of the risk faced by consumers of paying for more than they really get. On the whole this type of risk is probably greater today than formerly, for several reasons. For one, we do less home cooking, clothes and furniture making, and so on than did previous generations, so that we have lost many of the "thumb and finger" skills with which to judge purchases of clothing, textiles, and furniture. Moreover, in our modern economic order with its mass production, the majority of consumers must buy their goods from makers whom they do not know personally and whose integrity they, therefore, cannot well judge.

3. This point leads to a third basic cause of risk, namely,

the unpredicted behavior of others. It is true that we have built up through the process called civilization some social means to police human behavior and to keep it from imperiling others. Yet the existence of these means does not prevent law-breaking entirely—we still have thieves, murderers, kidnapers, and reckless drivers. Moreover, in our economic co-operation, consumers in the city, for example, not only depend upon farmers in many different parts of the world for food, but also on many other enterprises to produce the means of satisfying all their wants. They must rely on a host of people such as trainmen, truckers, retail clerks, and warehouse men to bring the desired goods to their doors. They face, through truck or rail strikes, or wars, or floods, the constant risk of a stoppage or breakdown in the intricate flow of goods from far-flung producers. It is said that many people in New York City, for example, would go hungry within 48 hours if all transportation into the city were stopped. Similarly, as individual workers we depend upon the continuing demand of many people for the particular good upon which our labor is expended; changes in consumer demand—the behavior of a certain group of buyers—can completely upset our wage-earning activities. The introduction of the radio affected employment in the phonograph business and the use of rayon has affected the cotton mills. Thus in many ways, unpredictable behavior of people makes life interestingly, excitingly, and painfully uncertain.

4. The three groups of risk that have just been discussed frequently lead, singly or in combination, to industrial fluctuations, or alternations between good and bad business conditions, of more or less severity. These fluctuations, frequently called trade or business cycles, directly affect prices of all sorts; wages change both in monetary amount and in purchasing power; the number of people who can find employment at any wage is modified; prices of commodities change, both absolutely and in relation to each other. None of these occurrences is predictable in detail. Each is an uncertainty, but any one of them will cause individuals to adjust their patterns of consumption to the changed conditions. Sometimes, as in the depression of the 1930s the individual adjustments that must be made are both sudden and profound. With millions unem-

ployed, factories closed down, dividends unpaid, established price relations completely upset, the task of making wise decisions concerning production and consumption programs becomes too complex and fraught with uncertainty for society to handle without great individual misfortune.

#### THE EFFECTS OF RISK AS FELT BY THE INDIVIDUAL

While the causes of risk may seem abstract, intangible, and often beyond the control of the individual, its effects are very intimate and real experiences. When the trees in a fruit orchard are washed out by a flood, or one loses his job because his employer goes bankrupt, or a strike stops the flow of goods to and from one's factory or store, the immediate effects are clear-cut, obvious, poignant, and often devastating. They fall, it is true, with different force on different individuals and social groups, but they are felt to some extent by everyone. The effects may be manifested in any of several ways, either singly or in combination. They may bring changes in any of the economic aspects of life such as property ownership, income from property, opportunity to gain wages, or ability to do certain things either as producers or as consumers. Through misinformation concerning the quality of goods and services, the effect of risk may be a discrepancy between anticipation of satisfactions and their realization; that is, shoes may not be comfortable, curtains may fade, the movie may not be interesting, or the carpet may not wear.

Although the effects of uncertainty are likely to be clearly felt by the individual sooner or later, they are not always traced back to their cause. In fact, cause and effect relationships are often very difficult to determine. For example, indigestion in middle life may be due to habits of eating during childhood which are not suspected as the cause; a house may burn as the result of undetected carelessness on the part of the electrician who wired it; certainly the causes of industrial fluctuations are often too complex to permit their complete diagnoses. To the extent that causes and effects are not paired accurately it is impossible either to prevent or to guard against continuance of the risk in the future.

1. *Changes in Property Ownership.* Unforeseen change in property ownership is one of the common effects of risk felt by the individual. This modifies his consumption pattern because of its repercussions both on his income and his mood. Loss in ownership may be associated with any of the causes noted above and some of the common associations are suggested by the examples that follow. The loss may take the form of complete loss of physical property, change in ownership of such property, or merely decline in value of property.

Loss of ownership may be caused by the ruthlessness of nature; that is, by fire, flood, or storm. It will be sufficient to quote a passage or two from an article describing the aftermath of a rampage of one of our uncontrolled rivers to remind us of the untold damage resulting from such causes.

"The town is soaking under a layer of oozing mud and dripping rubbish. Here beside a grimy piano with swollen, rigid keys lies the carcass of a horse. There stands a splintered telephone pole enmeshed in chicken wire, leaves and straw. Everywhere there is shattered glass, for thousands of windows in town have been crushed by the water's force. . . . In the patience-taxing job of cleaning up, it is every home-owner for himself. The relief workers can help little; they hand out oil stoves to warm the shivering children. Firemen can train their hose on littered streets. State troopers can stand guard through the night, prepared to deal summarily with looters. But the private citizen must do his own scraping and scouring."<sup>2</sup>

Loss of value in ownership may be due to unpredicted human behavior manifested by changes in demand. An owner of the bulging Buick of 1930, who tried to sell his well-kept car in 1931, suffered an unusual loss not because of the physical condition of the car, but because for an automobile to bulge in 1931 was outmoded. The unpredicted changes brought about by Dame Fashion have left many women's wardrobes filled with costumes but slightly worn and have made many other commodities, such as houses, old before their day.

Loss in ownership often is associated with the decline in

<sup>2</sup> Kramer, Thomas, "After the Deluge," *Reader's Digest*, April, 1937.

prices that accompanies industrial depressions. Many individual homes owned, with a mortgage attached, by the occupants, declined in value so seriously during the 1930s that their value no longer covered the mortgage note outstanding against them. In such cases the occupants lost such value of ownership as they supposed was theirs.

In like manner, industrial fluctuations may cause a great fall in the value of stocks or bonds which an individual owns and on which he is depending for future income. The average price of the 40 domestic bonds included in the Dow-Jones index,<sup>3</sup> for example, was 79 percent of par in 1929, but only 50 percent in 1932; the average price of the 30 industrial stocks included in the Dow-Jones figures was \$311.20 in 1929, but only \$64.60 in 1932. If anyone had purchased the complete list of either bonds or stocks in 1929 with the intention of reselling in 1932 to provide funds for that year's consumption, his living would have been far below anticipation. The prices of the bonds fell to 63 percent of their 1929 level, the stock to 21 percent, while the cost of living fell only to 78 percent of its 1929 point. In other words, the purchasing power of the sales prices of the bonds and stocks was only 81 and 27 percent as high, respectively, in 1932 as in 1929.

Not all loss in capital value of investments is due to industrial fluctuations of general or widespread nature. Individual mismanagement may be at fault. This latter is but one of many forms of unpredicted human behavior; it may be due to individual incompetence, lack of knowledge, or dishonesty.

2. *Changes in Property Income.* Changes in property ownership are inevitably and functionally related to changes in income from property. For example, in case a man's home is struck by lightning and burns, he no longer can live in it. Thus he is deprived of the anticipated satisfaction of living in that particular house; he must either build anew or rent from some other owner. In either case his purchasing power will be directed into different channels in the future than he anticipated. Or again, the reason the price of stocks or bonds

<sup>3</sup> This is an index, or average, of the prices of a selected group of bonds that has been computed regularly for many years by the Dow-Jones Company. For definition of an index, see Chapter 8.

falls is because it now appears that the company which issued them cannot pay the dividends or interest originally expected. In other words, a change in ownership *value* always is associated with, and frequently is the result of, a change in the *income* that one thinks he is going to get from that ownership.

All property income is not affected alike, however, by any one cause. A good deal depends upon the form of ownership that is involved. Industrial fluctuations may affect the income from bonds quite differently from that derived from stocks, as the following examples will show.

The 1929 dividends paid on a group of 20 preferred stocks averaged \$17.00; in 1932 the dividends on the same stocks had fallen to \$4.75. To be sure, the cost of living had fallen in the meantime, but only enough to make the 1932 dividends equal to about \$6.10 in terms of 1929 prices. Even in purchasing power, therefore, the yields were only 35 percent as high in 1932 as in 1929. Good 4 percent bonds, however, paid the same interest in the latter as in the former years; and the \$4.00 interest had a purchasing power in 1932 equal to \$5.00 or more in 1929. In other words, an investment made in these particular stocks in 1929 would have yielded a purchasing-power income in 1932 only 35 percent as high as in 1929, while the income from a similar investment in good bonds would have resulted in a 25 percent increase in real income. (Individual stocks varied, of course, either above or below the average.) The effect of such changes in the purchasing-power income from investments is just the same as though the income came from wages. A cut of 65 percent in income, whether from wages, salary, interest, or dividends, necessitates severe reduction in expenditures and curtailment of consumption. What would a man do whose wages were cut 65 percent, unless go on relief? Or what would he do if his wages were raised 25 percent? People whose income is derived from property ownership face the same questions.

The facts just cited do not prove that investments in bonds are always more remunerative than investments in stocks, but merely that generally they are safer. In fact, when industrial conditions are improving, stock dividends are likely to increase while bond interest remains constant and even falls in purchas-

ing power. In this connection it may be pointed out that attempts to avoid the risks of uncertainty generally involve giving up the possibility of gains. Participating ownership, such as personal possession of a farm or small business, or common stock in a corporation, carries with it no contractual guarantee of income from anyone, while loans secured by mortgages, bonds, or notes, carry such guarantees. Consequently the *rate* of income on loans cannot go above the contractual figure, while the rate of return on participating ownership sometimes is very high. Great fortunes, such as those amassed by the owners of Eastman Kodak or General Mills, are the result of riskful ownership in which the uncertainties concerning the public demand for the products and the ability of the concerns to meet competition through continually improving their products and lowering their costs, turned out favorably for the owners.

3. *Changes in Compensation for Personal Service.* Doubtless the most widespread economic effects of risk are the unforeseen changes in wages and other compensation for personal services. These are most widespread because nearly everyone receives wages in some form and is dependent upon their stability if a scale of living is to be continuous. Moreover, the effects of unforeseen curtailment of wages may be more serious than a similar curtailment of property income because, in general, the recipients of property income are better able to accept a reduction in purchasing power without seriously affecting their scale of living than are wage earners. This point must not be pushed too far, however, for there are some individuals who are entirely dependent upon their dividend checks for the necessities of a meager existence. Moreover even those who have large incomes from property must readjust their expenditures to fit each change in purchasing power. Sometimes a change in a large personal income affects the income of many other persons as well. Private gardeners, drivers, and butlers may be dismissed; contributions to churches and other privately supported institutions may be reduced; purchases of luxurious goods may be delayed. Thus we illustrate again the interdependence of the many parts of economic society.

A change in wages may be manifested in any one or more of three forms, namely:

- a. A change in the money wage per day, week, or month.
- b. A change in the purchasing power of money wages.
- c. A change in the extent of employment.

a. The first type of change may be illustrated by the indices of annual wages per wage employee and of the annual salary per salaried employee in American industry for the years of 1918 to 1927. The data are given in Table 2.

TABLE 2  
AVERAGE ANNUAL COMPENSATION OF EMPLOYEES \*  
(1913 = 100)

<i>Year</i>	<i>Wage Employees</i>	<i>Salaried Employees</i>
1918 .....	158	119
1919 .....	173	136
1920 .....	214	163
1921 .....	165	159
1922 .....	170	161
1923 .....	194	172
1924 .....	191	178
1925 .....	198	183
1926 .....	201	190
1927 .....	203	196

\* Data from Morris A. Copeland, in *Recent Economic Changes*, p. 771, Table 5.

From these data it will be noted that the wages of wage employees rose from an index of 173 to 224, or by 24 percent, in the one year from 1919 to 1920. The next year the index fell from 214 to 165—a fall of 23 percent. These fluctuations were unusually large, but changes occurred between many of the other years that would appear important to the wage earner. The fluctuations in salaries were not quite so large, but they were important.

b. As pointed out in an earlier chapter, however, these fluctuations in money income tell very little about the changes that actually occurred in purchasing power. If prices of things that wage earners customarily buy had happened to change in the same proportion, no differences would have occurred in the

employees' ability to consume. The actual changes in the cost of living for wage earners' families have been calculated by the Bureau of Labor Statistics and with these data it is possible to calculate the change in purchasing power of the annual wages just reported. The indices of cost of living and of real wages are given in Table 3.

TABLE 3  
COST OF LIVING AND ANNUAL REAL WAGES OF  
WAGE EMPLOYEES

(1913 = 100)

<i>Year</i>	<i>Cost of Living</i>	<i>Real Wages</i>
1918 .....	174	91
1919 .....	188	92
1920 .....	208	103
1921 .....	177	93
1922 .....	167	102
1923 .....	171	113
1924 .....	171	112
1925 .....	176	112
1926 .....	175	115
1927 .....	173	117

These calculations show that cost of living fluctuated somewhat differently during the period examined than did money wages. Consequently real wages were quite constant during the five years 1923 to 1927 inclusive. (It should be remembered, however, that these data refer to *average* wages, while the compensation of many individuals may have varied much more widely than did the average.)

Perhaps we should restate the meaning of the figures in Tables 2 and 3 above. If we may think of the *average money* wage in 1913 as about \$1000, that figure increased to \$1580 in 1918 and to \$2140 in 1920; then it fell to \$1650 in 1921, after which it rose gradually to \$2030 in 1927. In the meantime, however, the cost of living for factory wage earners had changed considerably so that real wages, or the ability of wage earners with average wages to buy groceries and clothes, pay the house rent and doctor's bills, take a vacation and go to the movies, had not behaved in the same manner at all. The

average wage of \$1580 in 1918 would have purchased 9 percent less of things in the wage earners' budget than did his \$1000 in 1913; he would have been 3 percent better off in 1920 than in 1913, and from 12 to 17 percent better off from 1923 to 1927 inclusive than in the earlier year.

c. Frequently there is uncertainty concerning the extent to which any individual will be employed. Mr. Whiting Williams, who has donned overalls and worked with laborers in various fields in order to discover their problems, wrote "this insecurity of the job causes more antipathy to the whole industrial, social, economic, moral and political structure than all other things put together."<sup>4</sup>

Uncertainty concerning extent of employment may occur seasonally. For example, the building trades have 80 percent more unemployment in December than in August. Machinists have about 50 percent more unemployment in December than in May. Printers tend to have twice as much unemployment during August as during November. It is true that there is little uncertainty about the amount of unemployment to be expected for the group as a whole at these specific dates, but for the individual there is great uncertainty as to employment. For the group of printers, for example, it is certain that there will be about 50 percent less employment in May than in November, yet each individual employee is uncertain as to whether or not *he* will be employed.

This uncertainty due to seasonal fluctuations is not confined to a few industries. According to Dr. Isador Lubin of the Bureau of Labor Statistics, "it would be most difficult to find an industry which showed an even distribution of production and employment throughout the year."<sup>5</sup>

Different people react very differently to seasonal unemployment. Many farmers, of course, have long periods when they are neither planting, tending, nor harvesting crops. Some of them use their time in wood-cutting, in making furniture for the home, in studying new methods of producing or marketing their crops, while others do nothing useful. Some people move

<sup>4</sup> Gemmill and Blodgett, *Economics, Principles and Problems*, p. 287, Harper, 1937.

<sup>5</sup> Douglas, Paul, *The Problem of Unemployment*, Macmillan Company, p. 84.

from place to place with the industrial seasons; the "fruit tramps" on the Pacific Coast follow the harvests as do itinerant farm laborers generally. Some people live frugally during their period of employment in order to save part of their money income for use during the slack months of the year, while others "spend as they go" and trust to luck or the relief agencies for the remainder of the year.

Uncertainty concerning extent of employment is an inevitable accompaniment of industrial fluctuations. Undoubtedly this is the most serious general cause of unexpected unemployment. Some idea of the seriousness of this sort of unemployment may be gathered from the Bureau of Labor Statistics data shown in Table 4.

TABLE 4  
INDICES OF AVERAGE MONTHLY EMPLOYMENT\*  
(1929 = 100)

YEAR	FACTORIES		ANTHRACITE COAL	
	Durable Goods	Non-durable Goods	Mining	Retail Trade
1930 .....	83	92	93	97
1931 .....	65	83	80	88
1932 .....	51	75	62	77
1933 .....	55	84	52	76
1934 .....	67	91	60	82
1935 .....	72	92	53	82

\* Data from *Survey of Current Business*, 1936 Supplement, pp. 29-32.

It will be noted that employment in all lines was seriously curtailed during the depression years. Some lines were more affected than others; factories making durable goods more than those making non-durable ones; anthracite mining more than retailing. In no field, however, can any individual be sure of his job when business fluctuates as widely as in those particular years.

A considerable amount of unexpected unemployment is brought about continually by the changing techniques of business and may be considered as part of the social cost of progress. New methods, new material, new commodities are not discovered in regular and predictable rotation. Often they

appear in the commercial world with great suddenness and result in serious dislocation of employment. A common type of situation occurs whenever an improved technical process is put into operation. For example, the cigar-making machine in use today manufactures between 3000 and 4000 cigars a day and its introduction displaced 30,000 skilled workers each able to make 300 cigars a day. Many of these individuals suffered permanent loss of employment and all of them felt at least a temporary stoppage of income. Another example from a field where little attention has been given to such unemployment is of interest. A large, well-known clinic had developed an intricate system of cross-indexing and filing the detailed data which needed to be immediately available concerning each patient. This work kept 12 to 15 trained filing clerks busy throughout the year under the direction of a highly skilled, experienced, and well-paid woman. A tabulating machine was installed which could be operated by one or two technicians. It replaced the skilled supervisor and the filing clerks, some of whom suffered a permanent cut in wages and all of whom had a temporary loss of income.

Finally, uncertainty of employment may result from permanent shifts in demand. For example, in 1900 there were 7632 establishments employing 62,540 workers, making carriages and wagons, whereas in 1925 there were only 152 establishments employing 4833 persons. Some of these employees were able to move into automobile factories or elsewhere with little or no loss of income; perhaps some even received an increase in pay when they made the change. It is undoubtedly true, however, that many of those who are dropped from a declining industry never find anything else that they can do as well or at which they can make as much money.

These things are serious to individuals, but to prevent them might be even more serious to society in general. If we had become too concerned over unemployment among carriage workers, for example, we might never have developed the automobile; or if we had been too worried about the pick-and-shovel men we might have forbidden by law the steam shovel. Either of these restraints would have delayed progress and held back total production. Perhaps it may be pointed out, however,

that if society is benefited in the end by such innovations, part of the social income may quite properly be used temporarily to care for and retrain for new roles those who are thrown out of work by the change.

4. *Changes in Abilities.* With the passage of time all people—except Peter Pan—mature, grow old, and die in a somewhat regular and predictable sequence. In nearly every life, however, there are some unexpected events that leave their mark in unpredictable ways. Old age itself comes to different people at different actual ages; some are old for any task at 40 while others still are in their prime at 70. Moreover, old age comes sooner for some tasks than for others; most professional football players are too old for that occupation at 35, while a judge may be making the soundest and wisest decisions of his career at 70. Perhaps it should be pointed out, however, that attempts to provide income in advance for the period of old age are based, in part, upon the uncertainty of when it will come, but in larger part upon the assurance that it will come.

Individuals experience many changes in abilities to earn and to consume that are not properly considered the result of old age. These changes may be of either a physical or a mental nature. For example, silicosis—a dust-induced disease of the lungs—is but one of many industrial diseases that may attack the worker and kill him or leave him physically weakened and suffering a great loss in earning power. Similarly, occupational accidents reduce the worker's ability to earn. According to the best obtainable estimates, work accidents in the United States each year cause more than 35,000 deaths and 575,000 non-fatal injuries serious enough to result in 4 weeks' or more disability. The total number of such accidents can be forecast with considerable accuracy for any year, but the specific individuals who will be injured cannot be predicted.

There are many additional hazards that are associated directly with consumption. Automobile accidents and Fourth of July explosions are generally the result of unpredicted carelessness in human behavior during the process of consumption. Food poisoning and other injurious results to consumers of specific merchandise are the result of incomplete knowledge

about commodities ; they occur with sufficient frequency so that a book of examples has been published under the title "American Chamber of Horrors." While some of the cases that are described are probably extreme, yet they do serve to suggest the possibility of "loss, cost, or damage" to the consumer. In each such case the result is likely to be a change in the ability of the individual affected, either in his ability to produce or to consume.

#### WAYS OF DEALING WITH RISK

This long list of the effects of risk makes it evident that we need carefully to consider the ways of lessening uncertainty and of avoiding its injurious effects. It is appropriate then, that we ask, what techniques and methods have we devised to cope with the many dangers and hazards ; what sorts of protection are provided by our present civilization and economic order?

There are three important ways of dealing with risk and its effects. First, the most fundamental and useful is to forecast harmful events and then either prevent their occurrence or lighten their effects. This is the most useful method because it results in reducing the total loss. Second, particular risks or their effects may be transferred to other individuals or groups. This procedure is useful to the person who thus avoids the risk, but it may not result in any reduction of total loss. Third, an individual may simply assume the risks and their effects himself. In spite of our development of sciences which permits us to reduce many uncertainties, and our institutions like contracts and insurance which permit us to share or transfer risks, many hazards remain which must be carried personally by each individual or family. Each of these three principal ways of dealing with risk merits further examination.

1. *Reduction of Risk.* Since the essence of risk is uncertainty or lack of knowledge of the future, it follows that any improvement in our ability to forecast the future will reduce risk. In many fields scientific analysis has enabled us to recognize cause-and-effect relationships so that we can foretell results with some accuracy. In business relations there are many things that are aids in forecasting. For example: fa-

avorable spring weather strengthens the probability of good crops; large orders for steel indicate active work in the heavy industries; good crops sold for good prices suggest active buying of consumer goods; hot weather or a "flu" epidemic strengthens the demand for lemons; when the social leaders introduce a new style of gown, the middle and lower income groups will soon demand an adaptation of it.

New knowledge concerning the causes and cures of certain diseases has made it possible for the practice of preventive medicine to reduce both risk and loss. Epidemics of bubonic plague and smallpox, for example, have been reduced by improved sanitation and vaccination. The ravages of tuberculosis have been reduced through early diagnosis made possible by simple tests and inspection with fluroscopes and x-ray machines. This progress of medical science in the forecasting of disease has done much to conserve and regularize people's abilities both as wage earners and as consumers.

Engineering, also, has done much to reduce risks, especially those connected with physical hazards. The record of modern railroads for carrying passengers without injury is impressive. Highways, banked at the curves, with stop-and-go lights, underpasses, and marked lanes, permit the passage of quantities of traffic with a high degree of safety. Large buildings, tunnels, machinery for factory or farm, automobiles, and bridges are all designed and constructed to afford a remarkable freedom from physical risk to their users.

Government has played an important part in enforcing the use of preventive measures. Quarantines against human, plant, and animal diseases; traffic rules; safety requirements in factories; enforcement of adherence to weights, measures, and standards of quality; inspection and limited supervision of banks and other financial institutions; weather and crop forecasts; re-employment agencies; building codes; fire and police departments; all these are illustrations of government participation in the prevention of harmful events and in the reduction of risk.

It is still true, unfortunately, that we have not developed the precision and accuracy of knowledge necessary to foresee impending hazards in many fields. We cannot yet forecast the

weather with accuracy for more than a few hours or days in advance and, consequently, we cannot know the effect of future weather on standing crops. Similarly, we cannot tell just what circumstances or events will result in a sudden shift in demand; the women's clothing industry does not know what colors will be acceptable to consumers six months hence; Tom Thumb golf is the rage for only a year; a Paris Exposition, or a Duke's wedding, or a new Hollywood star, may or may not greatly influence the demand for certain fashionable merchandise. New inventions may make television a widely accepted reality at any time. Thus it is clear that neither supply nor demand can be forecast accurately for many things.

The working of our economic order is so complex that we cannot state many cause-and-effect relationships with assurance or precision. Will there be war in Europe and, if so, what nations will be involved and what changes in production and demand will follow? What will be the outcome of a particular labor dispute, when will it close, and what wages will be affected? Will business leaders decide to install new machinery and equipment, or get along for another year with their present layouts? Will the legislature pass a minimum wage law, or change the unfair trade act, or modify the tariff, or authorize the governmental purchase of "surplus" grain, or tax chain stores out of existence?

Industrial fluctuations or business cycles have been the subject of intense study to discover possible methods of forecasting their movements and preventing their severity. If we could know what factors cause a business depression, or precede it regularly, then certain controls might be used to prevent or reduce what is, perhaps, the most serious risk of present-day society. Many plans have been suggested, such as public works programs to be launched at the beginning of a decline in business, or a control of money and credit by some central agency, or various schemes to give more flexible prices, or the legal elimination of monopolies, or a guarantee of a certain number of weeks of work to all employees each year. This is not the place to discuss the relative merits and the shortcomings of these various proposals. Suffice it to say that, unfortunately, great uncertainty still exists concerning the future movements

of the trade cycle; as yet no one knows what remedies should be applied, at what time, or in what degree. Much, if not all, of the uncertainty in regard to trade cycles is the result of our inability to forecast the behavior of human beings.

What is true concerning the trade cycle is also true in some degree with many other risky situations. Whenever we have sufficient knowledge, we can alter or avoid hazardous conditions. We can provide protection against many natural risks, we can improve the safety of highways and machinery, we can, to a less extent perhaps, control human behavior so it will be more predictable and less injurious to others. There remains, however, much uncertainty, the burden of which must either be transferred to others or assumed personally by each individual.

2. *Transfer of Risks.* Individuals sometimes may transfer the effects of uncertainty to others. One may, for example, enter into a contract for the building of a house at a stipulated total cost. The contractor then bears the risk of change in the wage rate, or cost of materials, or unforeseen delays due to strikes, weather conditions, or anything else.

Generally speaking, the financial effects are the most transferable aspect of risk. In many cases, the individual conveys these to other people in an informal sort of way. Often, when misfortune falls upon an individual or family, so that their income is stopped or curtailed, they go to live with relatives or friends, or borrow sums that they will never pay back. In a somewhat more organized fashion, brotherhoods and fraternal organizations of various sorts may assume some of the individual's unforeseen burdens, through giving him direct financial aid, educating his children, supporting his widow, affording him vocational rehabilitation, and so on. Many voluntary charity groups give various types of assistance to needy individuals, thus transferring part of the costs of the latter's misfortune to others.

Aside from these more or less informal channels of risk transference, there are several devices which one may use in conveying some of his risks, or their effects, to others. By entering into a price or sales contract with someone else, for example, we may safeguard ourselves against the risks sur-

rounding price changes. Whether we actually avoid a loss, or bear one because of such a contract, depends on the nature of the agreement or the turn of events. Although the consumer does not use many sales contracts as a risk protection device, there are some instances in which they might be useful. Thus, if we buy coal or furnace oil in the summer for future delivery, we probably have contracted at the lowest possible price; then if the price does rise in the autumn the effect will fall on the dealer or on other consumers. Wage earners, through their trade unions, have used wage contracts sometimes to avoid certain risks which commonly fall on workers. Thus, by stipulating wage rates and security of employment in these contracts, the unions transfer to the employer the effect of decreases in production costs other than labor. It is true, of course, that the employer, faced with this situation, may raise his selling price, so that the consumer may be the final bearer of these costs.

In addition to sales contracts, individuals may transfer the effects of risks to others through the device we call insurance. This is based on the principle of combination—i.e., that by the law of averages the individual's risk of loss becomes a relatively certain cost for the group. Although we cannot know whether a particular house will be burned in a particular year, there is reasonable certainty that about the same number of houses out of a large total number scattered among many locations will burn each year. This is based on the mathematical theory of probability. By collecting data on the frequency and magnitude of losses in the past, and by using these data to estimate future losses, individual risks may be reduced to a definite cost, shared by the group. Rather than bear the entire risk of a fire destroying one's home, one may pay a certain insurance premium, thereby transferring a large part of any loss to the entire group of insurance purchasers.

Many of our risk problems can be solved through such combinations. Witness the many different kinds of insurance in existence: accident, health, and life, covering unforeseen happenings to people themselves; fire, theft, and burglary covering many types of possessions. It is true, however, that insurance is possible only where sufficient data on past losses are col-

lectible to serve as an estimating base for future losses, and in many fields this is not yet feasible. Many risks, therefore, have not yet been made insurable, but as new information becomes available additional risks may be cared for in this way. Unemployment and old age are two fields in which insurance principles are being tested somewhat experimentally at present.

There are some risks confronting the individual which society considers other persons responsible for, and transfers the losses to them through legislation. The liability of public carriers is an example. The passenger on a train, ship, street car or other such vehicle may transfer to these agencies the cost of any injuries he receives while on them. It is true of course that the exact nature of compensable injuries, or the amount of compensation, may have to be determined through litigation, but the responsibility as a whole rests on the carrier. Another example of compulsory risk-assumption by others is the Workmen's Compensation Law, existing in most of our states. Through it, the financial costs of industrial accident and disease are transferred to the employer. He, of course, may convey the costs to the consumer, through higher selling prices. The existence of this type of legislation motivates much of the work done by private organizations in reducing and preventing risks. Thus, this Workmen's Compensation Law is said to have given impetus to many of the accident prevention programs carried on by individual enterprises and trade associations.

Individual risks and their effects may also be transferred to the government—that is to taxpayers in general. This way of dealing with risk has increased in recent years. Witness, for example, the large burden of relief carried by the federal and state governments since 1930. For millions of people a considerable portion of the financial costs of unemployment were borne by the government; that is, by all of us who *are* working and earning. Moreover, the government today carries a part of the financial risks of old age for a considerable part of the population.

3. *Assumption of risk.* Even after exhausting the present possibilities of prevention and transfer, we must recognize that most of the individual's risks must be assumed by himself.

Society has not yet been able to prevent them, no device for transferring them exists, or, equally important, the individual cannot use the devices available. Poor people, who need to transfer their risks the most, are the least able to pay insurance premiums or to enter into advantageous sales contracts for future consumption goods. Moreover, for many of our risks we have at present no transferring device: if our property depreciates in value or we buy a good which does not yield the satisfaction anticipated, we alone bear the losses.

For some risks, we as individuals can make provision. Thus, to protect ourselves against the financial effects of risk, we may accumulate savings, reserves. Or we may set up alternatives; as a protection against possible unfavorable changes in opportunities in one occupation, for example, we may train ourselves for several.

On the whole, however, these provisions offer no protection against many forms of risk. Moreover, even limited protection is available only to the minority of people. Few of us have the opportunity, for example, to set up definite alternatives in our choice of, and preparation for, occupations. In the matter of financial reserves, as another illustration, an examination of income distribution in the United States reveals that for most of us, personal savings adequate for protection against illness, unemployment, and old age are impossible. In other words, most of us face our risks with little personal provision for them. This condition is a large factor in the social problems of today and it has led, recently, to many suggestions concerning new governmental or group activities in risk bearing.

One of the slogans of the present-day youth movement is, "Youth demands security." But does it—should it—and, if so, to what extent and in what form? College football would be a very different sport to play or watch if there were assurance before each game which team would win, by what score, and that there would be no injuries. Courtship would be a very different thing than it is if it were known in advance who would marry whom. Fishing would lose much of its thrill if we always knew just where and how to lure the largest trout. The practice of medicine would miss part of its inspiration

if every ailment could be diagnosed instantly and all the cures were known. Business would be a humdrum affair, indeed, if it consisted solely of supplying a known demand for standard goods. "Man against the Unknown" always has carried a romantic challenge which it is doubtful if present-day youth really wants to forego. The attaining of security involves, in many cases, giving up some part of the chance of gain, and youth must face the questions, how much of opportunity they will need to give up in exchange for security, and do they really want to pay the price? These questions are referred to frequently in the chapters that follow.

#### SUMMARY

Risk is universal because information and knowledge are imperfect. We do not know how the weather or other aspects of our environment will change; much less do we know how people will behave.

Uncertainty is associated with many causes and it has many effects on people. Attention has long been given to the effects on production, but the effects on consumers and consumption are equally real and often more intimate. Uncertain events may turn in one's favor or against one. They may affect personal income, abilities, tastes, desires, and, thus, consumption, in many ways.

The burden of risk may be dealt with in several ways. Uncertainty may be reduced by preventive or protective measures; it may be transferred to others; individuals may assume the effects of risk in the belief either that they can avoid them or that they can turn the uncertainty to their own advantage. Organized governments recently have tried many devices such as old-age pensions, bank-deposit guarantees, unemployment insurance, and minimum standards for commodities, to lessen the risks confronting individual consumers.

Forewarned is forearmed. To realize the presence of risk in its many forms is an aid in avoiding its effects; to realize its precise nature, its cause, and the possibility of shifting its effects to others, is often of great personal importance.

It is not clear that youth should desire to avoid all risk, for often the meeting of it full on brings the greatest thrills of life.



*Part II*

PRESENT-DAY CONSUMPTION



## CHAPTER 5

### AMERICA'S CAPACITY TO CONSUME

AS ALREADY pointed out, income may be thought of in its relation either to production or to consumption.<sup>1</sup> Over a reasonably long period of time, the production of goods and services must, of course, set an upper limit to the ability to consume. That is, we cannot consume more than we produce without reducing the existing stock either of goods on shelves and in storerooms, or of capital plants, until finally all stocks are brought to zero. So far as tangible goods and services are concerned, therefore, production may serve as a measure of capacity to consume, although some adjustment may be necessary between specific periods of time. More wheat may be ground into flour than is grown in any particular year, for example, but over a longer period the harvest will limit the milling.

Among recent attempts to measure total national income in the United States, the most nearly complete and satisfactory are probably those of (1) the Bureau of Foreign and Domestic Commerce of the U. S. Department of Commerce, (2) the National Bureau of Economic Research, and (3) the Brookings Institution.<sup>2</sup>

In the report of the second of these sources, national income is defined as follows:

National income may be defined as the net value of commodities and services produced by the nation's economic system. It is "net" in that the value of output of all commodities and services is reduced by the value of commodities (fuel, raw materials and fixed equipment) consumed in the process of production. And it refers, by

<sup>1</sup> See Chapter 3.

<sup>2</sup> *National Income in the United States, 1929-1935*, Bureau of Foreign and Domestic Commerce, *National Income, 1919-1935*, by Simon Kuznets, Bulletin 66, National Bureau of Economic Research, and *The Income Structure of the United States*, by Maurice Leven, The Brookings Institution.

design, to the net product of the economic system, which, for the advanced nations during recent decades, may be identified with the market economy; provided "market" is understood broadly as the meeting-place of all buyers and sellers, no matter how much the freedom of transactions may be curbed by custom or regulation. National income is thus that part of the national product which is largely imputable to individuals who contribute to production either their labor or the services of their property. In return for this participation these individuals receive compensation, which accounts for the preponderant share of national income produced in any given year. But there may be two other elements in national income. First, the producing enterprises may make payments not only to individuals who, in a given year, participate in the productive process, but also to individuals who participated in it in the past or have not participated at all. Pensions, compensations for injuries, relief payments, and charity contributions by business enterprises are channels through which income produced in a given year may be paid to individuals other than those sharing in the process of producing it. Second, enterprises may distribute to individuals amounts not necessarily equal to the part of national income that these enterprises produce. In some years a business firm or other producing enterprise may pay out to individuals an amount smaller than its share in national income thus retaining what we designate as positive savings of enterprises. In other years an enterprise may distribute to individuals an amount larger than its own share in the national total, thus giving rise to negative savings of enterprises. If we designate all receipts by individuals from the producing enterprises as income payments to individuals, national income is equal to the algebraic sum of incomes paid to individuals and of savings of all enterprises.

Estimates of national monetary income under this definition are given in Table 5 for the years 1919 to 1936 inclusive. These original estimates are of some direct interest, but for our present purpose they are much more illuminating after they are adjusted for changes in the general level of prices and also for the change in national population. Data are included in Table 5, therefore, which report the annual monetary income in terms of 1929 prices and as an average per person.<sup>3</sup> This latter figure, i.e., the average per capita income in 1929 prices, is also shown in Fig. 14.

During the first ten years of the period under review, namely,

<sup>3</sup> See discussion of adjusting data in current dollars to prices in a particular year in Chapter 3.

1919-1929, there was a pronounced and fairly consistent increase in per capita production and, consequently, in capacity to consume. This trend was broken sharply in the next five

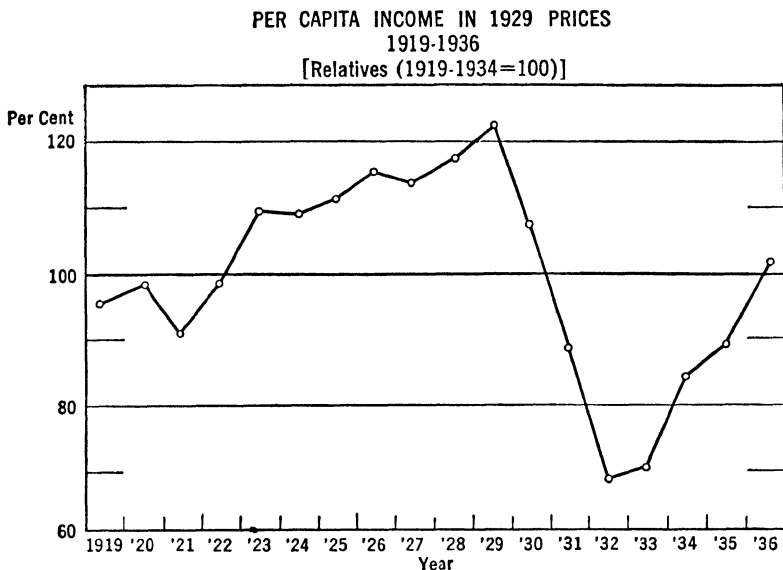


FIG. 14. The per capita income in 1929 prices was derived from the table of national income in current dollars as follows:

1. That part of the national income that went to consumers each year was adjusted for changes in prices of consumer goods and services by dividing the dollar figures by the Bureau of Labor Statistics index of wage earners' cost of living.

2. The annual totals in 1929 prices so derived then were divided by the number of consumers to get the per capita income.

The marked rise in per capita income that occurred during the pre-depression period was more than offset by the precipitous drop from 1929 to 1932. This decline in per capita income resulted in part from a decrease in total national production and in part from an increase in population. (Source: Kuznets, Simon, *National Income 1919-1935*, National Bureau of Economic Research, Bul. 60, p. 3.)

years, however. The reduction from \$689 in 1929 to \$389 in 1932 represented, of course, a major economic catastrophe. The outstanding characteristic of the entire 17-year period is, perhaps, the suddenness and severity of the fluctuations commonly thought of as "recessions," "depressions," "recoveries," and "prosperity" or "booms." This phenomenon and its effect

on consumption will be discussed in more detail in the next chapter.

It will be recalled that national income has been defined as "the net value of commodities and services produced by the nation's economic system." These commodities and services are of many sorts and they have varied industrial origin. They all result from the application of human labor (physical and mental) to natural resources. They may each be placed in one of several classifications based upon the type of industry that gives rise to each. One commonly accepted classification of industrial origins is comprised of the following ten classes:

- |  |                                       |
|--|---------------------------------------|
| 1. Agriculture                               | 6. Trade                              |
| 2. Mining                                    | 7. Finance                            |
| 3. Manufacturing                             | 8. Government                         |
| 4. Construction                              | 9. Personal and professional services |
| 5. Transportation and other public utilities | 10. Miscellaneous                     |

Each of these classes might be subdivided, of course, into many sub-classes. Agriculture, for example, includes such diverse productive enterprises as wheat farming, cattle fattening, and the raising of tomatoes in hot houses; manufacturing includes the making of paper flowers and of railroad locomotives; construction embraces both houses and harbors; and so we might go through each of the groups supplying almost endless detail. Later in this book some attention will be given to these details in the consideration of the consumption patterns of groups and individuals. For the present, discussion is confined to the general classes.

In Fig. 15 is shown the percentage of the total national income that originates in each of the ten industrial classes.<sup>4</sup> Manufacturing contributes the largest percentage to the total income, an amount averaging about 21 percent. That is to say, the value that is added to raw materials in the manufacturing and processing industries is about one-fifth of the total value created annually in the United States and, correspondingly, the change in form of commodities represents one-fifth of

<sup>4</sup> Data from Kuznets, *op. cit.*, p. 5.

the ability of the people to consume or to receive satisfactions. The raw materials produced in the agricultural and mining industries represent about one-tenth of the total. The services

TABLE 5

## NATIONAL INCOME, TOTAL AND PER CAPITA, 1919-1936

YEAR	TOTAL NATIONAL INCOME		PER CAPITA
	<i>Current Prices</i> (millions of dollars)	<i>1929 Prices</i>	<i>In 1929 Prices</i>
1919 .....	60,161	56,424	538
1920 .....	72,689	59,368	559
1921 .....	58,521	55,192	511
1922 .....	59,857	60,615	552
1923 .....	69,895	69,214	620
1924 .....	70,557	69,978	616
1925 .....	75,026	73,034	633
1926 .....	79,658	76,639	655
1927 .....	77,608	76,273	643
1928 .....	80,559	80,392	669
1929 .....	83,631	83,614	689
1930 .....	73,111	74,740	609
1931 .....	56,089	62,618	506
1932 .....	39,555	48,554	389
1933 .....	39,247	51,121	407
1934 .....	47,960	59,684	472
1935 * .....	53,118	63,832	501
1936 † .....	63,789	75,050	580
Average 1919-1934 .....	68,296	65,058	586

\* The estimates of national income for 1935 in this and subsequent tables rest upon a much more slender foundation than those for the earlier years.

† Calculated from data published by the Department of Commerce.

performed by government (police, fire protection, highways, schools, welfare activities, forest management, and a host of other things) are a growing portion, now equaling over 15 per cent of the total. Trade, and the service group (doctors, lawyers, barbers, housemaids, and so on) each account for between 10 and 15 percent, while the transportation-communication group and the financial group of services each equal about 10 percent.

This listing shows both the relative importance of production in the several groups and something of the relative value of things made available for consumption. It is interesting to note, for example, that we make available for consumption annually at least five times the value of personal and professional services as we do of the products of the construction industries.

PERCENTAGE DISTRIBUTION OF NATIONAL INCOME  
BY INDUSTRIAL ORIGIN 1919-1935

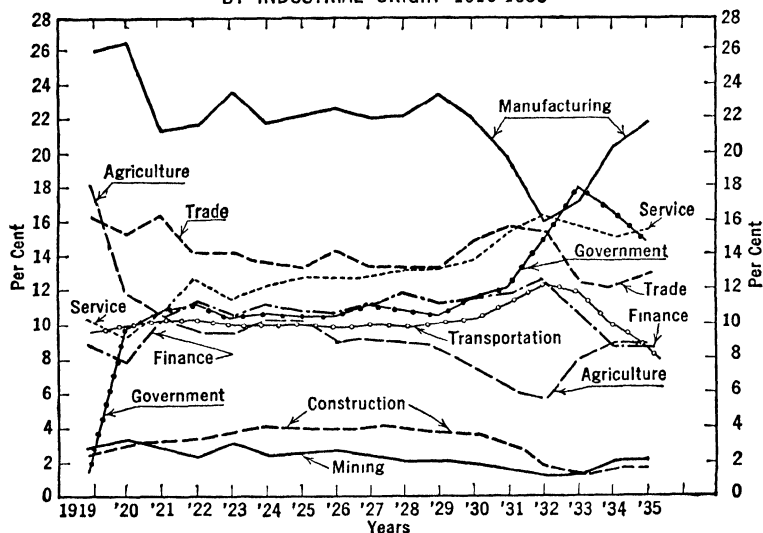


FIG. 15.

Trade is 50 percent more important to us as a nation than the products of agriculture and five times as important as the products of mines. At least these comparisons appear to be true when we measure our relative consumption by the amount that we pay in money and effort for the products of different occupations.

There have been some notable changes recently in the relationship among the industrial groups. The personal and professional services such as those performed in beauty parlors, lawyers' offices, hospitals, and so on, are becoming a larger proportion of the total; so are trade and governmental services. Material production in mining, agriculture and manufacture is becoming a smaller proportion. Perhaps these

changes are largely the result of increasing efficiency in the production of material goods relative to production of services; in part the change in importance of governmental services is accounted for by an increase in the number of things done by government instead of by private industry, such as the furnishing of power by municipal plants. These relationships will be considered in more detail when we come to discuss the patterns of consumption.

The facts concerning the relative importance of each different line of activity in our complete program of consumption are significant for many considerations. For example, the opportunity for employment in the different lines will be roughly proportioned to the income produced in each. This, in turn, will suggest the relative number of people who should be given opportunity and encouragement to train for each line of activity, and thus we can plan the educational facilities that should be provided.

As another illustration, we may consider the significance of the fact that the value produced by the processes of manufacture appears to be more than double that produced in agriculture. It would seem to follow that a 10 percent reduction in the value added by manufacturing would have twice as much effect on national income and ability to consume as would a 10 percent reduction in the value of farm products. This suggests that the slogan "as the farmer prospers, so prospers the nation," while true to a degree, is really less completely true than the slogan "as manufacturing labor prospers, so prospers the nation." This has its bearing, in turn, on public policies of control and aid for agriculture and industry. Some questions of policy covering such matters will be discussed in Part III.

Total income may be divided, also, among the various classes of claimants or recipients. It has already been said, but it bears repeating, that production of income results from the application of labor to various natural and man-made resources. Income is paid out to individuals and groups in return for their labor and for the use of whatever resources they may own. It is informing to note, therefore, the proportions

of total income that have been paid out for labor, on the one hand, and for ownership, on the other.

In Table 6 the estimates of the Department of Commerce are presented covering the division of income just referred to. From this table it will be noted that the reported compensation of employees has been approximately 65 percent of total income in each of the 8 years from 1929 to 1936 inclusive. In order to get a measure of total personal earnings it is necessary to add to this figure of 65 percent an undetermined part of the approximately 16 percent of total income credited to "entrepreneurial withdrawals." This classification includes both the "personal earnings" and the "return on ownership" of the many small operators whose accounting makes no distinction between the two sources of income. A grocer, for example, may own a building in which he has both his store and his home; both he and his wife may wait on the customers; his money is invested both in the building and in the stock of groceries. During a year he may take from the business enough money for his clothes and other living expenses and make no distinction between the amount that resulted from his labor as a clerk, his judgment as a buyer, or the use of his building and his investment in stock. All such sums are lumped together in Table 6 as "entrepreneurial withdrawals." The income of nearly all farmers, many retail shopkeepers, some professional men, and a few in all lines of endeavor fall in this group. Probably at least two-thirds of these entrepreneurial withdrawals are reward for personal effort. On this assumption, wages account for a little over 75 percent of total income while property rights represent a little less than 25 percent. In other words, direct personal effort is over three times as important in total as a source of income as is ownership of all forms of property. This is an important point for consideration in connection with the continuous controversy between "capital" and "labor" over the division of income. It is significant, also, in showing that "labor" has over three-fourths of the total capacity to consume in the United States.

TABLE 6  
PERCENTAGE DISTRIBUTION OF NATIONAL INCOME BY  
TYPES OF PAYMENT

	1929	1930	1931	1932	1933	1934	1935	1936
Total compensation of employees . . . . .	65.5	64.8	64.4	64.0	65.2	66.3	66.4	66.5
Total dividend and interest . . . . .	14.3	15.5	15.9	16.3	15.6	14.5	13.9	14.3
Total rents and royalties . . . . .	4.4	3.8	3.4	3.0	3.0	3.2	3.2	3.4
Entrepreneurial withdrawals . . . . .	15.8	15.9	16.3	16.7	16.2	16.0	16.3	15.8
Total income paid out	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

It is interesting to carry the division of income one step further and show the general fields in which personal effort gives rise to income as well as the relative importance of each field. In each of the census years of 1920 and 1930 approximately 40 percent of the total population was reported as gainfully employed at some economic task. These gainfully employed people were distributed among the several basic lines of endeavor as shown in Table 7.

TABLE 7  
GAINFUL WORKERS 10 YEARS OLD AND OVER

Percentage by Occupations

Occupation	1920	1930
Agriculture . . . . .	25.6	21.4
Forestry—fishing . . . . .	.6	.5
Mining . . . . .	2.6	2.0
Manufacturing . . . . .	30.9	28.9
Transportation and communication . . . . .	7.4	7.9
Trade . . . . .	10.2	12.5
Public service . . . . .	1.8	1.8
Professional service . . . . .	5.2	6.7
Domestic and personal service . . . . .	8.2	10.1
Clerical . . . . .	7.5	8.2
	100.0	100.0

The most important changes in the ten-year period are: (1) the reduction of the percentages in agriculture and manufacturing; (2) the increase in the percentages in professional

and domestic service and in trade. None of these changes are very large, but the downward trend in agricultural employment and the upward trend both in professional services and in trade have been continuing for some time and probably will continue in the future with perhaps a new upward swing in public service developing rapidly.

Some further details concerning the occupations of people in different parts of the United States are shown in Table 8. From these data it will be noted that the importance of agriculture as a field of occupation is particularly high in both North and South Dakota. It is well above the national average in states like Minnesota and Wisconsin, while it is well below the national average in states like Illinois and New York. In these latter two states manufacturing is a more important field for employment than it is for the nation as a whole. Moreover, in New York particularly, the fields of commerce and trade, service enterprises, and clerical occupations absorb an unusually high percentage of the gainfully employed. These general facts are well known, of course, to anyone at all familiar with economic developments in different parts of the country, but it is helpful to have specific verification of our general observations on the matter.

TABLE 8  
NUMBER OF GAINFULLY OCCUPIED PERSONS  
PER 1,000 POPULATION

In the United States, Minnesota and Other Selected  
States—1930

	<i>Total</i>							
	<i>U.S.</i>	<i>N.Y.</i>	<i>Ill.</i>	<i>Wisc.</i>	<i>Minn.</i>	<i>Iowa</i>	<i>S.D.</i>	<i>N.D.</i>
All occupations .....	399	439	417	384	387	369	357	352
Manufacturing and mechanical .....	115	147	136	124	81	70	40	32
Agriculture, forestry and fishing .....	88	22	46	101	121	133	189	197
Transportation, commerce and trade .....	81	100	98	72	80	79	59	55
Service .....	74	100	79	59	70	62	55	54
Clerical occupations ...	33	60	50	27	31	21	12	12
Extraction of minerals..	8	1	8	1	4	4	2	2

From Table 9 it will be noted that in a city like Minneapolis, for example, clerical workers form the largest group of the

gainfully occupied, with skilled laborers second, and proprietors and officials third. Clerical workers, professional and semi-professional workers, and semi-skilled laborers showed important increases relative to the total number during the twenty years from 1910 to 1930, while skilled laborers and common laborers declined, and proprietors and officials remained about constant in relative importance. Thus in Min-

TABLE 9

DISTRIBUTION OF GAINFUL WORKERS IN MINNEAPOLIS

Distribution of Gainful Workers in Minneapolis According to Occupational Groups—1910, 1920, and 1930

Occupational Group	Total		
	1910	1920	1930
Proprietors and officials . . . . .	20,456	28,850	30,793
Skilled laborers . . . . .	34,257	39,341	41,788
Semi-skilled laborers . . . . .	12,666	16,849	23,423
Common laborers . . . . .	24,755	21,903	20,075
Professional and semi-professional workers . . . . .	8,362	12,600	17,484
Servants . . . . .	14,974	13,995	20,075
Clerical workers . . . . .	26,315	41,108	54,262
Government employees * . . . . .	1,237	1,771	2,176
Government officials . . . . .	324	536	641
Miscellaneous . . . . .	136	327	348
<b>Total . . . . .</b>	<b>143,482</b>	<b>174,289</b>	<b>211,928</b>
	Percentages		
Proprietors and officials . . . . .	14.3	14.8	14.5
Skilled laborers . . . . .	23.9	22.6	19.7 —
Semi-skilled laborers . . . . .	8.8	9.7	11.1 +
Common laborers . . . . .	17.3	12.6	9.9 —
Professional workers . . . . .	5.8	7.2	8.2 +
Servants . . . . .	10.4	8.0	9.5
Clerical workers . . . . .	18.3	23.6	25.6 +
Government officials . . . . .	0.2	0.3	0.3
Government employees * . . . . .	0.2	1.0	1.0
Miscellaneous . . . . .	0.2	0.2	0.2
<b>Total . . . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* This group does not include government employees who could be properly classified in other groups. For example, public service laborers have been included in the common labor group, and government clerical employees in the clerical groups.

neapolis there continues to be a large group working on their own initiative as proprietors and officials. At the same time, however, there is an increase in the proportion of people engaged in the clerical and semi-skilled occupations. This increase comes, in part, from the increasing mechanization of industry with the accompanying decrease in the opportunity for skilled artisans to ply their trade, but, fortunately, it comes in larger part from the decrease in jobs requiring common labor.

We have said that consumption is limited by the volume of production. If we do not have all we want to consume as a national group, it is because we do not produce enough in total. Harder work, or better (i.e., more efficient) organization and work, or both, are essential if we are to increase our ability to consume.

Apparently our production is not limited to its present level by our supply of natural resources, capital goods, and labor. At least, the Brookings Institution has made a careful and elaborate study of America's capacity to produce which leads to this conclusion.<sup>5</sup> This study shows that in the peak year, 1929, and in the prosperous period, 1925-1929, the capital plant of the country was actually utilized only to between 70 and 85 percent of its practical capacity. This is a composite estimate, including all types of capital plants such as farms, factories, stores, railroads, power plants.

The same study indicates that there was sufficient unutilized labor supply to bring the estimated plant capacity into full use. This unused supply of labor was not distributed, however, in precisely the way to bring about such a result. Many minor shifts would be required throughout industry and, as a major shift, perhaps a million workers would need to be moved into the mining and manufacturing industries from agriculture and trade. Admitting the possibility of such shifts, however, the production of the country could be raised by, perhaps, 20 percent just by keeping our unemployed people and machines busy.

<sup>5</sup> E. G. Nourse, et al., *America's Capacity to Produce*, Brookings Institution, 1934.

This is not so easy of accomplishment as it might seem. During the World War an heroic effort was made to maximize the nation's flow of production. In that effort there were combined the inducements of patriotism, social pressure, high prices, and some measure of actual coercion. Even so, and making all reasonable allowance for the men withdrawn from industry into direct warfare, our production expanded only 15 percent above the expected normal level, and less than that above the peace-time performance in 1929 that we have just been discussing.<sup>6</sup> This is the best we have been able to accomplish so far, even under strong inducement.

Some people believe that we should—and could—do much better. Stuart Chase, for example, in *The Tragedy of Waste* estimates that about 50 percent of all our man power is wasted. We quote from his concluding chapter:<sup>7</sup>

We may list one by one the outstanding items of loss and leakage which the survey has disclosed, and beside them give such quantitative estimates as are capable of rough verification, and which do not duplicate with estimates in other fields. An addition of such estimates should give at least a minimum record of the margin of wasted man-power. Bring these totals together:

The man-power going into illth <sup>8</sup> is at least . .	8,000,000
The man-power idle on a given working day is at least . . . . .	6,000,000
The man-power wasted in production methods is at least . . . . .	4,000,000
The man-power wasted in distribution methods is at least . . . . .	2,500,000
A total of at least . . . . .	<u>20,500,000</u>
Against an able-bodied adult population of approximately . . . . .	40,000,000
Giving a minimum ration of waste of almost . .	50%

By this showing, we have reason to believe that the labor power is available to at least double current output; and, further, that through improved methods of exploitation, there is adequate raw material available with which to double it without exhausting natural resources at any greater rate than they are now being exhausted.

<sup>6</sup> See Nourse, *op. cit.*, pp. 426-429.

<sup>7</sup> Stuart Chase, *The Tragedy of Waste*, p. 270, Macmillan, 1925.

<sup>8</sup> Illth—a word derived from ill and meaning a disastrous or harmful condition: the antithesis of wealth!

The war-time experience would seem to belie this estimate or, at least, discount it strongly. Perhaps it may be suggested, however, that what we have need of is neither man power nor natural resources, but brain power that will permit us to use efficiently the available supplies of the other two. And it may be pointed out, also, that perhaps Mr. Chase has omitted from his list the most devastating of all forms of waste, namely, the production of the right things, but at the wrong time or in the wrong amount. Whenever man-power and natural resources are combined into products which no one with purchasing power will buy, then the effort might as well have been spent in beating tom-toms or in chasing any will-o'-the-wisp that strikes the fancy. And when business leaders think they have made such a mistake, their immediate reaction is to retrench, dismiss their employees, cancel their orders for raw materials, and upset the established flow of income. If our business leaders had wisdom and insight enough to forecast both the kind and the quantity of things that people will be willing and able to buy at prices that will cover costs, we might be able to keep our plants operating at full capacity. Then our consumption would be limited only by the stage of our technical ability in production. Unfortunately such inspired leadership does not exist. One of the purposes of education, surely, is to aid in its development.

If we could double the effectiveness of our man power, what would be the effect on consumption? Obviously, as will be pointed out in more detail later, we would not double the existing supply of everything, but we would develop our increases only in certain lines. Food would need comparatively little increase in total amount. Clothing output would hardly need to be doubled. Since these two items combine into 40 or 50 percent of the expenditures for consumption of the masses in this country, the labor saved through efficient production in these lines would permit much more than doubling in some others—improved housing construction, for example, or education and recreational facilities. The details of an enlarged program of consumption are discussed more fully in the chapters on consumption patterns.

## SUMMARY

The possibility of consuming goods and services is dependent, first of all, upon the existence or production of the things to be consumed. The total production of a commonwealth or a region generally is measured in terms of dollar values, although this is admittedly only an approximate measurement.

The total national money income for the United States has fluctuated widely during the past 20 years, the high figure being \$689 per capita in 1929, and the low figure being \$389 in 1932. About 75 percent of the total money income has gone to individuals in payment for their personal services of all sorts. Value added by manufacture, agriculture, and trade are the three largest sources for the production of national income.

Apparently our production is *not* held at its present level by our supplies of natural resources, capital goods, and labor, so much as it is by the lack of intelligence, integrity, and industry with which we utilize our resources. Moreover, if we could find ways of increasing income, the production of some things would merit much greater increases than would others.

## CHAPTER 6

### VOLUME OF CONSUMER GOODS AND SERVICES

**A**NNUAL data on income produced do not give an accurate account of income consumed in that year. This is so even after adjustments have been made for changes in population and in price level as suggested in the preceding chapter. At least two additional difficulties are encountered in any attempt to infer the level of consumption from figures that show the total of annual production. In the first place, both producer and consumer goods are included in the data on total production, and the proportions between the two are changing constantly. In the second place, durable consumer goods are used for many years so that changes in their *annual* production either may have little effect on their use, or such effect as the changes do have may be delayed for one or more years.

The year is a convenient and meaningful unit of time for many purposes, but for other purposes it is arbitrary and ill-suited. Especially when agriculture is the dominant industry there is a natural reason for considering the year as a unit because most crops are grown once a year. Even in a strongly agrarian society, however, annual production and consumption need not coincide. The consumption of the seven fat kine by the seven lean kine in Pharaoh's dream was interpreted by Joseph into an early recognition of the possible lack of balance between production and consumption on an annual basis. The same basic consideration is involved in the current discussion of an "ever-normal granary."

In the case of manufacturing industries there frequently is no close relationship between production programs and the year as a unit of time. The construction and outfitting of a plant may take  $\frac{1}{2}$ ,  $1\frac{1}{2}$ , 2,  $2\frac{3}{4}$  years, or any other fraction or multiple, just as "naturally" as a single year. Moreover, when a new plant is being built some of the forces of production are

engaged in the enterprise, and no consumer goods are emerging from it at the moment. When the plant is completed, on the other hand, labor is released, additional construction materials are not required, some of the forces of production are used to operate the new plant, and consumer goods begin to flow from it. Then it may be unnecessary for several years to reproduce any important part of the plant although consumer goods are being produced in it continuously.

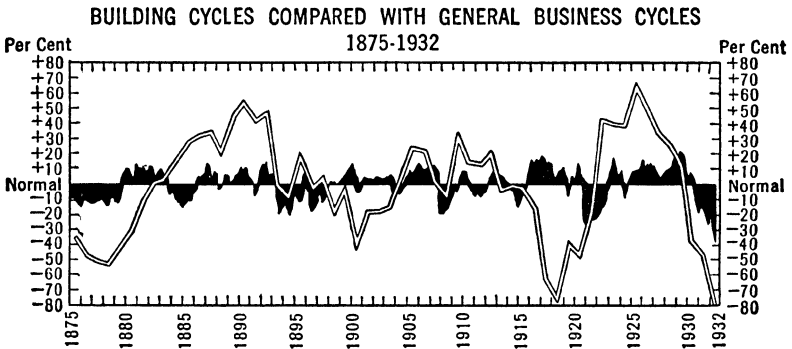


FIG. 16. The solid black areas represent cyclical fluctuations in business. Superimposed is a double-line curve which shows the magnitude of fluctuations in building activity in the United States. The major waves of building activity seem to be of much greater length and magnitude than those of general business. It may be noted also that the timing of the two curves does not agree. (Source: Artman, et al., *The Construction Industry in Minnesota*, p. 8, University of Minnesota Press, 1934.)

The same general phenomena may occur in the production of durable consumer goods. Perhaps the most striking illustration is found in the building industry. Fig. 16 shows the marked changes in annual construction of buildings in the United States, varying from 20 percent of normal to 165 percent. These changes do not mean, of course, that people lived in poorer houses or consumed less of housing accommodations each year that construction declined. Doubtless the annual consumption of housing has been much more uniform than construction during the period depicted. Automobiles furnish another illustration. In each of the years 1932 and 1933 only 30 percent as many new automobiles were purchased in the United States as in 1929, but the consumer purchase of gaso-

line was almost exactly the same during those depression years as in 1929. In other words, although the production and purchase of automobiles were curtailed greatly during the depression, their *use* was not.

Thus in any one year consumption may be either greater or smaller than production because of changes in the proportions of consumer and producer goods that are made, or because of changes in the rate of production of durable consumer goods. In the long run, however, consumption is set by total production.

While consumption in the aggregate is limited by production, there are circumstances that cause it generally to total less than production. For example, expenditures for military and naval armaments constitute an important element in the total volume of industrial production in the world, but they do not swell the total consumption of individuals, at least as we ordinarily conceive consumption. The labor and material resources that are devoted to armaments might otherwise have been turned to the production of food, clothing, recreational facilities or other typical forms of consumer goods and services. In Table 10 the movement of world production of armaments is compared to the movement of all manufacturing production in the United States from 1928 to 1936 inclusive. The marked relative increase of armament manufacture during the depression of the 'thirties is strikingly apparent. Since consumption is limited by production, this diversion of activity towards the making of armaments reduced consumption, as ordinarily considered, at a time when it was already very low.

There are other forms of production that do not result in consumption as we ordinarily conceive of it. Protection against crime is, perhaps, the outstanding illustration. Police, penitentiaries, and court systems seem to be necessary to the orderly conduct of any commonwealth, but they do not add directly to the goods and services that increase the satisfaction of the consumer. All regulation by government agencies falls into this category: the people who do the regulating *receive* part of the total income, but the only way in which they *produce* any of that income is indirectly, by making it possible for others to produce more than they could without protection or regulation.

TABLE 10

INDICES OF WORLD ARMAMENT EXPENDITURE AND TOTAL PRODUCTION OF MANUFACTURES IN THE UNITED STATES \*

(1926 = 100)

	<i>Armaments</i>	<i>U. S. Manufactures</i>
1928 .....	100	104
1929 .....	104	110
1930 .....	110	88
1931 .....	102	74
1932 .....	96	59
1933 .....	94	70
1934 .....	108	72
1935 .....	160	83
1936 .....	217	97

\* Armament data, weekly report for January 13, 1937, of the German Institute for Business Research. U. S. Manufactures data, Federal Reserve Board Index.

Perhaps the illustration of armaments is only a special case of producer goods, although it seems to have some very real points of difference. When labor and material are used in construction of capital plant, it is expected that the flow of consumer goods will be increased later. It is by no means certain, on the other hand, that the production of armaments will have a similar result. Of course machine guns and battleships finally are consumed in the sense that they are used up, but certainly the majority of people get no satisfaction out of the consumption.

However we may classify this special case, there is convincing statistical evidence that the fluctuations in business activity, from prosperity to depression and back again, are characterized by great, wave-like variations in the production of durable goods.<sup>1</sup> Since the durable goods may be made to last for long periods their replacement may be postponed when business prospects are not too bright. Frequently it is impossible, on the other hand, to postpone buying such goods as food, clothing, gasoline, tobacco, soap, and so on. The volume

<sup>1</sup> The Federal Reserve authorities classify as durable goods those industrial products that are made from lasting materials such as metals, lumber, stone, clay, and glass. The non-durable goods are made from shorter-lived materials such as chemicals, foodstuffs, leather, paper, rubber, textiles, and tobacco.

of production of non-durable goods does not fluctuate greatly between good periods and hard times and, consequently, em-

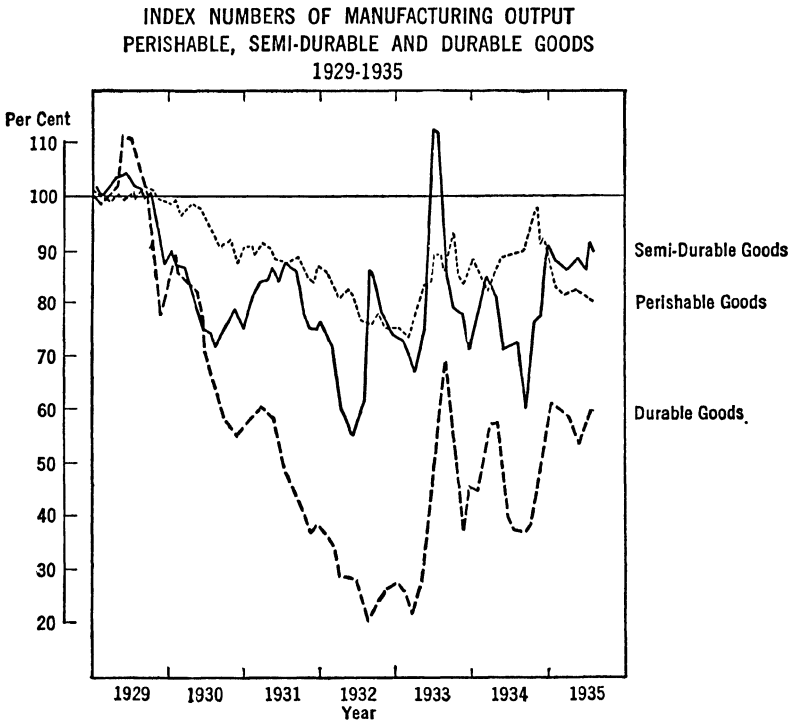


FIG. 17. The general trend of the three curves is similar; that is, the manufacturers in all three fields retrenched during the depression period. However, the curve of production of perishable goods differs from the other two in regard to magnitude and length of fluctuations. This is to be expected since there can be very little manufacture for stock on the one hand and very little postponed consumption on the other. The production of durable goods, in contrast, can be postponed during "tight" periods because consumers can continue to use their present supply rather than replace it with newer models, as they would under more favorable general conditions. (Source: Bliss, C. A., *Production in Depression and Recovery*, p. 6, National Bureau of Economic Research, Bul. 58.)

ployment in the non-durable goods industries is relatively stable.

In Table 11 the changes in the physical volume of manufactures in the United States are analyzed according to three classifications of commodities. Each of these classifications

permits some understanding of the effect of durability and use on the fluctuations in production. It must be emphasized, however, that the consumption of durable consumer goods probably was much more nearly constant during the period than was their production; also the *use* of capital equipment might have been more constant than the production. The first of the three classifications in the table is shown also in Fig. 17.

TABLE 11  
CHANGES IN PHYSICAL VOLUME OF MANUFACTURING  
PRODUCTION ACCORDING TO DURABILITY\*

	1927-1934							
	1927	1928	1929	1930	1931	1932	1933	1934
All Manufactures . . . . .	100	108	116	98	83	66	75	80
A. Durable goods . . . . .	100	114	122	95	67	44	52	61
Semi-durable goods ..	100	102	107	90	90	80	92	91
Non-durable goods ...	100	105	112	108	101	90	93	96
B. Consumption goods ..	100	107	115	101	93	80	88	90
Capital equipment ...	100	115	126	96	66	45	52	65
Construction material..	100	104	106	83	59	35	42	46
C. Consumption goods								
Durable . . . . .	100	122	132	105	80	57	66	77
Others . . . . .	100	103	109	100	96	87	94	94

\* Bliss, Charles A., *Production in Depression and Recovery*. National Bureau of Economic Research, Bulletin 58, pp. 6-7.

In 1932 the production of non-durable consumer goods was 13 percent below the 1927 level. That 13 percent reduction doubtless had a serious effect on the consumption of many individuals since to many, such a cut means the difference between being fed and being hungry, being warm and being cold. The combined production of capital equipment and construction material, in contrast, was 60 percent lower in 1932 than in 1927. If this drastic reduction had been immediately and fully reflected in curtailment of consumption, the effect would have been almost unbearable. If, for example, 60 percent of the population had been forced to live without houses or all jammed in with others, a very serious situation would have resulted. Fortunately, as already pointed out, the replacement of durable goods may be postponed and, consequently, it may

EMPLOYMENT OF PRODUCERS  
1919-1934

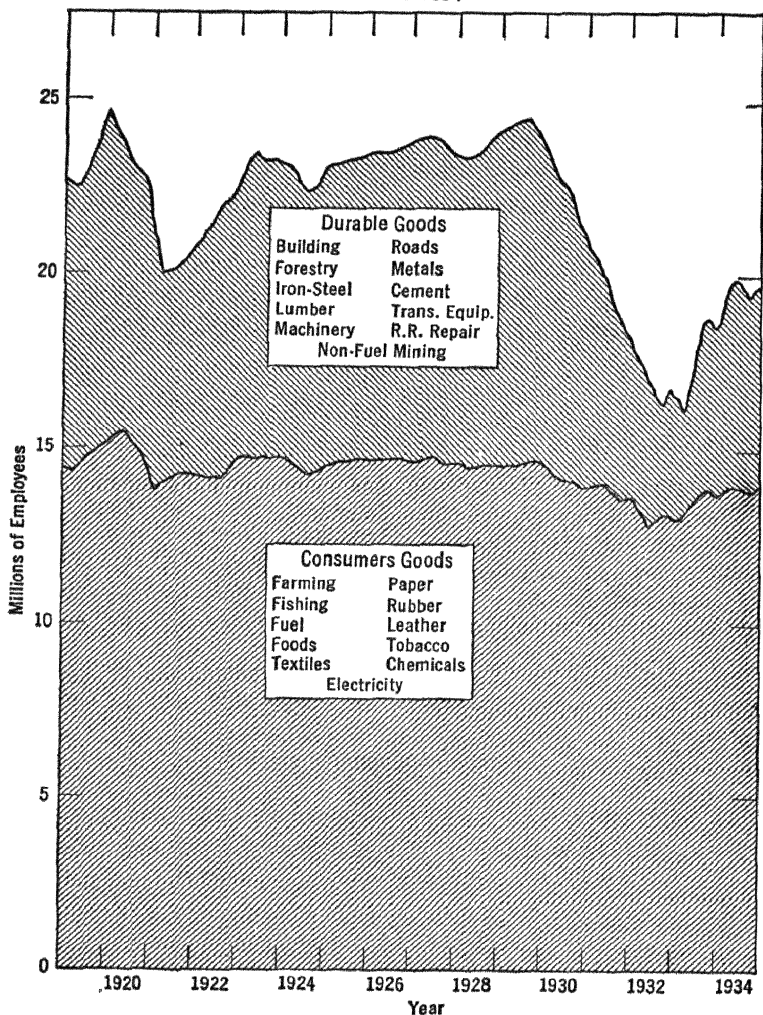


FIG. 18. The employment of all the producers of goods monthly over the past 16 years is represented by the *total* distance from the base line to the upper curve in the above diagram.

The lower part of the diagram represents employment among producers of consumers goods which include the kinds of things represented by the list in the lower part of the diagram. These, in the main, are commodities which must be replaced relatively quickly. It will be noted that there has been some variation in employment in these fields, as in the depressions

well be that no more serious curtailment of their use occurred in the recent depression than that reported for non-durable goods. In fact, the curtailment may have been even less severe in the consumption of things like housing—although many families doubled up in cramped quarters—than in the consumption of clothing.

In quite another way, however, the fluctuations in the production of durable goods are very important. When production is reduced, employees are put on part time or discharged, plants stand idle, and the flow of money income in the form of wages and profits is interrupted. This affects the purchasing power of some individuals in both the wage-earning and the property-owning classes. Consumption programs are necessarily modified as a result.

That much of the fluctuation in employment occurs in the durable goods industries is emphasized by the data presented graphically in Fig. 18. Here is represented the total employment of all the producers of goods from 1919 to 1934 inclusive, classified into two groups. The total number has fluctuated during the period from a low point of about 17,500,000 to a high point of about 24,500,000. Although only about one-third of the employment normally occurs in the durable goods industries, fully three-quarters of the fluctuation is there.

Fluctuations in employment are accompanied, of course, by fluctuations in unemployment. Data showing the lines of industry which contributed the most to unemployment during the 1930s are presented graphically in Fig. 19. It is again evident that the consumption goods industries are much more stable than are other lines. All of the data that have been examined on this point lead to the general conclusion that the

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of 1921 and 1932 but on the whole unemployment has not been a serious problem here.

The upper part of the diagram represents employment among producers of durable goods, which are such things as are indicated by the list in the upper section. These durable goods are long-lasting, and because of this fact, as pointed out in Fig. 17, new purchases may be postponed in depressions. Unemployment in this field, especially during the depression of 1921 and 1932, has been severe. During the 16-year period more than  $\frac{3}{4}$  of the total unemployment of producers of *all* goods was found in the durable goods field which hires less than  $\frac{1}{2}$  of total wage earners. (Source: *Business Bulletin*, The Cleveland Trust Co., May 15, 1935.)

total consumption of physical goods is a fairly stable matter, far more stable, certainly, than the broad indices of industrial fluctuations might lead us to suppose.

It is by no means easy to show what national consumption consists of in total for any one year. Data from various

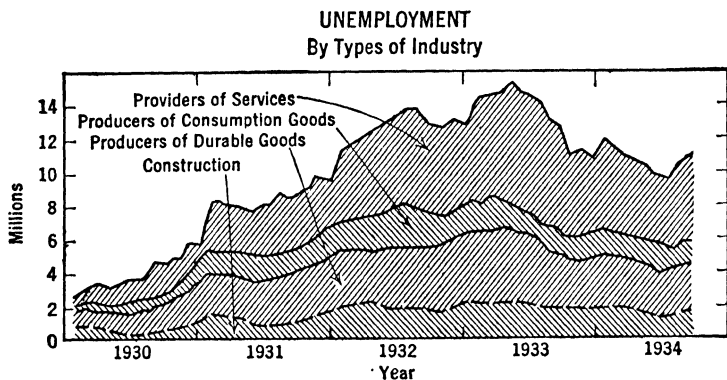


FIG. 19. Total unemployment is represented by the distance from the base line to the top curve. The area between the base line and the broken line represents the unemployment in just the construction industries. The second irregular area between the first and second lines represents that part of total unemployment which existed in the other durable goods industries and is the second largest area. The third area between the second and third curves represents unemployment in the consumption goods industries while the fourth and uppermost area, which is the largest area, shows that the largest share of total unemployment was in service industries such as wholesale and retail, trade, transportation, communication, professions, public positions, and domestic work. (Source: *Business Bulletin*, The Cleveland Trust Co., Oct. 15, 1934.)

sources may be utilized, however, to give some general impressions concerning the kinds and quantities of goods and services that we have actually used in the United States. We have chosen the year 1935 for this analysis, since fairly complete information is available for that year, and since it was a fairly normal year that showed marked recovery from the depth of the depression in 1932.

Total income for 1935 is estimated by the Department of Commerce at approximately \$55,000,000,000. Total sales of all retail establishments for that year are given in the Census of American Business as just over \$33,000,000,000. In other

words, goods purchased by consumers at retail absorbed approximately 60 percent of the total income produced. This is by far the largest single consumption use of income.

RETAIL DISTRIBUTION: 1935  
 Sales of Each Group of Stores in Proportion  
 to Sales of All Stores in the United States

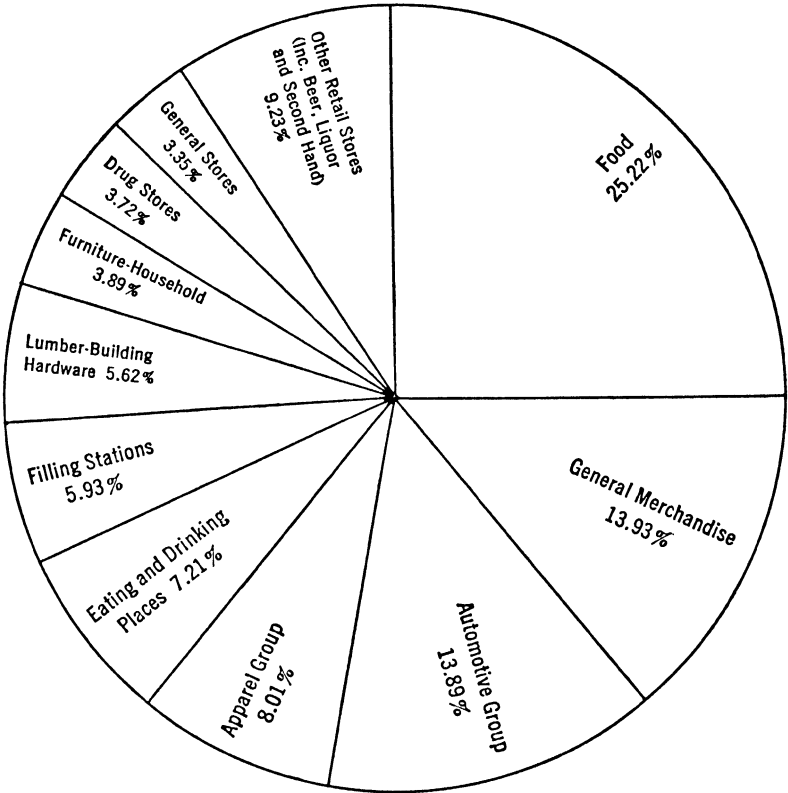


FIG. 20. The entire area of the circle represents total sales of all retail stores in the United States in the year 1935. The area is divided into sections, each sector representing the proportion of total sales made by a particular group of stores. (Source: *Census of Business, 1935 Retail Distribution, Vol. 1, p. 7.*)

The distribution of these expenditures among the various types of retail stores is shown in the pie diagram reproduced in Fig. 20. Sales through food stores, for example, were 25 percent of total retail sales. Eating and drinking places add

another 7 percent of sales, while some of the general merchandise, drug store, and general store sales were doubtless foodstuffs. Thus the purchase of foodstuffs at retail must have absorbed about 20 percent of all the income produced in 1935. This is easily the largest field of retail purchases, although the automotive group and filling stations combine to equal about 20 percent of all retail sales, or 12 percent of total income. Retail purchases in other lines are much smaller, but as already mentioned they all add up to about 60 percent of the total economic income.

Another large share of income that must be considered as a definite portion of consumption is the total of government expenditure. The National Industrial Conference Board has estimated the cost of government, exclusive of redemption of debt, at nearly \$15,000,000,000 in 1935. Part of this is used for the payment of interest and represents merely a redistribution of income rather than consumption. Probably not less than \$11,000,000,000, however, is included in the cost of goods and services furnished by government agencies to the citizens. This is 20 percent of total income, and, added to purchases at retail, it accounts for 80 percent of all consumption. Included in the goods and services furnished by government are police and fire protection to persons and property, public education, highways, parks and other recreational activities, our postal system, and our agricultural and other research agencies which try to find out how to do things better, more efficiently, and at less cost or with less waste.

A third large field for consumption expenditures is that of amusement and service enterprises. The 1935 Census of Business shows that somewhat more than \$2,000,000,000 was spent in various service establishments such as barber shops, beauty parlors, cleaning establishments, repair shops, and so on. In addition, nearly a billion dollars was spent for admissions to movies and other places of amusement—1938 figures show a movie attendance of nearly 90,000,000 men, women, and children weekly. In other words, about 5 percent of total consumption was in these two general fields.

This brings the total of consumption accounted for to about 85 percent of total production. The remaining 15 percent of

income produced was used for such miscellaneous items as the services of professional men such as doctors and lawyers who cater directly to individuals, the construction of new housing facilities, the payment for banking and other financial facilities, and individual savings invested in new capital plant. This list is not complete, but it probably accounts for most of the 15 percent.

A large amount of material has been collected, classified, and analyzed to show the changes in consumption that have taken place during recent years. Some of the changes have been the result of cyclical fluctuations in general prosperity, some have resulted from technological invention or discovery, while some are less easily related to any single cause. One study shows the proportion of national income spent for food, clothing, housing, and recreation, respectively, throughout the quarter century from 1910 to 1935.<sup>2</sup> According to this study the proportion spent on recreation has increased regularly throughout the period. At the same time the proportion spent for food appears to have declined, in part because of the shift from physically strenuous farm life to city life, in part because of changes in diet arising either from new medical knowledge or from admiration for slender figures, and in part, perhaps, from the comfort of centrally heated homes and closed automobiles. Meanwhile housing appears to have taken an increasing proportion since the war. The three "necessities" (food, clothing, housing) have absorbed about 55 percent of the total national income and recreation has come to take about 8 percent. The balance goes, of course, for many things such as medical expenditures, non-recreational transportation, education, and the like. Fig. 21 shows graphically the changes in these four lines of expenditure.

These shifts have occurred quite naturally as our country was developing and maturing. Pioneering absorbs all the time and energy of individuals. Discovering the natural resources of a new country and then opening mines, building and equipping factories, cutting the timber, breaking the sod on farms, constructing railroads, highways, and communication lines are

<sup>2</sup> Julius Weinberger, "Economic Aspects of Recreation," *Harvard Business Review*, Summer, 1937, p. 457.

activities which leave little opportunity for the niceties of life. As the pioneering period tapers off, however, and people can

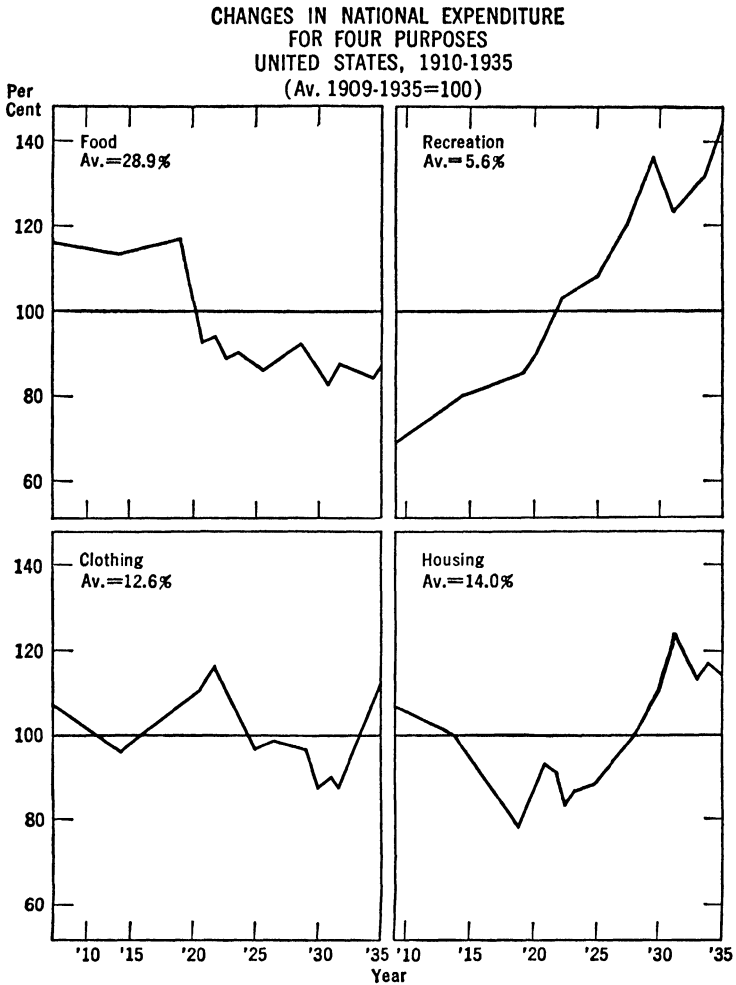


FIG. 21. The four charts show the percent of the national income which was spent for four purposes for the years 1910 through 1935 compared to the average expenditures for the period which is represented by 100. (Source: *Business Bulletin*, The Cleveland Trust Co., Oct. 15, 1937.)

devote themselves more fully to the production of immediate consumption goods, both opportunity and desire for recreation and for patronizing the arts increase. It has long been pos-

sible to observe important differences, for example, in the recreational habits in the mature society of England and in

CONSUMPTION OF NECESSITIES DURING DEPRESSION  
1928-1934  
(1928 = 100)

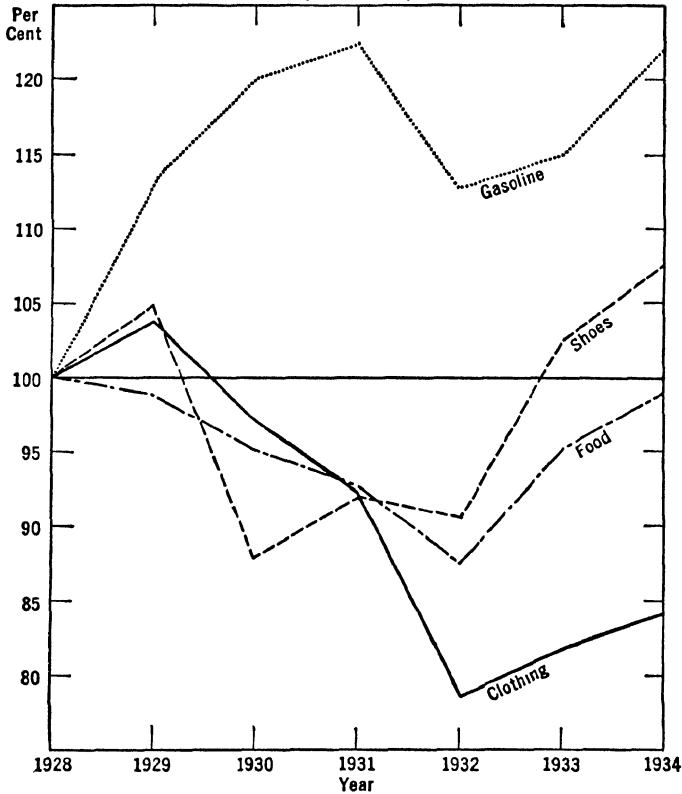


FIG. 22. In the above diagram the four lines are arranged to show the annual changes in the consumption of gasoline, shoes, processed food, and clothing during the period 1928-1934 on the basis of 1928 equal to 100. The line for gasoline represents consumption, those for shoes and processed food show production, and the line for clothing represents the changing numbers of workers in the clothing field. (Source: *Business Bulletin*, The Cleveland Trust Co., Feb. 15, 1935.)

the young society of America; differences which appear to be rapidly disappearing as America comes of age.

As one evidence of this sort of change during the past thirty years, the automobile has come to play a much greater part

in our general living. Even during hard times Americans now give to gasoline a foremost place among the necessities of life. Each year from 1930 to 1934 inclusive the consumption of gasoline in the United States was from 10 to 25 percent higher than in 1929. In contrast, the shipment of coal from the mines fell over 40 percent below the 1929 level in 1932 and remained at least 30 percent below 1929 for each of the three years following 1932. Even other non-durable and semi-durable consumer goods showed much greater reduction in consumption during the depression than did gasoline. Fig. 22 shows some comparisons that suggest the relative importance which people attach to different lines of consumption when hard times force them to give up something. Other illustrations which have occurred during the depression are shown in Tables 12, 13, and 14.

TABLE 12

INDEXES SHOWING CHANGES IN PHYSICAL OUTPUT OF  
SELECTED COMMODITIES: UNITED STATES, 1929, 1932, 1934 \*

(1929 = 100)

<i>Commodity</i>	<i>1932</i>	<i>1934</i>
Rayon .....	111	173
Potatoes .....	109	118
Fruits and vegetables .....	107	109
Milk .....	104	100
Silk .....	89	74
Boots and shoes .....	86	97
Cotton consumption .....	70	76
Cigars .....	67	69
Wool consumption .....	66	65
Auto tires .....	52	69
Wool carpets and rugs .....	38	53

\* Bliss, Charles A., *Production in Depression and Recovery*. National Bureau of Economic Research, Bulletin 58.

These data with respect to the consumption of specific commodities lead to certain general conclusions as follows:

1. The total consumption of foods changed very little during the depression. This is evidenced by the physical sales through food stores, by the physical units of meat, wheat, flour, and butter sold, and the physical production of potatoes, fruits and vegetables, and milk.

TABLE 13

INDEXES SHOWING CHANGES IN QUANTITIES OF SELECTED CONSUMER GOODS SOLD ANNUALLY: UNITED STATES, 1929-1936 \*

(1929 = 100)

Type of Commodity	1930	1931	1932	1933	1934	1935	1936
Electric refrigerators ...	183	440	390	490	625	770	...
KWH electricity (domestic only) .....	112	120	122	122	131	143	158
Gasoline .....	102	108	100	101	109	116	114
Incandescent lamps ....	98	102	99	100	114	122	...
Meat .....	97	98	96	102	101	84 †	91 †
Wheat flour .....	101	95	93	95	93	90	92
Cigarettes .....	100	95	87	94	106	113	122
Butter .....	100	103	80	79	83	78	76
Electric flashlights .....	93	81	77	91	109	120	...
Electric toasters .....	80	80	64	63	115	125	...
Radio tubes .....	75	77	64	80	80	94	...
Radio receivers .....	86	77	59	85	91	107	...
Vacuum cleaners .....	75	56	35	43	58	72	90
Passenger automobiles ..	65	44	30	30	39	60	69

\* The data in this table are compiled from various sources and probably they are of different reliability. All of them, however, are believed to be reasonably close estimates. The items are arranged in declining order of 1932 ratios.

† Not including government slaughter for distribution to relief clients.

TABLE 14

INDEXES SHOWING CHANGES IN PHYSICAL VOLUME OF RETAIL TRADE, BY TYPES OF OUTLETS (ADJUSTED FOR CHANGING PRICE LEVEL): UNITED STATES, 1929, 1933, 1935

(1929 = 100)

Types of Outlets	1933	1935
Filling stations .....	117	145
Food .....	98	100
General merchandise .....	92	94
Drug .....	82	85
Apparel .....	69	86
General (country) .....	68	58
Lumber and hardware .....	45	63
Furniture .....	40	54

2. The sales through general merchandise outlets, including urban department stores, remained fairly constant during the depression. This is in contrast to the trend of sales through country general stores. Perhaps the decrease in the latter is due partially to greater mobility, which has resulted in country people increasing their purchases in city stores. To the extent that this is true, the change is not due directly to the depression. Moreover, this shift of patronage may account in part for the maintained volume of sales by urban department stores.

3. The use of automobiles seems not to have declined. This is indicated by the sales through filling stations and by the sales of gasoline. The sales of passenger automobiles in physical units, on the other hand, showed a pronounced decline. This is evidence of the ability of people to use automobiles for a longer period of years than had previously been the custom. It is interesting to note also that automobile tires showed a marked decline in physical volume of output. This is probably associated with an improvement in quality; another partial explanation may be that it was not necessary to furnish tires as new equipment on as many new automobiles during the depression as previously. Certainly the gasoline figures indicate that motor vehicles went as many miles as previously.

4. There has been an interesting shift in volume of production and consumption of different types of textiles. The output of rayon increased materially. The output of silk decreased somewhat and that of cotton and wool textiles decreased much more strikingly. Part of the reduction in wool consumption is due to the reduction in output of wool carpets and rugs. Undoubtedly a weighted index would show some total reduction in yards of textiles consumed.

5. Another case of change in the relative status of related commodities is found in the fact that cigarettes decreased very little and for a brief period while cigars decreased materially and had not recovered in 1934.

6. The domestic use of electricity showed a considerable increase throughout the period of the depression. Associated with this was the striking increase in the sale of electrical refrigerators and the continued active sale of many other electrical devices for the home. One cannot, of course, attribute this increase to the depression—more likely, it may be said to have occurred despite the depression.

7. Durable consumer goods, such as furniture and automobiles, showed a striking reduction in sales. This reduction, however, may have been accompanied by no reduction in use, as is indicated in the case of automobiles by the gasoline consumption figures.<sup>3</sup>

<sup>3</sup> Vaile and Canoyer, *Research Memorandum on Social Aspects of Consumption in the Depression*. Pp. 19-22. Social Science Research Council, 1937.

Some consumer goods have been consumed in increasing quantities for many years. In some cases even the recent depression did not materially check their growth. Automobiles and radio receiving sets are outstanding examples of comparatively new consumer goods; air-conditioning equipment for homes is a newer illustration. These all happen to be durable goods, but some non-durable commodities also have had recent rapid increase in consumption. Fig. 23 shows the phenomenal 15-year growth in three non-durable and one durable goods industries. While the depression checked the growth in each case depicted, it did so relatively slightly and only temporarily.

#### SUMMARY

The volume of consumption cannot be visualized directly from the figures on money income; physical units must be employed as an aid in our understanding of how well or ill we live. In this chapter several compilations have been presented to show the relative importance of various things in our national consumption. Changes that have occurred in these relationships during recent years also are emphasized.

Goods purchased by consumers at retail account for about 60 percent of our expended income, with foodstuffs and the items necessary for automobile transportation accounting for over half of all purchases at retail. The expense of government services is another 20 percent of the total, while the remaining 15 percent of the money income is used for a long list of miscellaneous things.

The 60 percent of total money income that is devoted by consumers to articles purchased in retail stores goes to pay, of course, not only for the process of retailing, but also for the earlier steps of transportation, manufacture, production of raw materials, and the like. In other words, the money that consumers pay for merchandise in retail stores is distributed to many people in many walks of life.

The maintenance and increase of consumption that actually occur in some lines while others lag are not always pleasing to moralists and others who are at pains to consider the general welfare. That food and clothing should have suffered a greater decline in consumption during the depression than did

**RAPID GROWTH OF PARTICULAR INDUSTRIES**  
 1920-1935  
 (Average Production 1927-1931=100)

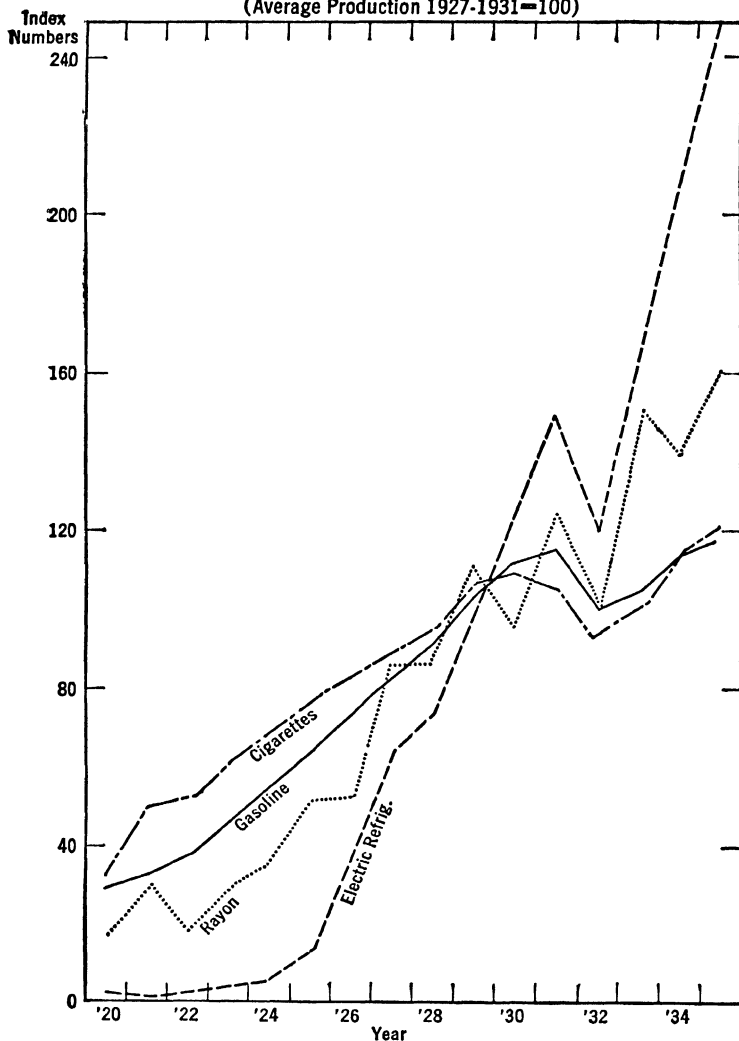


FIG. 23. The four lines show the total production of cigarettes, gasoline, rayon and iceless refrigerators during the 16-year period from 1920-1935 adjusted to average production for 1927-1931 which average is taken as 100. Thus during the lowest year of the depression, 1932, the production of cigarettes was about 5 percent below that in '27-'31; of gasoline, a little over the '27-'31 record; of rayon almost 10 percent above that of '27-'31 and of electric refrigerators over 20 percent higher than the '27-'31 average production. (Source: *Business Bulletin*, The Cleveland Trust Co., Aug. 15, 1935.)

cigarettes and gasoline is considered by some to have been a sign of a degenerating race. It appears to have been the result, however, of a democratic choice on the part of all the people as to how they would spend their money income—a voting with dollars, so to speak, for the most popular commodities. To be sure, the voting was influenced by advertising and other forms of commercial publicity, but in the last analysis it was voluntary and democratic. It had become clear as early as the winter of 1934-35, for example, that the vigorous production and sales efforts of the automobile industry were among the most important single factors in the early stages of recovery from the depression. There were many people who believed that the country needed new housing far more than it needed new automobiles, but the people who held the purse strings of the masses of pocketbooks thought otherwise, and they put their money or their names on the line for automobiles. And in a price-regulated democracy, that sort of vote always will determine the national pattern of consumption.

## CHAPTER 7

### FACTORS THAT INFLUENCE THE INDIVIDUAL'S CAPACITY TO CONSUME: DISTRIBUTION OF INCOME

**S**INCE the ideal of plenty is as illusive as the proverbial pot of gold, individuals are constantly confronted by the necessity of choosing what they will consume and what they will go without. The basis for these choices is, generally, the satisfaction that each individual believes he personally will get from the various possible consumption alternatives.<sup>1</sup> We may assume that consumers generally seek to receive the maximum of satisfaction or utility for every expenditure of money or of labor. We may assume that consumers will act as intelligently as their judgment and the available information permit in respect to the goods they buy; that is, they will consider the known facts relating to the market, they will compare goods and prices, and they will make those purchases that they anticipate will give them the greatest satisfaction.

Consumers may have very different ideas, however, as to what each one individually wants or believes will give him satisfaction. The desires of people that find expression in the market place differ markedly from group to group, from individual to individual, and even with the same individual from time to time.

The causes of these variations, that is, the factors that limit and influence our individual choices, are deeply imbedded in our individual inheritance and environment. Some of them are physiological, some are psychological, while some are economic in origin and nature. By way of illustration, the blonde desires different colors in her wardrobe or her lipstick than the brunette; the introvert, who likes to avoid contacts with

<sup>1</sup> Later in this book there is some discussion of other possible bases for choice on the part of the individual consumer.

other people, enjoys different forms of recreation than the extrovert, who likes to mingle with the crowd; he who inherits a million dollars at 21 has an entirely different program of consumption than he who continues through life to dig ditches for the wages of the common laborer. In this and the following chapter we shall examine some of the most important causes of variations in consumption.

AMOUNT AND CHANGE OF INCOME

The most obvious as well as the most limiting of the factors determining consumption is money. Experts have estimated the amount of money required to afford various American standards of living when prices are at the 1929 level. Professor Paul Nystrom has summarized these estimates and we present his summary in the following table.<sup>2</sup>

TABLE 15  
APPROXIMATE EXPENDITURE REQUIRED TO SUPPORT  
VARIOUS AMERICAN STANDARDS OF LIVING UNDER  
URBAN CONDITIONS (COSTS AND VALUES AS OF 1929)

<i>Standards of Living</i>	<i>Ind.</i>	<i>Man and Wife</i>	<i>1 Child</i>	<i>2 Chil- dren</i>	<i>3 Chil- dren</i>
Bare subsistence . . . . .	\$ 600	\$ 900	\$1,200	\$ 1,500	\$ 1,800
Minimum for health and efficiency . . . . .	800	1,200	1,500	1,800	2,100
Minimum comfort (de- cency level) . . . . .	1,000	1,500	1,800	2,100	2,400
Comfort . . . . .	1,200	1,800	2,200	2,600	3,000
Moderately well-to-do..	1,800	2,700	3,200	3,700	4,200
Well-to-do . . . . .	3,000	4,500	5,500	6,500	7,500
Liberal . . . . .	5,000	7,500	8,700	10,000	12,000

In 1935 the index of cost of living had fallen to 82.6 relative to 1929: <sup>3</sup> that is, \$82.60 would buy as much in food, clothing, rent services, and so on combined, in 1935, as \$100 did in 1929. Consequently, for conditions in 1935 the expenditure requirements given above would have been more than adequate for the

<sup>2</sup> Nystrom, Paul H., *Economic Principles of Consumption*, p. 302. Ronald, 1929.

<sup>3</sup> National Industrial Conference Board Cost of Living Index, *Survey of Current Business Supplement*, 1936, p. 11.

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particular standards of living that are enumerated. The 1929 data may be adjusted for the change in costs by multiplying each figure by the cost-of-living index, namely, 82.6 percent. So adjusted, the approximate money requirements for 1935 are given below.

TABLE 16

APPROXIMATE EXPENDITURE REQUIRED FOR VARIOUS AMERICAN STANDARDS OF LIVING (COSTS AND VALUES AS OF 1935)

<i>Standards of Living</i>	<i>Ind.</i>	<i>Man and Wife</i>	<i>1 Child</i>	<i>2 Chil- dren</i>	<i>3 Chil- dren</i>
Bare subsistence . . . . .	\$ 495	\$ 745	\$ 991	\$1,240	\$1,485
Minimum for health and efficiency . . . . .	660	990	1,240	1,485	1,735
Minimum comfort (de- cency level) . . . . .	825	1,240	1,485	1,735	1,982
Comfort . . . . .	990	1,485	1,817	2,150	2,478
Moderately well-to-do..	1,485	2,230	2,643	3,050	3,469
Well-to-do . . . . .	2,480	3,710	4,520	5,350	6,200
Liberal . . . . .	4,125	6,200	7,186	8,260	9,912

### PERSONAL DISTRIBUTION OF INCOME

In 1935 the income produced in the United States had a money value of just under \$55,000,000,000, which was about \$420 per person or \$1680 per family of four.<sup>4</sup> If this money income could have been divided uniformly among all families in the United States, each family would have been permitted a scale of living somewhere between the "minimum for health and efficiency," and the "minimum for comfort." No such equal division occurred, however.

Fig. 24 illustrates graphically the distribution of income in 1929. It shows that there were 21,500,000 families, or 78 percent of the total number, with incomes less than \$3000. The total of the incomes received by these families was about \$31,000,000,000 out of the \$77,000,000,000 of total income produced that year. In other words, 78 percent of the families received but 40 percent of the income. This type of income

<sup>4</sup> Nathan, Robert R., *National Income, 1929-1936*, p. 11. The calculation of family income is based on a total population of 130 million and an average family of 4.1 members.

distribution apparently is not peculiar to the year 1929; it was also present in 1918 as is shown in Table 17. In fact it is doubtless a continuous phenomenon.

If we assume that the same percentage of families fell in each income group in 1935 as in 1929, we find that the average

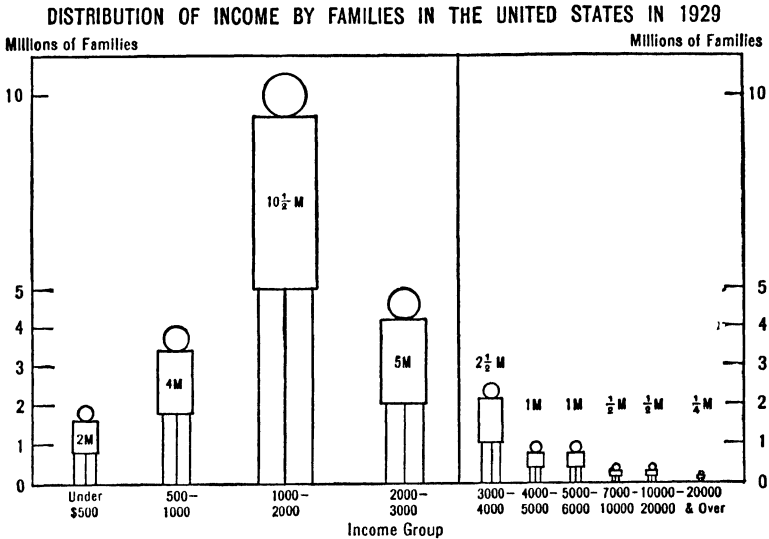


FIG. 24. This chart illustrates the distribution of the national income among the families in the United States during the prosperous year, 1929. There were a total of 21,500,000 families with incomes less than \$3,000 a year, and 6,000,000 families with incomes of \$3,000 a year and over; the largest number, 10,500,000, had incomes between \$1,000 and \$2,000. This emphasizes the great concentration of incomes at low levels.

annual income that year for the families receiving less than \$3000 was approximately \$1000 per family.<sup>5</sup> This average income would have been \$240 below the amount required by a family of four for the "bare subsistence" scale of living at cost prices that prevailed in 1935. In other words, the total of all the incomes distributed to the 78 percent of families with lowest incomes was insufficient to permit an average consumption equal to the scale suggested as adequate for "bare subsistence."

<sup>5</sup> The calculation in round numbers is as follows: Total income produced, \$55,000,000,000, 40 percent of which is \$22,000,000,000. Total families, 30,505,000, 78 percent of which is 22,000,000. \$22,000,000,000 divided by 22,000,000 families = \$1,000 per family.

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The causes of inequalities of income are as old as Methuselah and as uncontrollable as the Mississippi. Basically, these causes are of two sorts: those associated with differences in the capabilities of individuals, and those associated with the differences in opportunities that are presented to individuals.<sup>6</sup> Of

TABLE 17

THE DISTRIBUTION OF PERSONAL INCOMES BY INCOME CLASSES AS SHOWN BY THE OFFICIAL COMPILATION FOR THE CALENDAR YEAR 1918 \*

Income Classes		Number of Returns	Amount of Incomes Millions of Dollars	Percentage Number of Returns	Percentage Amount of Income
\$1,000-	\$2,000 ..	1,516,938	\$2,232	34.28	14.02
2,000-	3,000 ..	1,495,878	3,627	33.83	22.78
3,000-	5,000 ..	932,336	3,535	21.06	20.20
5,000-	10,000 ..	319,356	2,146	7.22	13.47
10,000-	25,000 ..	116,569	1,737	2.63	10.90
25,000-	50,000 ..	28,542	978	.65	6.14
50,000-	100,000 ..	9,996	680	.23	4.27
100,000-	150,000 ..	2,358	284	.05	1.78
150,000-	300,000 ..	1,514	305	.035	1.92
300,000-	500,000 ..	382	145	.009	.91
500,000-	1,000,000 ..	178	119	.004	.75
1,000,000 and over	...	67	137	.002	.86
		4,425,114	15,925	100.000	100.000

\* Income of the United States. *National Bureau of Economic Research*, p. 117. Incomes below \$1,000 are not shown.

course there is much interplay between the two. Opportunity to use specific abilities generally results in development of those abilities, while lack of opportunity tends to retard development. Moreover, where an individual finds no chance to do those things he greatly enjoys, a feeling of general frustration may occur with a more or less complete breakdown of ambition and morale. But when the urge to express and develop a particular ability is strong enough, the individual frequently can make the opportunity.

Equal opportunity for all individuals is sometimes supposed to be a sacred guarantee in a democracy, but, in reality, such

<sup>6</sup> For further discussion of individual abilities and opportunities the reader is referred to Williamson, E. G., *Students and Occupations*, and to Paterson and Darley, *Men, Women, and Jobs*, Univ. of Minn. Press, 1936.

equality has never been even closely approached. For one thing, the operation of our laws and customs concerning inheritance prevents equality of opportunity. Because of inheritance practices, the children of rich parents may receive a large income from ownership of property towards the acquiring of which they, themselves, never did anything. In fact, the differences in children's opportunities that result from their parents' income level begin to appear long before the specific act of inheritance; differences in early training, in general standard of living, and in physical and cultural environment, occur from the very beginning of the individual's life. It is not certain that the advantages associated with the differences in family income are always in one direction; sometimes sons of wealthy parents become ne'er-do-wells, while many from modest homes succeed in every sense of the term. It is certain, however, that the *opportunities* presented to children differ greatly among the various income classes.

There are other ways in which our laws and customs have permitted or caused inequality of opportunity among individuals. The right of individuals to combine their shares in the ownership of property in a partnership or corporation, for example, has permitted certain people so to pool their financial strength that they have held an advantage, at least temporarily, over their competitors, or their employees, or their customers. To be sure, the opportunity to combine for business or economic purposes is open to all. Labor unions might, and sometimes do, bring to people as workers the same sort of strength in numbers that corporations bring to people as owners. Perhaps consumers' co-operative organizations can, and sometimes do, bring the same sort of advantage to people as consumers. In reality, however, people so far appear to have taken advantage of the chance to pool their ownership rights much more frequently and effectively than they have to pool their strength as laborers or as consumers. Consequently equality of opportunity for bargaining has not existed, since those people who have not possessed property rights have lacked, also, the power given by combination. Some of the possibilities, as well as the advantages and disadvantages, of

equalizing opportunities through additional organizations of laborers and consumers will be discussed in Part III.

Psychologists and others who have been studying individual differences in abilities believe that they fall into what is known as a "normal" distribution. This means that there are just

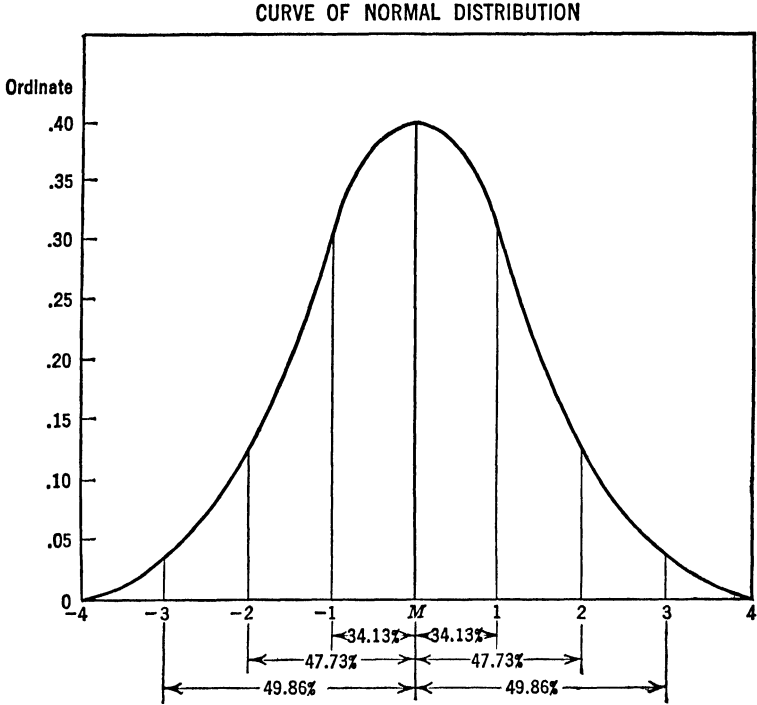


FIG. 25. In the above figure, the point M represents the average or mean of a series of observations. The height of the perpendicular line rising from M represents the number of individual observations or cases that are exactly equal to the average of all cases. The height of the other perpendicular lines represent the number of cases that are equal to the distance of the line from M. If all the individual cases are distributed around the average in a "normal" or chance manner several things will be true, namely: 1. There will be the same number of cases on either side of the mean. 2. The total range will extend the same distance on either side of the mean. 3. The height of any perpendicular on one side of the mean will be the same as that of a perpendicular erected at the same distance on the other side of the mean. 4. 99.73 percent of all the cases will fall within 3 statistical units known as standard deviations on either side of the mean. 5. The percentages shown in the figure will fall in each standard deviation on either side of the mean.

as many people with abilities greater than those of the average person as there are with abilities less than the average. Moreover, the range of individual ability extends the same distance above the average as it falls below that point, and at each degree of ability above the average there will be found as many individuals as at the same degree below the average. There is still a further characteristic of a normal distribution. If the total range in the measurement of ability, for example, is divided into six equal parts, three of which lie on either side of the average, it is found that about one third of all the cases lie in each of the two segments nearest the average and on either side of it; about 14 percent of the cases lie in each of the next segments on either side of the average, while about 2.5 percent of the cases lie in the third segment on either side.<sup>7</sup> An illustration of a normal distribution is shown graphically in Fig. 25.

If the psychologists are right, that is, if people are distributed by ability in accordance with a normal curve, then it might be argued that income would be so distributed, also, if differences in opportunity could be overcome. Such a distribution, it might be claimed, would represent a "just" sharing of total income.

It should be remembered, however, that "*ability*" is not a single, general thing, but many specific things. We have already pointed out that the complex division of tasks is based, in part, on differences in people's abilities. There may be a normal distribution throughout a commonwealth of the ability to sharpen a knife, or to bake a pie, or to memorize poetry, or to solve a jig-saw puzzle, or to play the piano. A person who is outstanding as a musician, however, may have low ability as a mechanic or a cook. Consequently it is not very useful to talk about ability in general, but attention must be turned to more specific questions.

For one thing, the age of a person affects his abilities. There are many studies which show that people start to slow down in many of their physical reactions when they are in their

<sup>7</sup> Actually about .27 percent of the cases would lie further from the average than the limits here suggested, but this small number of cases may be omitted from our present consideration.

middle twenties and do so rather rapidly after forty. For this reason there are some occupations, such as professional baseball, truck driving, and airplane piloting, in which young people only are wanted. It is not in these cases alone, however, that age makes an important difference in the monetary incomes received by individuals. A recent study (1934) of incomes of employed workers in Michigan, classified by age and occupation, shows the following typical wages, for all occupations, by age groups:

<i>Age</i>	<i>Typical Wage</i>
15-24 .....	\$ 480
25-34 .....	916
35-44 .....	1,023
45-54 .....	930
55-64 .....	789
65 and over .....	576
Average all ages .....	840

Life may begin at forty, but these figures indicate that monetary income begins to decline at about that time. Moreover, it becomes increasingly difficult to hold onto a job or find a new one after that age.

Employed women reach their peak of average wages earlier than do men. The Michigan data just referred to show that the typical wage for women in 1934 was highest for the ages between 25 and 34, while for men the high point came in the following ten years.

This effect of age on average income apparently is not limited to any single line of work. In Fig. 26 are shown the average incomes of employed workers by both age and occupational classes. Clearly all the lines of activity reach their peak before age 40, the only exceptions being the clerical and professional groups. Even in these two cases, decline sets in before the age of 50. Age evidently has an important bearing on the value which society places on the services of people in the mass. Consequently the inequality of income that is associated with age may be more just and equitable than would be a normal distribution.

Fig. 26 emphasizes also some of the differences in income that accompany different occupations. These differences ap-

**INCOME BY AGE AND OCCUPATION**  
**EMPLOYED WORKERS IN MICHIGAN, 1934**

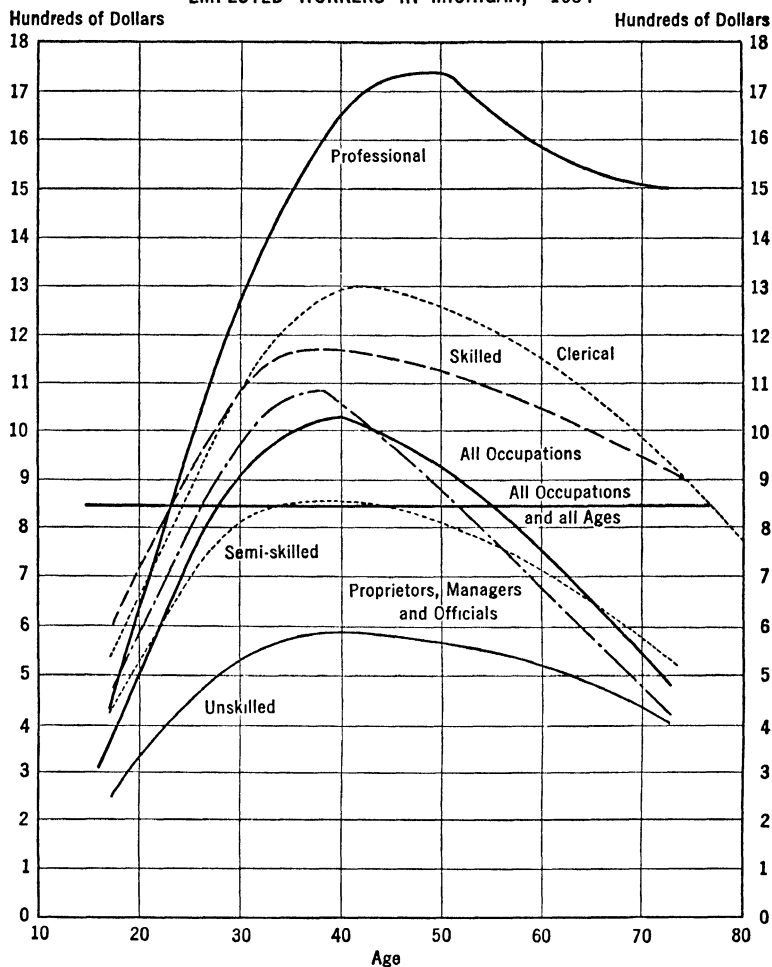


FIG. 26. The series represented by these seven curves are made up of medians of the 1934 data—the median being that average which divided a distribution into two equal parts. Thus each point on the above curves represents the median income for the *age group* indicated on the horizontal scale. For example, the median income for all occupations for the age group 15 to 25 years was \$480, for the age group 25 to 35 years, \$916, for 35 to 45 years, \$1,023 and so on. (Source: Leven, Maurice, *The Income Structure of the United States*, p. 51, Brookings Institution, 1938.)

pear to be due to the scarcity of people able and willing to do some jobs relative to the numbers available for other tasks. If this is so, the question naturally arises: "Why do not more people move out of the poorly paid occupations into the highly paid ones, thus reducing the scarcity in the latter, and leveling the incomes in all?" The answer to this query is not simple.

In part, the present situation is due to artificial restriction against entering some occupations, imposed by trade unions or by government. For example, some trade unions of skilled workers such as plumbers attempt to limit the number of people who may train as apprentices, and then refuse union membership to all except the limited number who have been trained. Other groups, like the certified public accountants, sometimes modify the severity of the qualifying examinations that must be passed by all who enter the field. Such modifications are designed to raise the professional level of the service, of course, but they result in excluding some who would have qualified under the old standards and who might, with experience, become very proficient.

A more nearly general answer, however, lies in the facts that (a) *high* ability in many tasks is rare, and (b) there are some fields in which only high ability can command a price while medium or low ability has no exchange value at all. Many people will pay well, for example, to see a great actor, while no one will pay anything to see Hamlet played by the "average" person in a community. A great tennis player, or landscape painter, or architect can obtain a high income for his talents because he has rare ability, while a person with mediocre ability in these lines can get little or nothing for his performances. Society has gone so far as to rule that only those with unusual ability may practice the professions of law and medicine; in fact, only those who have shown special ability along these lines in their early university years are admitted to formal training in law and medical schools. For other fields, such as retail shopkeeping, clerical work, housework, many jobs in factories and on farms, average or medium ability is "good enough" to be commercially useful, and the large supply of mediocre talent tends to limit the price that employ-

ers are willing to pay for greater ability in these fields. Consequently inequality of occupational income is inevitable if individuals with rare talents are to be paid their full and respective worth to society. It is interesting and informing to note in this connection that the Russian soviets found rather early in their experience with a socialistic state that equality of occupational income was either undesirable or impractical; at least they instituted important inequalities in the rates of pay for different tasks which seem to agree rather closely with those prevailing in the democratic countries.

One more point: the claim, that a normal distribution of income is "just," would need to rest not only on the assumption that individuals possess abilities in accordance with a normal distribution, but also that they will always use them for the common welfare. This assumption is not, of course, always borne out by facts. Many competent or even brilliant people have spent their time and energy in getting rich at the expense of others. Bank robbers, forgers, and swindlers of all sorts acquire income by taking it away from others, without contributing anything to the common stock of wealth. There is general agreement that these efforts of people do not entitle them to any share in total income, and police power is used to prevent their getting any in these ways.

In any case, however, it is interesting to inquire what the distribution of recently produced income would have been if it had followed the normal curve.

In Chapter 1 a table is presented which shows the average per capita income each year in terms of 1929 prices. For the ten years 1920-1929 inclusive this per capita income averaged about \$615. If we simplify reality and assume that all people in America are members of "typical" families of four individuals, the average income of each family would have been about \$2500. Then if we assume further that the very least capable families produce no income, but require \$1500 for bare subsistence, we shall have established certain limits for a normal distribution.<sup>8</sup> From these assumptions we find the following points:

<sup>8</sup> See Table 5.

1. Lower limit of income ..... \$-1,500
2. Mid-point or average income ..... +2,500
3. Upper limit of income ..... +6,500
4. Total range ..... +8,000

We find that in accordance with the normal curve, 2½ per cent of the population would have incomes ranging from -\$1500 to -\$170, and 14 per cent of the population would have incomes ranging from -\$170 to \$1160. A third of the population would have incomes ranging from \$1160 to \$2500; another third of the incomes would range from \$2500 to \$3840; 14 percent would range from \$3840 to \$5170; and the highest 2½ percent would lie between \$5170 and \$6500. In Fig. 27

A COMPARISON OF ACTUAL AND "NORMAL"  
DISTRIBUTION OF INCOME BY FAMILIES  
(1929)

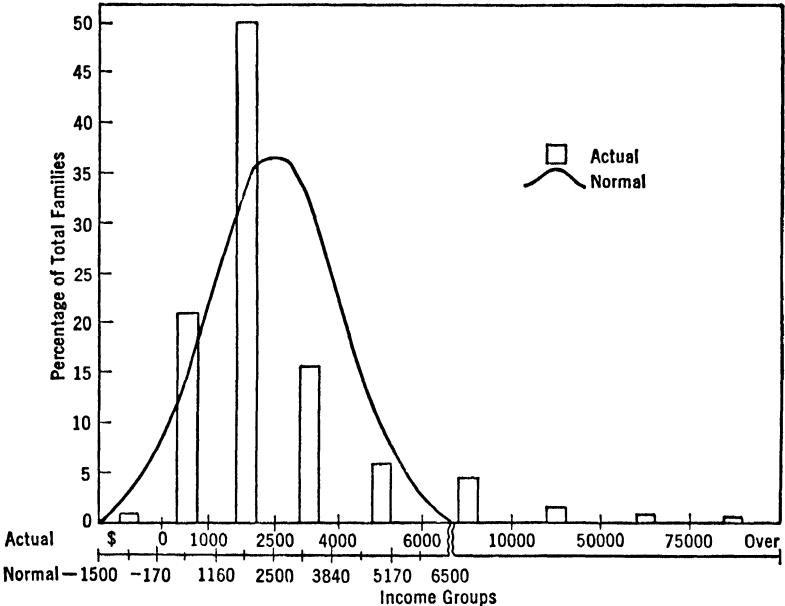


FIG. 27. The actual distribution of 1929 income is represented by the height of the bars. The curve is used to represent an imaginary distribution of income—one which would have resulted if the 1929 income had been apportioned according to the so-called normal curve—see Fig. 25. The actual distribution resulted in a great concentration of small incomes; the "normal" distribution included no incomes above about \$7,000.

this distribution of incomes is shown graphically in comparison with that which actually existed.

Whether such a distribution of incomes would actually measure the contributions to society made by the personal and individual efforts of people depends, as already pointed out, upon the use to which abilities are put. It depends further, of course, upon whether the range of so complex a series of phenomena as human abilities can be said to truly follow a curve of normal distribution. The fact is, of course, that many employers are paying salaries for personal services that are way above the upper limit set for the normal distribution of existing incomes; the people pay the President of the United States \$75,000 a year, a symphony orchestra conductor may be paid \$20,000, many business executives get salaries of over \$15,000, and so on. This is strong economic evidence that certain abilities, at least, may fail to conform to any such pattern of distribution.

It must be pointed out further, that if it were not for the incentive of possible high income, the whole pattern of production might be different. That is to say, the assumption that the same national income would have been produced during the years 1920-29 as was actually produced is an assumption that has not been tested. There are many who believe that the possibility of high income is not only a strong incentive, but that it is essential to economic progress. Would the railroads ever have been built, for example, or the chemical dye industry developed, or iron ore deposits been found, or the process of vulcanizing rubber worked out, if individuals employed in these several pursuits had not hoped to gain personal, material wealth on the successful completion of their undertaking? On what other basis might the risk of loss of time, energy, money, and other resources have been taken? We do not know the full answer to these questions. We do know, however, of some few outstanding people who have contributed greatly to scientific progress without paying much attention to personal monetary reward. It is said, for example, that the late electrical wizard, Steinmetz, was such a person. Moreover, many people, like

Jane Addams of Hull House, voluntarily choose a life of arduous service at low pay because of the satisfaction of making the lot of others somewhat easier. No one knows how many such people there are in the world, or just what decisions they would make concerning the total use of resources if they were in control of all industry and if the profit motive were eliminated. Certainly many things would be done differently than at present, but the criteria or basis for decision would be less *objective* and, perhaps, less democratic.<sup>9</sup>

One further point deserves mention in connection with this general problem. Certainly one of the reasons for permitting combinations in the ownership of property is found in the economy or increase in production that accompanies the use of large amounts of capital in a single undertaking. This is partly a matter of engineering; that is, electrical or mechanical power frequently can be applied more effectively in large machines than in small ones, or large quantities of ore can be reduced with less heat *per unit* than can small quantities, or power conveyors can replace more human labor in large factories than in small ones, or fairly large airplanes apparently can carry a number of passengers more cheaply than several small ones. It is also partly a matter of judgment; that is, decisions concerning both the costs of production and the market demand frequently can be based on more complete and more accurate information when large operations are under one management. The results of all these advantages are often spoken of as the *principle of decreasing cost* or the *economy of large-scale production*.

Many times, efficient use of capital occurs only when the power of ownership of many individuals is brought together in one plant and under one management. Buildings, machines, and similar items of capital equipment frequently are not physically divisible into units that are as small as are the units of labor—the single person. If the present forms of combination of ownership were to be discarded, some other method would need to be devised to permit the use of large units of capital equipment or else many of the advantages of machine production would be lost.

<sup>9</sup> See Chapter 2, p. 25.

There are some people who do not like the present distribution of income among individuals and who propose various methods and degrees of redistribution. Some have advocated an equal distribution to each person. Had this been the situation from 1920 to 1929, everyone would have received \$615 per year or about \$2500 *per family*. A few years ago a proposal, called the Townsend Plan, for aiding old people was given wide publicity. This plan provided, among other things, that \$2400 be given each year to *everyone* over 60 years of age. Had this been done in 1935 the total income produced that year would have provided \$2400 to each person over 60 years of age all right, but would have left only enough to give each individual under 60 a mere \$211, or about \$850 per family.

At this point in our discussion we are not ready, perhaps, either to support or to condemn any scheme for the redistribution of income. It should be clear from the figures that have been presented in this chapter, however, that unless total income is greatly increased no distribution of it will permit all Americans to enjoy the scale of living that they would like.

#### EXPENDITURE PATTERNS BY INCOME CLASSES

Unequal distribution of income results in a series of quite different consumption patterns for different income groups. The first statistical study of the relationship existing between the amount of income and the proportionate expenditures for groups of consumption goods was made by Ernest Engel. In 1857 he formulated his famous "laws of consumption," the outgrowth of his analysis of expenditures in Belgium and France of families whose incomes ranged from \$300 to \$1000. Briefly stated they are:

1. As the income of a family increases, a smaller percentage is spent for food.
2. As the income of a family increases, the percentage of expenditure for clothing remains approximately the same.
3. With all the incomes investigated, the percentage of expenditures for rent, fuels, and light remains approximately the same.

4. As the income increases in amount a constantly increasing percentage is spent for education, health, recreation, amusement, etc.

More recent detailed studies of family expenditures by income classes provides the opportunity for more precise statement and limitation of the four laws. From these studies it appears that:

1. The percentage spent for food decreases very slowly up to yearly incomes of \$1000-\$1300, then decreases sharply up to \$3000, and finally decreases steadily but at a constantly declining rate up to \$20,000.

2. The percentage spent for clothing increases slowly up to yearly incomes of \$600, remains about constant from \$600 to \$1500, and decreases steadily at a declining rate thereafter.

3. The percentage spent for home maintenance remains fairly constant up to incomes of about \$1300, declines irregularly up to \$3000, rises irregularly up to \$6000 and thereafter drops steadily at a constantly declining rate.

4. The percentage spent for sundries rises slightly for incomes up to \$1300 and increases rapidly to about \$8000, declining slowly but steadily up to \$20,000.

Certain additional observations may be made on the patterns of expenditure of various income groups. First, \$4000 seems to be the dividing line below which marked adjustments in the proportionate utilization of income are usually made and above which the percentage of total income spent for any consumption goods, except food, varies but slightly. Second, the changes in income under \$4000 will necessarily result in important readjustment in consumption patterns. Third, for the low income group choice is restricted to bare necessities, while the market for sundries is negligible for this group. Fourth, the percentage of expenditure on broad commodity groups for all people of the same income class is similar. Fifth, low income groups accumulate practically no savings from current income for further use.

Not only do families with different incomes have quite different consumption patterns in a given year, but also when the income of a particular family changes, its proportionate expenditures are modified. By way of illustration let us note the results of a study at the University of Minnesota, which

was made in February, 1935.<sup>10</sup> An inquiry was made of the families of 300 freshmen concerning the changes that had taken place in their income and expenditures, the year 1934 being compared with the year 1932. Of the total number, 57 percent had suffered a decrease in income and 43 percent had enjoyed an increase. The following percentages of all the families with *increased income* reported that their expenditures had increased in the certain specific ways: (1) payments of debts, 42 percent; (2) education, recreation and similar expenditures, 48 percent; (3) purchase of durable goods, such as automobiles, 34 percent; (4) purchase of food and other necessities, 28 percent; and (5) purchase of more expensive clothing, 17 percent. Similarly, the following percentage of all the families with *decreased income* reported that their expenditures had decreased at specific points: (1) purchase of durable goods such as automobiles, 62 percent; (2) purchase of clothing, 60 percent; (3) rent or home upkeep, 40 percent; (4) education, recreation, and similar expenditures, 36 percent; (5) payment of debts, 29 percent; and (6) purchase of food, 22 percent. These figures are of interest in showing how people tend to modify their consumption when their income changes. When income increases there is not, apparently, a direct and proportional increase in the consumption of material goods: only 28 percent of the families with increased income purchased more food and only 17 percent purchased more expensive clothing. When income falls, relatively few families reduce their expenditure for food, which means that this field absorbs an increased percentage of income. In other words the changes in consumption patterns of these particular groups of families following a change in their incomes were in accord with the generalizations just presented.

The data given above are not to be interpreted too narrowly. In the first place there is some variation among families within each income class, variations based on such things as differences in age, taste, and environment. Moreover, the averages given will change somewhat with each change in the

<sup>10</sup> Filipetti and Vaile, *The Economic Effects of the N.R.A.*, pp. 78-79, Univ. of Minn. Press, 1935.

general level of prices. Still further, inventions and other changes in the arts and sciences frequently have important effects on production and consumption of particular goods. Nevertheless, the general relationships among the several groups of expenditures that have just been described have been found so consistently throughout the past 80 years that they must be the result of deep and lasting influences. These influences appear to affect both the cost of goods and services and the desire for the particular satisfactions that they bring to people.

#### SUMMARY

Whenever the social system is controlled in large part by the ability of people to sell their wares and their services, the money income received by individuals is a dominant influence on consumption. The distribution of total money income in the United States among individual families shows a great number of very large incomes. In technical language, this is called a skewed distribution, with concentration near the low end of the income scale.

The consumption patterns or scale of living of families differ greatly between the different income groups. At each income level, however, there are fairly definite patterns of consumption or use of money income. The amount of money income required to maintain any particular scale of living varies from year to year, sometimes violently, because prices change. When the change in the general price level is noted it is possible, however, to estimate the money income required for a particular scale of living in any year.

It is sometimes suggested that people as a whole would be better off if money income were distributed more equally among all families. It is pointed out, however, that total production has always been inadequate to give everyone a satisfactory scale of living, no matter how equally the products are distributed. Moreover, no entirely satisfactory method of changing the distribution of income has yet been suggested; the most important attempts to do so are discussed in Chapter 13.

The "laws of consumption" formulated by Ernest Engel over 80 years ago seem still to hold. They show that food

and other necessities take a smaller percentage of money income as the size of the income increases. Perhaps it may be said, therefore, that a test of economic civilization is the share of total income devoted to food; as that share decreases, the economic status of the family or community increases.

## CHAPTER 8

### OTHER FACTORS THAT AFFECT THE INDIVIDUAL'S CAPACITY TO CONSUME

**T**HERE are many things besides individual or family income that affect consumption both in total amount and in pattern. Some of these things are inherent in the individual; that is, they result from his physical, emotional, or mental nature. Others are environmental; that is, they result from the actions of other people, the natural resources that surround and are available to him, or the institutions (social, political, economic) that have been developed in the community in which he lives. Several of the most important of these things are discussed in the following pages. No attempt has been made to arrange the various items in any particular order either of importance or logical relationship since each reader will want to work out for himself an arrangement based upon his own sense of order of importance or logic.

#### PRICE

The relative prices at which things can be bought has much to do with the relative quantities of different things that are consumed. As prices of specific things change relative to each other, consumption patterns also change; that is, if eggs are low and meat is high we eat more eggs; if rayon becomes cheaper than it has been relative to linen for summer clothes we buy more rayon and less linen. At present we are not concerned with the forces that cause change in relative prices, although that is a field of major importance, but we are concerned with the effect on consumption of such changes in price as do occur.

It has been said that the greatest single urge to human activity is the desire to obtain goods to satisfy wants. Ordinarily it is the power which a good possesses to satisfy a

want rather than the good itself that the consumer is after. We really are not interested in automobiles *per se*, but in the ability to go places or the thrill of speeding; we are not interested in owning cloth or even garments *per se*, but in the warmth, comfort, and distinction that well-designed clothes can give; when we buy tea we are not interested in ugly, shriveled leaves that color water a sickly brown, but we are interested, perhaps, in a Sunday evening spent before a cozy fire with charming friends whose pleasure and comfort are enhanced by the warmth and sprightliness of the brew. Only misers are interested in mere possession of goods themselves.

Many goods have more than one use, more than one way, that is, in which they can satisfy a want. A piece of wood, for example, may be useful as fuel in a fireplace; the same piece of wood might have been fashioned into a canoe paddle, a table top, or a picture frame and thus have had its usefulness greatly extended in time. It would have served a very different purpose as well.

When goods are scarce—that is, when the supply of them is inadequate to permit *all* people to have them for *all* possible uses—they are rationed, as has already been pointed out, to the highest bidders. Generally they go to the people who put them to their most valuable uses first; that is, they are used where they will satisfy the most intense desires, or at least those desires the satisfying of which causes other people to pay the highest price for them. For example, mahogany is so scarce that it is used only as a veneer on furniture, or solid in the finest furniture, and not as stove wood; jade is used for fine ornaments or museum pieces, not for marbles; electricity is used in homes first for lighting, then for cooking, if the price is low enough, and finally, when the price is very low, for heating the entire house. When people bid intensively for a good, its price rises and the satisfaction derived from it becomes smaller relative to the price paid. If the price continues to rise, the satisfaction derived from the purchase of that particular good becomes less than can be obtained from expending the same amount of purchasing power on other things. When there is a short crop of oranges, for example, some people are willing to pay a relatively high price

to obtain their customary share; others, however, will not pay the higher price, but substitute apples or some other food which has not risen in price. In such circumstances, a smaller total quantity of oranges will be purchased, for purchasing power is used by each person so that each unit of it buys about the same degree of satisfaction. Similarly, the amount of butter that is used relative to such substitutes as margarine, lard, and corn oil, will vary with the differences in relative prices. To generalize, whenever the price of one commodity or service rises in relationship to other prices there is a reduction in the quantity purchased and consumed. This tendency for the consumption of any economic good to increase when its price falls and to decrease when its price rises relative to prices of substitutes is sometimes spoken of as the *law of demand*.

The consumption of some goods is affected much more violently by changes in price than is that of other goods. It has been discovered through experience, for example, that the consumption of staple commodities that are in constant, customary use, is but slightly changed by moderate changes in price. This is the case with many common food products, medium-priced clothing, and so on. Ordinary price concession in these lines may change patronage from one store to another, or from one week to an earlier one, but they are not likely to increase total sales very much. In contrast, consumption of novelties, style goods, or high-priced items like automobiles, may be changed markedly by changes in price. Extreme changes in relative prices will result in substitution even among staple commodities. When the price of butter is very high, for example, there is a considerable increase in the consumption of margarine, and during the depression of the 1930s housewives in several cities staged a concerted and effective boycott against the high price of meat.

The degree of change in consumption that accompanies a change in price of a particular commodity is spoken of as the *elasticity of demand* for the product. If the percentage change in quantity purchased is greater than the percentage change in price, the demand is said to be *elastic*; if the quantity change is small relative to the price change, the demand

is called an *inelastic* one. It will be noticed that if the percentage changes are the same in both price and quantity, (unit elasticity) the same total amount of money will be paid for the commodity regardless of price; if the demand is *elastic*, total purchases in money terms will increase as the price falls, and vice versa. If the demand is *inelastic*, total purchases in money terms will decrease whenever the price falls, and vice versa (see Fig. 28).

Experience has shown that staple foods like bread and milk have inelastic demands. For example, if the price of milk should be increased from 10 cents to 11 cents a quart, or by 10 percent, in a particular city, the quantity purchased for home consumption would be reduced, probably, about 5 percent or a little less. Similarly, if the price of bread should be raised from 10 cents to 11 cents a pound, the quantity purchased would decrease less than 5 percent. In such cases, if there was a single producer with a monopoly of supply, he could make more money by restricting his output or holding it off the market; that is, he would obtain what is commonly called *monopoly profit*.<sup>1</sup> Fortunately for consumers, however, in most cases of staple commodities there are so many suppliers that when one attempts to restrict output to his own advantage, someone else increases supply and the price falls until monopoly profits disappear.

Under certain circumstances, price does not rise to permit monopoly profits even when supply is restricted. When there has been a disastrous flood, for example, and there is a shortage of boats for rescue purposes, the owners use their limited supply of boats without stint and without price. There are situations, in other words, in which the profit motive that was discussed in the previous chapter is inoperative in determining either use of resources or price, but such cases appear in our modern democratic countries mainly under emergency conditions. Apparently men feel that national catastrophies place individuals at so great a disadvantage that the ruthlessness of competitive price should be set aside temporarily. When it is man against man, without advantage, on the other hand, price may go to whatever limit customers will pay; it

<sup>1</sup> See Fig. 40 on page 251 for an illustration.

### ELASTICITY OF DEMAND FOR ELECTRICITY FOR DOMESTIC USE

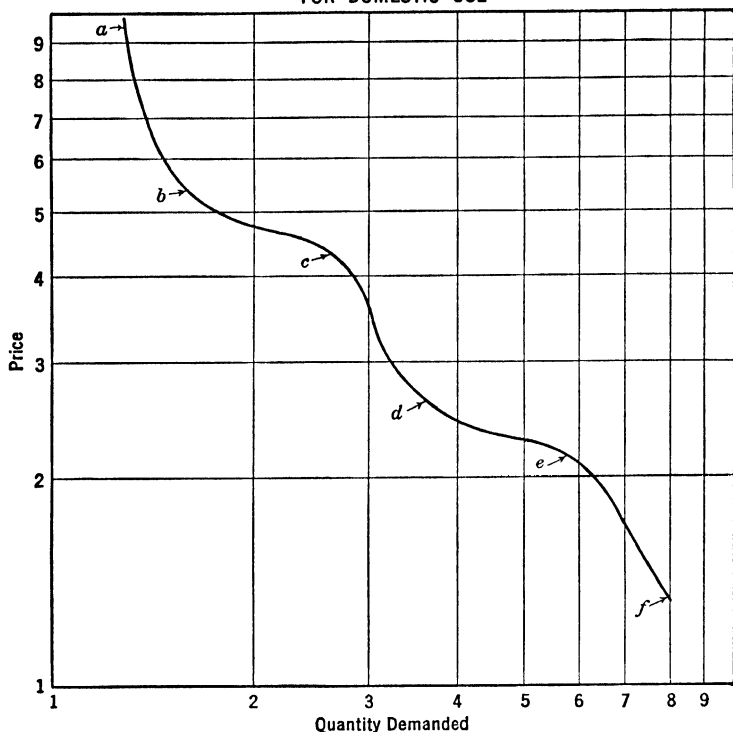


FIG. 28. The elasticity of demand for a single product is not always the same throughout the entire range of possible prices. In the case of electricity used for domestic consumption, for example, the demand at different prices might vary somewhat as shown in the figure above. When the price of electricity is high—at point *a*, for example,—its use in homes may be limited to lighting. Then there may be little increase of consumption with a lowering of price until it falls low enough for many people to put in electric ranges. In other words, with prices between *a* and *b* the demand is inelastic. Then between *b* and *c* many people are persuaded to use electricity for cooking and the demand is elastic until that particular use is generally satisfied. Then follows another stretch, while the price is between *c* and *d*, when little additional use accompanies a lowering of price. Finally, however, when the price falls as low as *d*, people may begin to use electric furnaces, and the total consumption is increased sharply. When that market is saturated the demand becomes inelastic again for prices lower than *e*. This example illustrates different degrees of elasticity and emphasizes the fact that they may occur even with a single commodity. (In this figure, both prices and quantities are plotted on a logarithmic scale so that identical slopes in any part of the diagram represent identical elasticities.)

will go to the point that the seller considers most profitable to him, and consumption of specific things will depend in considerable part upon the price and production policies of the individual producers or merchants.

#### UNCERTAINTY

Another factor that affects the individual's consumption is his feeling of uncertainty. The size of his income and its continuance is uncertain: if he is an employee he may lose his job, or be demoted; if he is a farmer, he may have a poor crop or a low price for his products, or his best cow may sicken and die; if he is a proprietor of a retail store, a new competitor may move in next door and reduce his patronage; no matter who he is, he may die and leave his family without means of support. In addition, sudden and unforeseen drains on his income may occur at any time; sickness, serious damage to his automobile, loss of household belongings either through theft or fire, may bring unexpected expenditures that brook no delay. Moreover, there are some expected events that will require large monetary outlays, provisions for which must be planned and started well in advance; schooling for the children, a trip to Europe, the building of a larger home, replacement of durable goods, like automobiles and furniture, frequently cannot be financed out of any one year's income. People who want to prepare for such emergencies must save part of their current income for the proverbial "rainy day." In so doing they necessarily decrease their expenditure for current consumption.

Life insurance is a splendid example of a medium through which individuals may escape the unfortunate effects of many forms of uncertainty. In fact, Americans appear to regard life insurance much as Popeye does his spinach, as a source of power to overcome many obstacles. In January, 1935, there was nearly \$100,000,000,000 of life insurance in force in the United States and the net increase during the preceding decade had been over \$28,000,000,000.

Life insurance has two important uses for the individual. When the insured person dies, it provides funds either for surviving members of the family, for a favorite philanthropy

of the deceased, such as a school, a hospital, or a home for indigent cats, or for some other purpose. During the life of the insured it provides an accumulation of funds that either may be drawn out in cash and the policy canceled, or may be borrowed, leaving the policy in force. In the former case, no death benefits remain; in the latter case the death benefits are reduced by the amount borrowed.

These two purposes for insurance policies should be considered separately in the planning of an insurance program for the individual. Policies are issued that provide only death benefits without an accumulation of reserves that may be drawn out before death. Other policies differ in the percentage of annual premium that is devoted solely to death benefits as distinct from accumulation of cash or loan values: annuities and endowment policies generally have the largest percentage of premium used for such accumulations. At the time the individual plans his insurance program, he should consult an expert in the field so that he may obtain the policy or policies that best accomplish the specific purposes he has in mind.

To what extent have we actually used life insurance in this country for protection and saving? In 1935 there were over 115,000,000 policies in force in our country of 130,000,000 population. Of course, many people carry more than one policy so the proportion of our population that is insured is by no means as high as these figures might suggest, but certainly a goodly portion of male adults do carry some insurance. During 1934, 24,200,000 policies were terminated, while 25,700,000 were issued or renewed, for a net increase of 1,500,000 policies in the year. As already mentioned, the total value of the death benefits guaranteed by the policies is almost \$100,000,000,000, or about \$775 for every man, woman, and child in the United States.<sup>2</sup>

In connection with this volume of insurance, about \$20,000,000,000 has already been accumulated by the insurance companies and this amount represents the present total cash or loan value of the policies; that is, savings of that amount

<sup>2</sup>Data used in this paragraph are from the Insurance Yearbook for 1935.

have been accumulated by policy holders. Against this amount, about \$3,600,000,000 has already been withdrawn by borrowing; that is, individuals are making temporary use of the savings they have accumulated with the insurance companies. These borrowings have been used to meet emergencies of all sorts. In some cases, the policies were taken primarily to provide savings, while in other cases the borrowing was unexpected. In the former cases the policies may be allowed to lapse after they have served their main purpose, while in the latter cases they may be continued because of the importance of the death benefits in the individual's general plan. In such cases the loans are likely to be repaid, although even if they are not they reduce the remaining death benefits by less than 4 percent on the average.<sup>3</sup> In individual cases, however, the loan on a policy may so reduce its death benefits and, consequently, so increase its cost as pure insurance as to cause it to be dropped. Individuals who have borrowed heavily on their policies will do well to consult an expert concerning the wisdom of making some change in their general program of insurance.

Other methods of saving are also common in providing for the unforeseen social, economic, and physical uncertainties. By saving we do not mean hoarding money—that is, taking it out of circulation by placing it in the proverbial sock or cookie jar, or by burying it, although we realize a certain amount of such “providing for emergencies” exists. We mean, rather, the placing of some part of our current money income so that it may be used for the time being in some other way than in satisfying our own individual desires, but may be reclaimed later, if we wish, for use in our program of consumption.

Banks are one of the outstanding institutions that provide the individual with facilities for savings. As one of their many services, banks act somewhat as money merchants, accepting deposits from those who want to save, and extending loans to those who want temporarily to use more money than they possess. The data in the following table illustrate the number of savings and other time depositors in banks and

<sup>3</sup> Total loans, \$3,600,000,000; death benefits, \$100,000,000,000.

trust companies in the United States together with the total savings and other time deposits from 1926 to 1934.

TABLE 18

## SAVINGS AND OTHER TIME DEPOSITS AND DEPOSITORS IN BANKS AND TRUST COMPANIES IN THE UNITED STATES \*

<i>On or about June 30</i>	<i>Savings and Other Time Deposits in All Banks (mill. of \$)</i>	<i>Savings and Other Time Depositors (thousands)</i>
1926 .....	24,692	46,762
1927 .....	26,091	48,355
1928 .....	28,413	53,188
1929 .....	28,218	52,764
1930 .....	28,479	52,729
1931 .....	28,220	51,399
1932 .....	24,281	44,352
1933 .....	21,126	39,262
1934 .....	21,868	39,562

\* Statistical Abstract of the United States, 1935.

In 1930 there were approximately 30,000,000 families in the United States and there were nearly 53,000,000 different savings accounts with an average value of about \$540. If all of these had been accounts of individuals, available for future use in consumption, and if each had been of average size, they would have formed considerable protection against future uncertainties. Unfortunately, however, a large number of these accounts were corporation or business savings and, therefore, not available to individuals as future purchasing power.

Fig. 29 illustrates the concentration of savings deposits in a few large accounts. In this figure, if all amounts were of the same size the curves of deposits by depositors would be identical with the diagonal line. The departure of these curves from the diagonal is large, indicating a high concentration of savings in the large accounts. Actually, 50 percent of all rural depositors were responsible for only a little over 3 percent of the deposits, while the 2.2 percent of largest depositors were credited with a full 50 percent of the deposits. The concentration is shown by the graph to be less among the urban depositors, but even with this group the 10 percent of highest depositors accounted for nearly 60 percent of the deposits. Moreover, the average life of savings accounts is only

seven years. Thus it appears that not much protection is actually gained by the rank and file of people through savings accounts; not many people have such accounts and even such accounts as do exist are small and short lived.

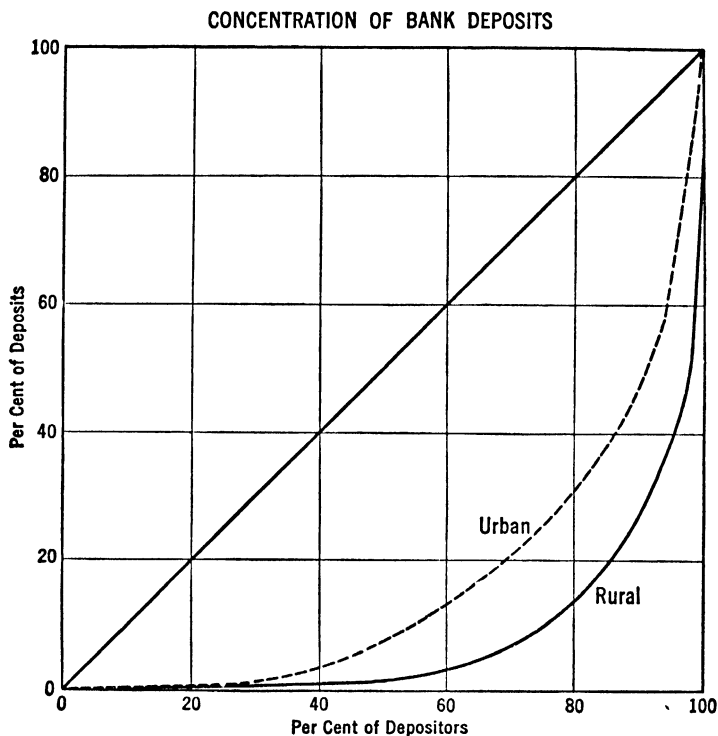


FIG. 29. This diagram shows the concentration of demand deposits of a rural bank and of an urban bank by means of Lorenz Curves which are curves of accumulated percentages. (Source: Croxton and Cowden, *Practical Business Statistics*, p. 163, Prentice-Hall, 1934.)

Banks provide some other services besides savings departments that may be used to lessen individual uncertainty. For example, they have trust departments which will take the responsibility of investing and handling sums of money or parcels of property that are left in trust for any specific purpose. Trust funds may be established for many personal purposes, such as the provision of an income after retirement from active work, or to cover the expense of college and train-

ing for children, or to yield an income for a widow. Trust departments or trust companies do not usually guarantee an exact income from their handling of trust funds, but they have a fairly good general record of combining safety with a moderate yield. Individuals should, however, inquire carefully into the reputation of a particular trust company before assigning funds to them to handle.

Individuals may make personal use of their savings rather than turn them over for safekeeping and accumulation either to insurance companies, savings banks, or any other financial institution. This may be done in either of two ways. In the first place the individuals may use their surplus funds to purchase some business or capital equipment, such, for example, as a farm, a retail store, or a small manufacturing plant. These businesses may be purchased, of course, with a small down payment, and the balance may be paid off gradually out of subsequent savings. Moreover, the enterprise may be added to or increased in size at any time that additional savings are available and that general conditions warrant the expansion. Many people place all their savings throughout their lifetime in their own enterprises. In this way they keep close watch of their ownership interests, and at the same time provide themselves continually with a proprietor's job.

In the second place the individual may invest his savings in partial ownership of any of the many forms of incorporated business. He may take a partial ownership in a corporation through the purchase of capital stock. In this case he gains some rights of management and a share in the net earnings of the corporation. He must also bear a proportional share in the losses, if there are any. On the other hand he may purchase bonds or mortgages. This is equivalent, in many ways, to loaning money to the corporation or individual who issues the bond or mortgage. The investor knows in advance just what income he is to receive, and he is certain to receive this amount unless the borrowing corporation or individual is unable to meet its contractual obligations. Bonds and other loans generally carry lower rates of return to the investor than do stocks during periods of good business, but they represent a much safer form of investment. The average indi-

vidual will do well, however, to consult an expert before making any investment, at least until he has had considerable observation and experience.

A considerable proportion of the total population is either unable or unwilling to take advantage of any of the facilities of saving. It has been estimated that in the prosperous year of 1929 there were about \$15,000,000,000 of individual savings, which was about 18 percent of the total income produced.<sup>4</sup> Of this amount, the 59 percent of families having incomes of under \$2000 saved only 1.6 percent while the 2.3 percent of families having incomes in excess of \$10,000 contributed two-thirds of the entire savings of American families. In other words, the nearly 60 percent of families at the lower end of the income scale made total savings that averaged only \$15 per family and even the lower 97.7 percent of families saved an average of only \$165 per family, while the upper 2.3 percent saved an average of over \$14,000 per family. In fact, the 21 percent of families with incomes of under \$1000 actually consumed more than they produced by an aggregate amount of about \$2,150,000,000 or an average of \$365 per family; that is, instead of saving money or purchasing power for use later, this large group used up past savings, increased their borrowings, or received contributions from charity even in the relatively prosperous year of 1929. Obviously it must be concluded that the rank and file of American families are failing to make, because they either cannot or will not, any adequate personal provision for old age, unemployment, or other future emergency. This circumstance has led recently to much public discussion and some legislation concerning compulsory saving for old age and insurance against unemployment. Some of the possibilities as well as the advantages and disadvantages of the various proposals will be discussed in Part III.

Uncertainty is broader in its effects on consumers than we have indicated here. Some of the many other manifestations of uncertainty, such as those due to price fluctuations and to quality of products, will be discussed later on.

<sup>4</sup> The data used in this paragraph are from Leven, et al., *America's Capacity to Consume*, p. 93.

To the extent that the desire to guard against uncertainty diverts income into insurance, savings, and investments, and away from purchases of food, clothing, shelter, and so on, immediate-consumption patterns are affected. Moreover, future-consumption patterns are modified likewise. The extent and direction of this later modification depends, in large part, upon the wisdom with which the original program for saving was conceived and carried out. People who have reached the age for retirement, for example, may be able to live comfortably and even travel widely if they have followed a wise program of saving and investment; if they have not, they may find it necessary to spend their remaining years supported by their children or by some other form of charity such as a public or private old-people's home.

#### SIZE AND AGE OF THE FAMILY AND THE INDIVIDUALS

The consumption patterns are affected to some extent by the structure of the family. As a family increases in size, for example, physical requirements increase. In any income group the larger expenditures for food and clothing necessary for large families tend to reduce expenditures for other items. Such general trends are shown in the following table.

TABLE 19

AVERAGE EXPENDITURES FOR ONE YEAR FOR FAMILIES OF THREE DIFFERENT SIZES (SAMPLE CONTROLLED FOR INCOME). EMPLOYED WAGE EARNERS AND CLERICAL WORKERS: NEW YORK CITY, 1934, 1936 \*

<i>Groups and Expenditures</i>	<i>Families of Husband and Wife Only Mean Expenditure</i>	<i>Families of Husband, Wife and 1 Child Mean Expenditure</i>	<i>Husband, Wife and 4 Children Mean Expenditure</i>
Food . . . . .	541.50	589.80	657.50
Housing . . . . .	365.80	368.90	375.20
Home operation ..	145.50	135.80	149.50
Recreation . . . . .	119.70	106.60	92.70
Personal care . . . .	32.00	31.00	29.90
Medical care . . . . .	61.90	61.30	57.90
Transportation . . .	111.60	71.50	62.20
Clothing . . . . .	161.80	178.30	146.90

\* Williams, Faith, "Methods of Measuring Variations in Family Expenditures," *Journal of the American Statistical Association*, March, 1937, p. 40.

Miss Williams points out that "these figures show that increases in expenditures for food and housing with increases in family size are obviously not large enough to provide food and housing for the larger families at the same level as for the smaller ones; average expenditures for personal care and medical care per family decrease slightly but the average expenditures for these items per person decrease markedly with increase in family size. Expenditures per family for recreation and for transportation decrease greatly with the addition of children, but not so rapidly as average expenditures per person for medical care."<sup>5</sup>

Not only does the number in the family affect the buying habits of the family, but the degree of family maturity affects what will be purchased as well as the amount of those purchases. Families with small children will spend less money on clothing than adult families in the same income class. The data in Table 20 illustrate how the age composition of the family affects what is purchased.

Furthermore, the age and physiological structure of each individual have a decided influence on total family consumption. We are all familiar in general with the gamut of wants which is the function of age. Children want marbles, dolls, bicycles; youth demands cigarettes, lipsticks, flashy clothing, fast automobiles, swing music; middle age gives up tennis for bridge; old age puts comfort ahead of either fashion or speed. Perhaps it is true that children become sophisticated at an earlier age nowadays than they did one hundred years ago and that people do not grow old so young as once they did, but the differences between the social age groups are still distinctly evident in their consumption patterns. The Townsend Plan of large old-age pensions, already referred to, certainly would upset consumption patterns by directing consumption toward things chosen by old people. This, in turn, would cause some important changes in production, employment, and the use of resources.

Most of us are not so familiar, however, with the actual distribution of people in a community by age levels. In Fig. 30

<sup>5</sup> Williams, Faith, *op. cit.*, p. 43.

# 158 THE INDIVIDUAL'S CAPACITY TO CONSUME

## TABLE 20

DISTRIBUTION OF A \$1,500 INCOME AMONG THE PRINCIPAL GROUPS OF GOODS AND SERVICES: FIGURES ADJUSTED FOR SIZE OF FAMILY \*

Kinds of Goods and Services	Preschool † 66 Families		Grade School ‡ 92 Families		High School § 58 Families		All Adults    51 Families	
		% of Total		% of Total		% of Total		% of Total
All .....	\$1,540	100.0	\$1,450	100.0	\$1,273	100.0	\$1,811	100.0
Food .....	582	34.4	542	37.4	483	37.9	550	30.0
Clothing .....	172	11.2	170	11.7	206	16.2	298	16.5
Rent .....	261	16.7	235	16.2	173	13.6	241	13.3
Furnishings .....	60	3.9	69	4.8	32	2.5	87	4.8
Home Operation..	258	16.8	222	15.3	186	14.6	249	13.7
Maintenance of								
Health .....	93	6.1	67	4.6	42	3.3	82	4.5
Advancement of								
Goods .....	59	3.8	59	4.1	84	6.6	167	9.2
Personal Goods...	55	3.6	45	3.1	41	3.2	77	4.3
Ins., Life & Health	54	3.5	41	2.8	26	2.1	60	3.3

\* *The Life Cycle of the Farm Family*, Wisconsin Research Bulletin No. 121, p. 84. Figures have been adjusted on basis of the average size for the 267 families, i.e., 4.4 persons. Therefore the average costs of family living for each state are for a theoretical family composed of 4.4 persons.

† Preschool family, children under 6 years of age.

‡ Grade school family, children 6-13 years of age.

§ High school family, children 14-18 years of age.

|| All adult family, children 19 years of age and over.

the population of Minnesota in 1930 is shown graphically by age and sex. From this graph it may be noted that about 9 percent of both males and females were under 5 years old, that at least 25 percent of the population were under 15 years of age and at least 50 percent were under 30. These percentages have an important bearing on the aggregate consumption of different commodities and, consequently, upon the market possibilities of different lines of production.

Another line appears in the same figure showing the percentage of population at each age in a community that has ceased to grow. Comparison of the two lines shows a greater part of the total Minnesota population at the lower age levels than is found when population has become stationary, that is when the number of births in the community just equals the number of deaths. The situation in Minnesota is typical of young, pioneer communities. As countries become older, the general tendency is for them to approach the stationary popu-

lation state. New England appears to have matured in this sense, as have France, England, and many other countries.

COMPARISON OF THE POPULATION IN MINNESOTA  
IN 1930 WITH A STATIONARY POPULATION

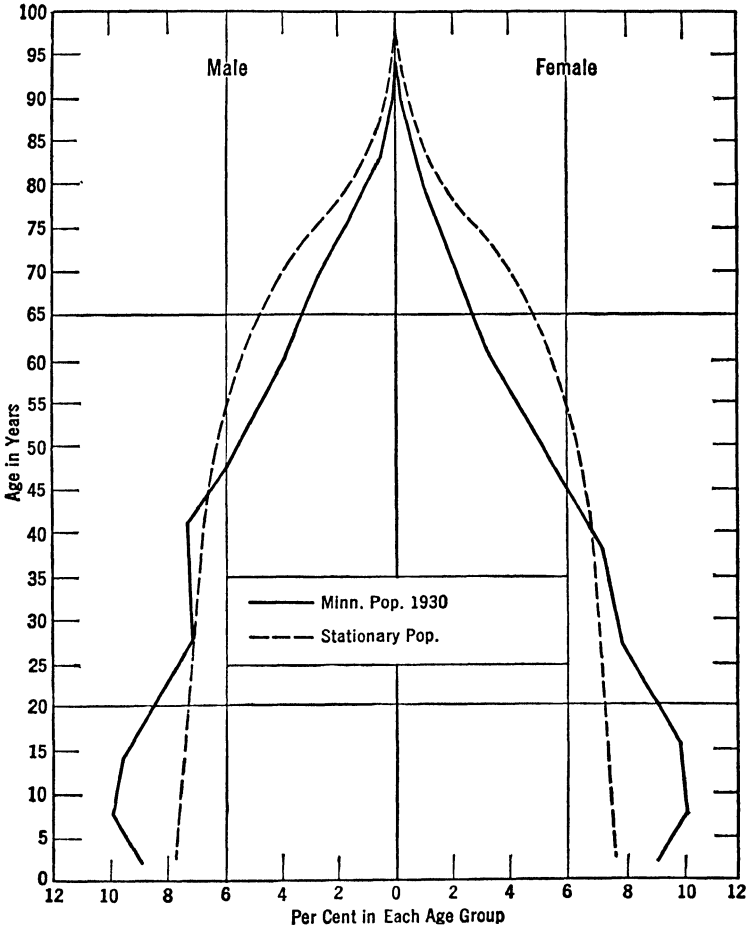


FIG. 30.

The change in age distribution in a community is usually gradual, but as it develops it brings with it an unmistakable change in the pattern of community consumption.

Similarly, physiological characteristics of the individual ex-

ercise an important influence on his purchasing habits. The person who conforms to the measurements most common among his fellows can buy, if he will, shoes, clothing, and so on, at prices considerably lower than those the unusually large or deformed person must pay. Due to the economies of large-scale production, the price of the "ordinary size" is less than that of the "special order."

#### HABITS

"A habit is a way of living that has been learned; the doing of the same things always in the same way under the same conditions—it is a stereotyped form of response."<sup>6</sup>

Consumption is regulated to a considerable degree by the fact that people tend, both individually and *en masse*, to react habitually in the same way to the same stimuli. By and large the consumer prefers to use the commodity with which he is familiar and which he sees his compatriots using.

Moreover many of our everyday actions are the direct result of habit. William James pointed out that, "there is no more miserable human being than one in whom nothing is habitual but indecision, and for whom the lighting of every cigar, the drinking of every cup, the time of rising and going to bed every day, and the beginning of every bit of work are subject to express volitional deliberation."<sup>7</sup> Thus persons raised in poverty acquire habits of economy which follow them through life whereas the children of the wealthy find it extremely difficult to live frugally if ever they need to do so. We conclude therefore with Mr. Wyand that, "habit determines the choice made, but is in turn the product of the relationship existing between the consumer and the conditions under which he lives."<sup>8</sup> It then follows that the determinants of habitual choices are in reality the other factors which we are discussing in this chapter.

<sup>6</sup> Dunlap, K., *Habits, Their Making and Unmaking*, pp. 1 and 8. Liveright, 1932.

<sup>7</sup> James, W., *Principles of Psychology*, Vol. 1, p. 122, Holt, 1890.

<sup>8</sup> Wyand, C. S., *Economics of Consumption*, p. 196, Macmillan, 1937.

## CUSTOM

The phenomenon of custom resembles habit somewhat, and is almost equally responsible for consumption patterns. It may be defined as "the repetition of acts or ways of doing solely because they are practices of the others now living, and probably of many generations gone before. It differs from habit in that in habit the repetition is always by the same person after himself, whereas in custom the repetition is always after others."<sup>9</sup> Most of the details of daily life are regulated by custom. In Sumner's comparison of cases of food taboos there are illustrations of the degree to which food preferences are influenced by custom.<sup>10</sup> We do not eat dog flesh but some North American Indians preferred it, while the Banziris in the French Congo solemnize the eating of dog's flesh with rituals. Negroes in the French Congo have a perfect horror of the idea of drinking milk whereas Americans believe it the most nutritious food for infants. Not only are our *food* preferences influenced by custom. Women travelers are shocked at the failure of Japanese workmen to wear clothing and are totally unconscious that their own dinner costumes shock Orientals.<sup>11</sup> Thus we see custom plays an important part in influencing what we buy.

Social pressure may affect the individual's consumption in much the same way as does custom if it does not, in fact, produce custom. As a member of a society the individual may try to consume a greater quantity and a greater variety of goods than does his neighbor. Keeping up with the Jones's or ahead of them explains much wasteful consumption. Last year's car, although in excellent condition, is traded in for a new one having chromium trimmings and new gadgets, and even many old married folk have replaced their original wide-band wedding ring by a circlet. Women's fashions are subject to sudden and extravagant change due in the main to

<sup>9</sup> McIver, R. M., *Society, Its Structure and Changes*. "Habits can exist without the support of customs but customs could not exist unless the corresponding habits were inculcated into the rising generation." P. 288.

<sup>10</sup> Sumner, W. G., *Folkways*, pp. 28-29, Ginn, 1907.

<sup>11</sup> Atkins, *Economic Behavior*, Vol. II. p. 5, Houghton Mifflin, 1931.

this desire on the part of adults to imitate.<sup>12</sup> Many garments which are essentially as good as they were when they were new become obsolete and either require major alterations or are not wearable and must be discarded. For example, Fig. 31 shows the frequent changes in the lengths of women's skirts during the period from 1923 through 1932. The knee-length skirt which reached its peak of popularity at the close of

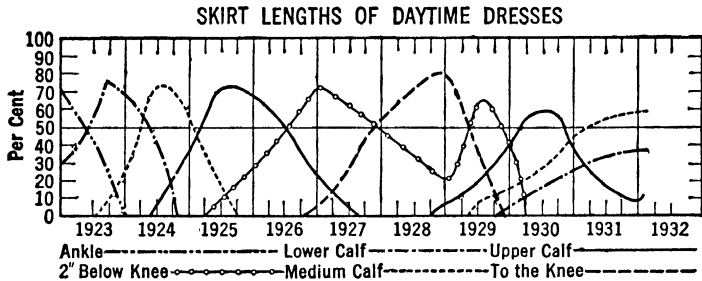


FIG. 31. The above chart shows the increased popularity of the short skirt during the period 1923-32. In 1931-32 the longer skirt was being worn by an increasing number of women. If we brought the graph up to date we should note another decline of the long skirt with a gradual shortening of skirts up to 1938. (Source: *The Commercial Problems of the Woolen and Worsted Industries*, p. 67.)

1928 was completely replaced one year later by a skirt so sufficiently longer as to render the knee-length skirt obsolete. Fashions may be either short lived or long lived; if they are very short they are spoken of as fads; if they persist a *long time* they become customs.

Habits and customs often result from, and tend to reflect, the stage in the development of civilization to which a particular people have come at a particular time. By way of illustration, it could not be customary to listen to the radio until the physical scientists had discovered certain practical methods of transmitting and receiving sound; the stylish horse and carriage was not replaced on Fifth Avenue by the automobile until the internal combustion engine had been satis-

<sup>12</sup> A distinction should be made between "style" and "fashion." Style is a characteristic or distinctive mode or method of expression in the field of some art, while fashion is the prevailing style at any given time.

factorily attached to a wheeled vehicle; legend has it that the custom of eating roast meat arose in China only after someone discovered by accident the excellent flavor of a pig roasted quite accidentally by a fire that destroyed a home from which the pig was unable to escape; even the custom of the morning milk delivery had to await the domestication of the cow. Changes in "the state of the arts" are occurring constantly and these changes frequently affect the habits and customs of people, thus modifying their consumption.

## ABILITIES

People differ greatly in abilities. Some college students are great football players, others are sprinters, others play tennis, others seem to have no athletic ability; some dance well while others are just plain clumsy; some have photographic memories of great accuracy, others can memorize only after many repetitions; some have high I-Q's and others low ones.

During the years 1931 to 1936 the Employment Stabilization Research Institute of the University of Minnesota conducted many case studies of men and women workers, employed and unemployed alike. One of the groups that was observed was composed of some 300 "casual" workers in the city of Duluth. These were men who had held no regular job for some years prior to 1931, but who had worked irregularly in seasonal industries or at odd jobs. More than three-fourths of them had never been married and most of them were classed as "homeless men" lodged in central quarters by the community. In terms of measured abilities and education these men represented an inferior section of the working population. Tests were given them in seven fields to show their physical and mental abilities and in only two of these tests were they able to perform as well as the average of the population and even in them they were only average. Because of a combination of poor abilities, poor physical condition, advanced age, and meager background, about one-third of these men could not, even under most favorable conditions imaginable, be fully self-supporting in any ordinary type of work. People with

similar limitations are present, of course, in every community.<sup>13</sup>

There are distinct differences in abilities between other groups of workers. Figs. 32 and 33 are taken from the summary of the tests made by the Employment Stabilization Research Institute to illustrate some of these differences.<sup>14</sup> Garage mechanics were found to be superior to men office clerks in mechanical assembly tests, but inferior in number tests and in finger dexterity. Retail saleswomen as a class were found to be inferior to women office clerks in all the tests given. These "occupational ability patterns" give a pretty good picture of the traits that characterize steadily employed workers in different jobs. Similar measurements have been made—or may be—of the characteristics of workers in many different occupations or jobs. It has been found, in fact, that the "ability" patterns for many jobs are well enough known to permit quite accurate forecasts of an individual's chances for success, from his performance in certain prescribed tests.

The presence or lack of specific abilities has a direct bearing upon income. In the first place competitive industry is attempting constantly, through trial and error, to use individuals where they will be most effective and to weed out the inefficient from each specific job. Sometimes this process brings tremendous hardship to the individual, but in the long run it must result in increasing the total output of society. Data gathered by the Employment Stabilization Research Institute show that industry did tend to eliminate first the less efficient people during the period of increasing unemployment in the 1930s. Fig. 34 shows the average test scores of women clerical workers who lost their jobs early in the depression, compared with the scores of those who lost their jobs later and those who were continuously employed.<sup>15</sup> Apparently employers were able, in general, to single out the people with relatively low ability and to dismiss them early in the period of retrenchment. This has a very pertinent bearing on such matters as civil service, permanence of tenure, and seniority

<sup>13</sup> Paterson and Darley, *Men, Women, and Jobs*, pp. 23-25. Univ. of Minn. Press, 1936.

<sup>14</sup> *Ibid.*, pp. 44-45.

<sup>15</sup> *Ibid.*, p. 41.

## OCCUPATIONAL TEST SCORES MADE BY MEN CLERICAL WORKERS AND AUTO MECHANICS

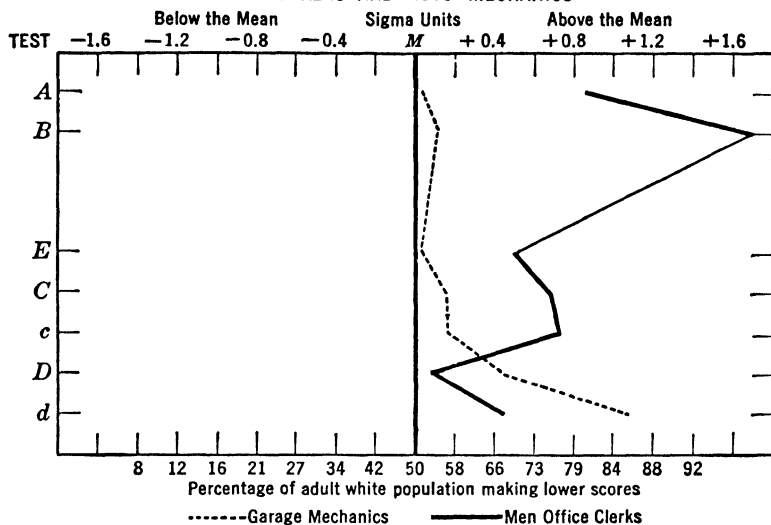


FIG. 32. The letters represent tests as follows:

- |                              |                                   |
|------------------------------|-----------------------------------|
| A. Educational: Verification | c. Dexterity: Manual              |
| B. Clerical: Numbers         | D. Mechanical: Assembly           |
| E. Dexterity: Finger         | d. Mechanical: Spatial Relations. |
| C. Dexterity: Tweezer        |                                   |

The average occupational test scores made by a group of men clerical workers and a group of experienced auto mechanics are plotted above. The middle line represents the average scores of people in general on the same tests. There were over 100 persons in each of the two occupations, and almost 500 in the general sample. These curves show that, on the average, clerical workers do better on the test of educational ability than about 80 percent of the general population, whereas the auto mechanics agree with the general average. In the test for clerical aptitude the clerical workers make an average score that is better than the scores of 95 percent of the general working group, whereas the auto mechanics are slightly above. In three tests of dexterity, the clerical workers are better than about 75 percent of the general population and the auto mechanics are better than about 55 percent. But for tests of mechanical ability the picture is reversed. The auto mechanics make much better scores than the general population and greatly exceed clerical workers. In a test involving the rapid assembling of small mechanical objects the mechanics are better than 66 percent of the general population, whereas the clerical workers exceed about 56 percent of people in general. The last test, where irregularly shaped pieces are to be fitted to cut-outs in four boards, is performed best by the mechanics, who make an average score better than 85 percent of the working population in general. Clerical workers are better than about 66 percent of the general population. (Source: Paterson and Darley, *Men, Women and Jobs*, p. 44, University of Minnesota Press, 1936.)

**OCCUPATIONAL TEST SCORES MADE BY WOMEN CLERICAL  
WORKERS AND DEPARTMENT STORE SALESWOMEN**

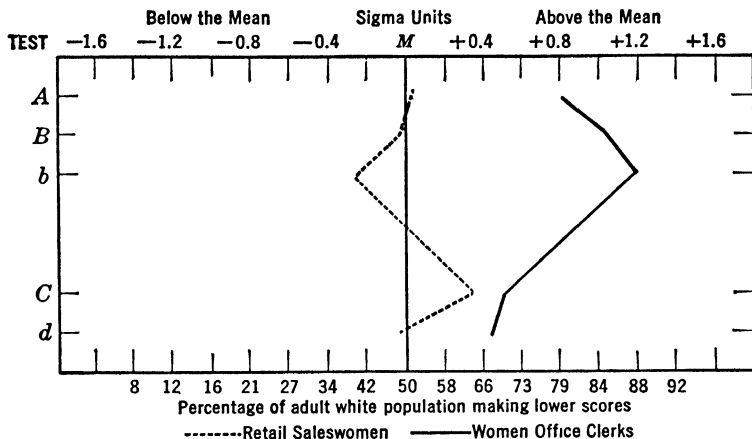


FIG. 33. The letters on the above vertical scale represent the tests used to measure the abilities of women clerical workers and department store saleswomen as follows:

**TEST**

- A. Educational: Classification and Verification
- B. Clerical: Numbers
- b. Clerical: Names
- C. Dexterity: Fingers
- d. Mechanical: Spatial Relations.

Fig. 33 shows, first, the average occupational test scores made by over 150 women employed as office clerks; the average scores made by over 130 women in department store selling; and, finally, the average scores, represented by the center vertical line, of a general sample of women workers, so selected as to be representative of the occupational distribution in Minneapolis, St. Paul, and Duluth.

"Women clerical workers are superior to about 79 percent of the general population of women in a test of educational ability, while retail saleswomen are at the general average. In working accurately and rapidly with number and name comparisons, clerical workers are better than about 85 percent of women workers in general, while retail saleswomen are just below the general average in the number-checking test and much below the average in the name-checking test, making an average score on the latter that is better than only 40 percent of the general population. Both clerical workers and retail saleswomen are above the general average in the speed with which they use their fingers, and both groups are rather similar in this trait. In the spatial relations test, described for the men, retail saleswomen are at the average of the general population of gainfully employed women, while clerical workers are better than about 70 percent of women in general." (Source: Paterson and Darley, *Men, Women and Jobs*, p. 45, University of Minnesota Press, 1936.)

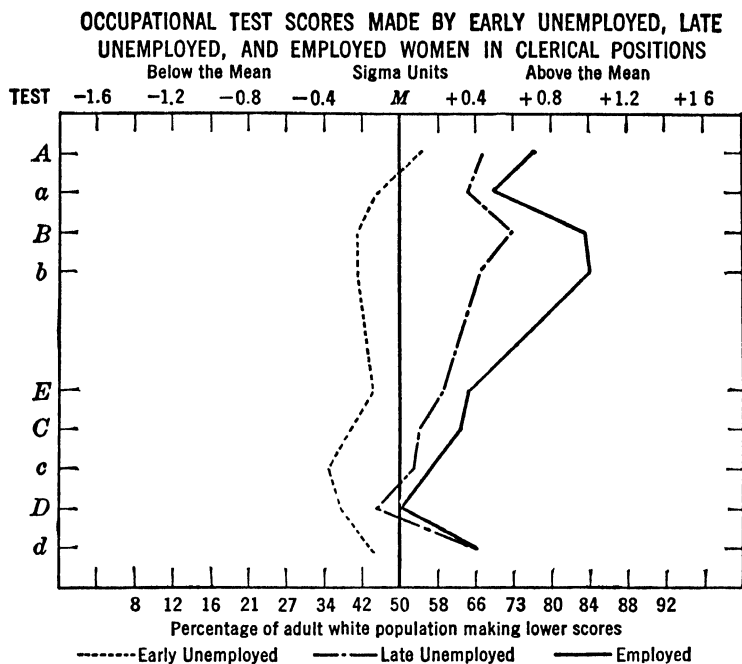


FIG. 34. The letters on the above vertical scale represent the tests used to measure the abilities of women in clerical positions as follows:

**TEST**

- |  |  |
|--|--|
| <p><i>A.</i> Educational: Classification</p> <p><i>a.</i> Educational: Verification</p> <p><i>B.</i> Clerical: Numbers</p> <p><i>b.</i> Clerical: Names</p> <p><i>E.</i> Dexterity: Finger</p> | <p><i>C.</i> Dexterity: Tweezer</p> <p><i>c.</i> Dexterity: Manual</p> <p><i>D.</i> Mechanical: Assembly</p> <p><i>d.</i> Mechanical: Spatial Relations.</p> |
|--|--|

“The average test scores made by women in clerical occupations have been plotted separately for the early unemployed, late unemployed, and employed groups. The lines joining the averages for the late unemployed and the employed are closer together and more nearly the same shape than those for the early and late unemployed. Similar results were found in comparing the three employment status groups among business and professional workers, men clerical workers, and men skilled workers. In all these fields the employed and late unemployed were much alike, and the early unemployed and late unemployed were different, in their performances on objective tests of abilities.” (Source: Paterson and Darley, *Men, Women and Jobs*, p. 41, University of Minnesota Press, 1936.)

rights for employees. Further discussion of these matters appears in Part III.

Specific abilities affect *income* in other ways than through mere employment and unemployment. The geniuses in any of the arts—the Menuhins, the Rachmaninoffs, the Whistlers, the Sinclair Lewises—are rare, their works are scarce and cannot be reproduced at will, and so if people want what they alone can give, the price for their services is high. Inventors, captains of finance, great surgeons, are rare and, sometimes, society is willing to pay handsomely for what they alone can do. The situation that faces the individual in his attempt to market his abilities is similar to other cases of sale; if the ability is scarce relative to the desires of others for what it will produce, the price the individual can charge for his services is high. If the ability of the individual is common relative to the demand for that type of ability, the price or wage will be low. It has already been pointed out that income affects consumption, so it follows that as abilities result in differences in income, they also modify consumption.

Abilities also affect the *patterns of consumption* even within each income group. People with musical ability are likely to spend more on musical training, concerts, and the like, than do those who lack such ability. Those who lack discriminating intelligence are likely to reduce their total consumption through careless purchasing and lack of planning. The specific abilities to redesign and make over dresses may reduce the family expenditure on clothing. In these and many other ways specific abilities affect the details of the individual's consumption program.

#### ATTITUDES

Consumption will vary among the people in any social group or between social groups as a result of differences in attitudes of individuals towards many questions, and quite in addition to the effects exercised by income and ability. As already pointed out, it is said by some that the desire for wealth or income is *the* economic motive beside which all others are unimportant. Perhaps this is true for enough individuals so that it is largely true for people *en masse*, but certainly there are other motives which strongly influence some people. Much

of our discussion of economics has been predicated upon the assumption of an hedonistic philosophy of psychology; that is to say, it has been assumed that people generally do those things that give them the greatest pleasure and cost them the least pain. Perhaps they do, but it must be pointed out that there is no precise measurement of either pleasure or pain and, furthermore, that the voluntary acts of people frequently do not appear to be entirely so regulated. Missionaries, for example, have gone through terrific hardships because of an "ideal," and soldiers go "into the jaws of death" as a patriotic duty. Perhaps these cases, like those already referred to which accompany emergencies, are "exceptional," but perhaps the exceptions of today may be the rule of some tomorrow.

Doubtless there are many shades or degrees of philosophy and psychology that affect individual patterns of consumption. The optimist, with his bowl full of Wheaties in front of him, asks politely, "Please pass the cream," while the pessimist, in contrast, laments, "There isn't any milk left in that pitcher, is there?" The stoic consumes the food placed before him without any sign of like or dislike, while the epicurean tastes critically, consumes only that which pleases the palate, and suffers acutely over anything that is not "right." Some people insist on remaining on farms, while others are happy only in the midst of crowds. Some take vacations in the north woods where they may "suffer together" from mosquito bites, campfire smoke in the eyes, muscles weary from canoeing, while others luxuriate on the beach at Miami and still others attend the latest shows on Broadway. Some people with large incomes give generously of their time and money to churches and charities, or build library buildings, or endow research institutions, or support peace movements, while others build race tracks, or breed race horses, or establish gambling casinos and night clubs.

Perhaps there is little that can be said with definiteness about the "right" or "wrong" of these different philosophies or tastes. There are those who believe that individual selfishness should be curbed in the interest of general welfare, but it might be difficult to find positive proof even for this belief. Some would say that we need more good old-fashioned thrift,

while others argue that public well-being dictates free and continuous spending. Probably there is an almost universal feeling that truthfulness is socially desirable, for it reduces uncertainty and lessens the losses due to misinformation. And yet it is said that in some countries, Persia and Japan for example, if one cannot be both courteous and truthful, one had better be courteous first. In the play, *Nothing but the Truth*, the difficulties accompanying complete truthfulness are strikingly emphasized in comedy.

Many of the classical writers in the field of political economy had in mind some special problems in general welfare and the means by which organized governments might be used to solve these problems. Their suggested solutions always carried certain assumptions, however, concerning what was socially desirable. Common among the assumptions that have been held from time to time are the following:

1. It is desirable to have an increasing population in a country.
2. It is desirable to have an increase in the consumption of material goods, per capita.
3. General prosperity is dependent upon prosperity in agriculture.
4. Wage earners should have an increasing share of the total product of society.
5. Monopoly profits, exacted from consumers by those who have been given special rights which permit restrictions of output, are *prima facie* bad.

Whether we care to accept any or all of these assumptions, and what others we should add to the list, are pretty much a matter of individual attitude.

#### HEALTH

The state of one's mental and physical health has a marked affect on one's buying habits. To most depressed individuals all activities and commodities lose much of their appeal. On the other hand the happy person tends to buy impulsively, has a variety of interests and will, therefore, buy a wider range of products and, perhaps, more of each. Similarly, those who are physically ill or who suffer from any of various neuroses are either not able to indulge their interests or think they

cannot. They retain little interest in buying ordinary goods but spend large sums for medicine, medical services and in travel in search of relief.

Our consumption habits clearly express our physical and mental health. Although relatively few people are chronic invalids either of the physical or mental type still there are few who do not suffer from minor illnesses and still fewer who have a perfectly balanced mental life. The total effect of illness is undoubtedly very large. For example, the best available estimates show 342,000 days lost annually by workmen in the United States as the direct result of illness, much of which loss could be prevented with reasonable care and foresight. The loss of income produced that accompanies this loss of working time clearly must have its effect on total consumption.

Our economic order has not yet found a way to provide adequate medical care to all our people. It was pointed out earlier in this chapter that, as the number of children in a wage earner's family increases, the total money expended on medical care decreases. Probably this is not because the members of the family are healthier, but rather because funds are not available with which to maintain the previous standard of care. Associated with this economic situation there appears to be a large amount of inexpert home doctoring. This situation has led to widespread use of patent medicine of many sorts, some of which are quite useless and others of which many be actually harmful. In a recent issue of a reliable women's magazine, for example, there appeared an article on coughs and colds by Drs. Morris and William Fishbein, one of whom is editor of the *American Medical Journal*. One of their rules was, "Give no medicine except on doctor's orders," and another was, "Do not spray the nose or drop in oily substances." On the same page there appeared an advertisement for Vicks *Va-tro-nol* which said, "When colds threaten . . . quick!—put a few drops of Vicks *Va-tro-nol* up each nostril." Perhaps the Drs. Fishbein were overly cautious in this particular case, but since the ordinary consumer has no sure or safe way to judge the merits of the two claims he is probably

safer in taking the advice of the physician rather than that of the manufacturer.

Strong and healthy people are the greatest asset any country has. Since this is so, and since private enterprise has not made available to average citizens an adequate amount of health care at a price they can afford to pay, perhaps this is a field in which additional governmental efforts should be used. Public service in health education and preventive measures is already expanding and, doubtless, it will continue to do so.

#### TIME

Time is, perhaps, the most relentless of all factors limiting consumption. Is there any who has not said, "I'm sorry, but I cannot take the time to do it, much as I'd like to." And "it" can be many things! You cannot listen to two radio programs at once, you cannot study economics while watching Minnesota and Notre Dame play football, you cannot go with Tom to the theater and Jerry to the dance the same evening—or can you? Many circumstances will occur to you in which a choice must be made among two or more things all of which you would like to do—but cannot, because to be done at all they must be done at the same time.

Not only does time limit consumption because things get in each other's way, but the total time in each day is limited to 24 hours. Usually about 16 of these hours are spent in working and sleeping. The remaining 8 hours set a rigid limit for the day's consumption. Whenever you change your costume, or shave, or curl your hair, you reduce the time available for the consumption of other things. And whenever you consume material things you reduce the time available for meditation, enjoyment of the sunset, and similar things. The person who becomes greatly involved in the consumption of *things* has no time to do as the proverbial farmer who often "sits on the fence and thinks, and sometimes just sits."

The day is short and so is life itself. In our western civilization we have found no close approach to the beautiful timelessness that was found at Shangri-La in *Lost Horizons*. When we have reached the common age of college students we

can look forward only to about 45 more years, for that is the *average* length of life beyond the eighteenth year. The average life expectancy as one reaches each age level is shown in Table 21.

TABLE 21  
LIFE EXPECTANCY IN THE UNITED STATES \*

<i>Age Attained in Years</i>	<i>Life Expectancy in Years †</i>	<i>Age Attained in Years</i>	<i>Life Expectancy in Years †</i>	<i>Age Attained in Years</i>	<i>Life Expectancy in Years †</i>
0	51.49 ‡	36	31.16	72	8.22
1	57.11	37	30.42	73	7.79
2	57.72	38	29.68	74	7.38
3	57.44	39	28.94	75	6.99
4	56.89	40	28.20	76	6.61
5	56.21	41	27.46	77	6.25
6	55.47	42	26.73	78	5.90
7	54.69	43	25.99	79	5.56
8	53.87	44	25.26	80	5.25
9	53.02	45	24.54	81	4.96
10	52.15	46	23.82	82	4.70
11	51.26	47	23.10	83	4.45
12	50.37	48	22.39	84	4.22
13	49.49	49	21.69	85	4.00
14	48.60	50	20.98	86	3.79
15	47.73	51	20.28	87	3.58
16	46.86	52	19.58	88	3.39
17	46.01	53	18.89	89	3.20
18	45.17	54	18.21	90	3.03
19	44.34	55	17.55	91	2.87
20	43.53	56	16.90	92	2.73
21	42.73	57	16.26	93	2.59
22	41.94	58	15.64	94	2.47
23	41.16	59	15.03	95	2.35
24	40.38	60	14.42	96	2.24
25	39.60	61	13.83	97	2.14
26	38.81	62	13.26	98	2.04
27	38.03	63	12.69	99	1.95
28	37.25	64	12.14	100	1.85
29	36.48	65	11.60	101	1.76
30	35.70	66	11.08	102	1.67
31	34.93	67	10.57	103	1.59
32	34.17	68	10.07	104	1.50
33	33.41	69	9.58	105	1.41
34	32.66	70	9.11	106	1.33
35	31.90	71	8.66		

\* *United States Life Tables*, p. 55, Table 2.

† Average length of life remaining to each individual alive at each attained age.

‡ At birth.

In connection with the length of life that remains on the average for college students, it may be pointed out that nearly

all of economic production is accomplished in the middle 45 years or less of each individual's life. During these 45 years each person must produce not only what he consumes at the moment, but enough in addition both for those who are below the producing age and for those who are above it.

As individual parents we generally accept the responsibility of caring for our children until they are sufficiently developed physically and mentally to care for themselves. As political groups we provide care for orphan children, and we are inclined to pass laws setting age limits below which children may not work at any except a few occupations. Moreover, we insist that children go to school for some years, at least, and we are providing more encouragement right along towards higher education. In these respects the handling of children is accepted and standardized. There are mixed reasons, perhaps, for doing these things for children. Many people would claim sincerely that we provide compulsory education and prevent child labor in the interests of the children themselves; that is, in order that they may be better and more competent citizens when they reach maturity. Others would claim, somewhat cynically perhaps, that children are sent to school and kept out of jobs mainly to lessen the competition for employment which confronts adults. That this latter is a real force is indicated by the growing tendency to exclude married women, as well as children, from many jobs. Whatever the motives back of it, however, we do make considerable provision for the care of children.

People who are above the producing age, on the other hand, are not so systematically provided for. As individuals we no longer always accept responsibility for our aged parents and when we are forced to do so, much personal friction is likely to develop. As political groups we are attempting to lessen or avoid the personal problems connected with income-less old age by insisting on old-age pensions and similar matters. Some of the questions concerning social adjustment of these problems are discussed further in Part III.<sup>16</sup>

<sup>16</sup> The reader is referred to Josephine Lawrence's novel *Years Are So Long* for a dramatic statement of the human problems of old age.

It has been pointed out in another connection that about 40 percent of all the people in the United States are gainfully employed at some economic task. This means, of course, that each employed person must produce enough of economic goods to supply 2.5 persons including himself. This ruthless necessity to produce during the years from 20 to 65 limits rather strictly the time which the individual may spend on anything else. Many of us are too busy producing during these years to do much consuming beyond the biological necessities for life. For this reason we repeat that, unless people enjoy their work, much of their time will be spent unhappily, and the net satisfaction gained from life necessarily will be small.

#### LEISURE

Since 1890 there has been a considerable reduction in the daily hours of work of nearly all classes of labor in the United States. A reliable estimate suggests that it is probable that the normal work week in American industry as a whole has decreased by 20 hours during the last 50 years. The decrease in average hours of labor per week that occurred between 1890 and 1928 in 11 major industrial fields is estimated to have ranged from a minimum of 6.5 percent to a maximum of 29.3 percent (see Table 22). It is interesting to note that the 11 industries became much more uniform in their hours of employment during the period. In the 10 years since 1928, the work week has been shortened still further and also made still more uniform among the various industries.

The shortening of the work week has resulted in more leisure time to people. This growing margin of leisure time is coupled with an ever-increasing variety of leisure-time facilities available at low cost to the individual, such, for example, as public golf links, low-rent cabins on lakeshores, movies, cheap but good reading, and radio programs. Moreover, people have more both of physical and mental energy, as well as time, to devote to such activities. This set of circumstances is important in changing people's habits of living. It opens a field of consumption that merits careful planning both from

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the economic and from the philosophic or moral standpoints, for what we do as individuals with our leisure time will determine in large measure what sort of civilization we have.

TABLE 22  
AVERAGE HOURS OF LABOR PER WEEK IN  
ELEVEN INDUSTRIES, 1890-1928 \*

<i>Industry</i>	<i>Average Hours Per Week</i>		<i>Percent Decrease During Period</i>
	<i>1890</i>	<i>1928</i>	
Bakeries .....	64.7	47.4	26.7
Boot and shoe .....	59.5	49.1	17.5
Building. ....	52.0	43.5	16.3
Cotton goods .....	62.8	53.4	14.9
Foundry and machine shops ...	59.8	59.4	15.7
Blast furnaces .....	84.6	59.8	29.3
Marble and stone .....	54.7	44.0	19.6
Millwork .....	52.0	44.8	13.8
Book and job printing .....	56.4	44.3	21.5
Newspaper Printing .....	48.2	45.1	6.5
Woolen goods .....	58.9	49.3	16.3

\* *Recent Social Trends*, by Research Committee on Social Trends, p. 829.

### SPECIFIC QUALITIES OF MERCHANDISE

Earlier in this chapter it was said that people tend to spend their money incomes so as to get about the same degree of satisfaction out of each dollar's purchase. This is no easy thing to do. One reason it is not easy lies in the fact that frequently consumers are poor judges of the quality of things they buy and, consequently, they anticipate satisfactions from the purchased commodities that are quite different from those actually realized. Sometimes as consumers we are agreeably surprised, but more frequently we are disappointed for we have anticipated better quality than we have received. Whenever this is true, any of several things may happen to our consumption. We may, for example, be so disappointed with a particular commodity that we avoid buying that type of thing in the future. On the other hand, we may still desire the particular satisfaction so keenly that we immediately purchase again, with greater care in the selection of quality. Whether

we do either of these two things, or react in some different way, our future program of purchase and consumption is different than it would have been if the original commodity had come up to anticipation.

One of the earliest functions of government was the establishment and enforcement of standards of weights and measures. The foot as a unit of distance, the pound as a unit of weight, the gallon as a unit of volume, have been established as legal quantities enforceable at law. No standard measure of human satisfaction, however, has ever been adopted or even proposed. Moreover, in these days of complex and intricate consumer goods, what measurements of either quantity or quality are available? Would \$1000 spent for an automobile in 1938 buy more or less than a similar expenditure made in, say, 1911; and by how much? Some automobile manufacturers maintain that, while their money prices remained about constant during the depression of the 1930s, the quality of their cars improved so that the real price of automobiles fell as much as any other prices. How can such a statement be either verified or disproved? Gasoline mileage, other elements of operating cost, ease of handling, comfort of riding, appearance, speed and flexibility, safety, and many other things would need to be measured separately and then combined into a single measurement of quality. Quite evidently there is no *exact* way to make the comparisons between different cars that would be necessary to determine their relative value.

This same situation exists with many of our goods today. Houses, heating and ventilating equipment, and college education are examples of consumer goods and services that are too complex for our present units of quality or quantity measurement. Several specific qualities are usually important in the choice between purchases. Comfort, appearance and durability are each important in shoes, for example, but there is neither a good way to measure any of these qualities, nor is there any sure way to combine the three into a measure of satisfaction to be derived from shoes. Consequently consumption patterns of individuals always will appear somewhat whimsical to others and they will contain no little element of surprise and disappointment.

Some of the specific qualities of some commodities can be determined with exactness. The width of a bolt of cloth, for example, or the weight of a leg of lamb, is subject to unquestioned measurement. Consumers who purchase with reasonable care need never be surprised in these matters. The width of the cloth tells little, however, about its final usefulness; one needs, in addition, full information concerning the stuff from which it was made, its wearing qualities, the fastness of its dyes, the extent to which it will shrink on washing, and so on. And the weight of the leg of lamb tells little about its flavor, or tenderness, or the proportions of bone and fat.

Even in the cases where accurate measurement should be fairly easy, clever merchants frequently disguise their containers to their own advantage when selling to careless customers. Thick bottoms are used in some glass bottles, false bottoms in berry boxes, particular shapes or colors or designs on all sorts of packages have been carefully planned by commercial psychologists to give the optical illusion of size. Handsome containers have been used to give the impression of high quality. Fig. 35 shows how the shapes and sizes of standard cans used in the food industry compare. From this diagram it is easy to see how much care consumers must exercise if they are to make accurate comparisons among the different sizes and prices of canned goods.

Moreover, in matters of taste, such as the flavor of a peach or a cigarette, the color of nail polish, the cut and design of a dress, there are no final or objective standards and the fashion is constantly changing. It is matters such as these that permit competing sellers to persuade customers to spend their money on one thing rather than another without full proof of the relative merits of the competing goods.

Governments, federal, state and local, do some policing in the field of weights and measures. Not enough, perhaps, so that consumers no longer need to be on their guard against subtle misrepresentation, but on the whole consumer protection in this limited field is reasonably good. In the case of goods with many important qualities, enforcement of either explicit or implicit guarantees is very difficult. Government has done some policing, however, even in this field of intangible

qualities. They have attempted to prevent misrepresentation, the calling of inferior commodities by names customarily used for better goods, the copying of the appearance of high-quality merchandise in a low-quality line, and the like. Here,

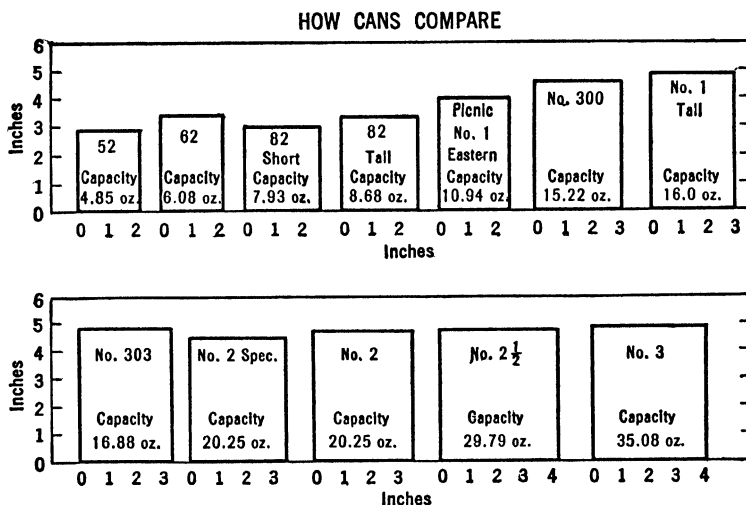


FIG. 35. The chart shows the exact dimensions of some of the cans on the grocer's shelves. Capacity indicated on the cans is the distilled water which the can would hold if filled to its very top. Actual weight of the contents of cans of the same technical size varies with the kind of food and the degree of fullness. The label on the can gives the weight of each can's contents. (Source: *Consumer's Guide*, Volume III, No. 18, October 5, 1936, pp. 10-11.)

however, even more than in the previous case, the consumer must, unfortunately, still beware.<sup>17</sup>

Consumer's purchasing would be greatly simplified with some saving of both time and money if more goods were produced under a plan of standardization and inspection. Producers in general have opposed standardization, however, because it might interfere with their chance to claim a superior product and to get thereby the patronage of some careless or busy customers. Moreover, consumers have never been entirely sure they wanted goods standardized because, perhaps,

<sup>17</sup> See Chapter 14.

they feared to lose some degree of individuality; women all dressed alike has not been a popular idea.

The fact that various specific qualities are combined in a single commodity influences consumption. At one particular time it may be fashionable, for example, to dress in the finest quality cloth even at the expense of variety in dresses. At another time, in contrast, the popular idea may be to have many different dresses even though the durability and the appearance of each are somewhat inferior. Thus custom and fashion interplay with quality to influence consumption.

#### SALES PROMOTION

Consumer's buying habits often are effectively influenced by advertisers' *claims* of quality and performance. Nystrom points out that consumers have increasingly bought ready-made goods on the basis of brands and advertised statements instead of on the basis of careful, old-fashioned methods of shopping and testing quality.<sup>18</sup>

The advertisers are aware that sales increase with the use of such claims. "Because it pays best we are coming to quality and performance-promise of the merchandise."<sup>19</sup> Macy's advertises "tested drugs." Gimbel's slogan is, "Gimbel's Tells the Truth." Some other slogans in this vein are: "When Better Automobiles are Built, Buick will Build Them"; "Best by Test"; "U. S. Tires are Good Tires"; "Cleans Teeth the Right Way"; "More People Ride on Goodyear Tires Than any Other Kind." To quote Beatrice Lamb:<sup>20</sup>

Many consumers show a surprising indifference to the matter of finding out the quality of the things they buy. They can become much excited over what they call "bargains" without having the least idea as to whether it is indeed a bargain that they are getting or whether the quality has been reduced even more than the price. They are easily satisfied by the glowing recommendations of salesmen and advertisements. They too seldom insist upon obtaining specific and definite information before making a purchase.

<sup>18</sup> Nystrom, Paul H., "The Causes of the Present Decline in Quality," *Advertising and Selling*, June 22, 1933, p. 19.

<sup>19</sup> Drayton, Edward, "The Facts Become Fashionable," *Retailing*, March 25, 1935.

<sup>20</sup> Lamb, Beatrice Pitney, *Government and the Consumer*, pp. 5 and 6.

The reasons for this consumer indifference about quality information are probably numerous.

In the first place, it obviously takes study to find out what specific questions to ask in regard to the quality of different kinds of goods. And if these questions are answered it also takes knowledge to judge the quality on the basis of the information just given. For example, in buying sheets the factors which make a difference in quality are thread count, tensile strength, weight per square yard and maximum amount of sizing. Information secured on these points is not very useful unless we also know whether that particular thread count, tensile strength, and weight indicate a good, bad, or indifferent sheet in terms of durability. Multiply the effort required for this by the number of different kinds of articles that the average woman must buy, and it becomes clear that it is not simple for a very busy woman to buy intelligently.

A second reason for consumer indifference, however, is probably the fact that even if she takes the trouble to ask intelligent questions about quality, the answers are usually inaccurate or incomplete. Either the salesman does not know them or else he will not give them to her. Instead, non-essentials are used as talking points. In household appliances, for example, clever but relatively unimportant attachments are stressed in place of the durability, performance, and economy of operation of the machines as a whole. Style and design are emphasized to the neglect of concrete information regarding wearing qualities under the condition of actual use. In the face of modern salesmanship and advertising, it becomes difficult for the consumer to keep up an intelligent interest in quality.

A third reason for the consumer's indifference to this problem is that she often thinks it possible to rely on a kind of intuitive knowledge of quality. She believes that by simply feeling an article or looking at it, she can judge its composition, its wearing qualities, and all the other factors that affect its serviceability.

Against this indifference of consumers it is interesting to view the intensive efforts of producers and sellers to influence consumption. In 1930 \$2,000,000,000 was spent for advertising in the United States (see Table 23). One writer estimates that at least 2 percent of the national income is spent each year for advertising.<sup>21</sup> This is done in the hope that it will change consumption habits by influencing consumers to try new products and old products in new ways.

<sup>21</sup> Wyand, C. S., *Economics of Consumption*, p. 261, Macmillan, 1937.

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There are some cases where advertising has created a demand for a product. Two classical examples are raisins and cranberries. In 1914 the per capita consumption of raisins was 1.66 pounds. After an intensive "eat more raisins" campaign the per capita consumption was increased to 3.41 pounds by 1919. Cranberry consumption showed a similar increase in response to advertising at about the same time.

Examples are not difficult to find where advertising has

TABLE 23

### ADVERTISING EXPENDITURES BY TYPES OF MEDIA—1930

(000 omitted)

Newspapers .....	\$860,000
All periodicals other than newspapers .....	340,000
Outdoor advertising .....	100,000
Radio advertising .....	75,000
Direct mail .....	400,000
Specialties .....	125,000
Premiums, programs, directory and reference media ....	25,000
Window display .....	75,000
	<hr/>
	\$2,000,000

"sold" a new use for a well-known product. It required a strong educational campaign to persuade consumers to use listerine to stop dandruff, and to use lemons for garnishment and for a rinse after shampooing, but both these campaigns were successful.

Advertising is more effective, however, in causing shifts among brands of a commodity already in use than in causing people to do new things. It has not been successful in making people continue to wear stiff collars and play mah jong, but it has helped to make more people buy Chesterfields, Camels, or Lucky Strikes than Viceroy's, Wings, or Twenty Grands. Of 140 separate advertisements appearing in a typical issue of the *Saturday Evening Post* only five were designed to increase total consumption of the commodity involved. In fact, more than 96 percent of the total space was devoted to taking the existing market from one brand and giving it to another.<sup>22</sup>

<sup>22</sup> Vaile, R. S., *Economics of Advertising*, pp. 44-45, Ronald, 1927.

Results of various local studies further illustrate the importance of brands in the pattern of consumption. In a survey made in the Milwaukee market, consumers were found to strongly favor a few leading brands of the commodities studied.<sup>23</sup> A research investigation conducted at the University of Minnesota found that the people of the Minneapolis market were decidedly brand conscious and that the brands which were remembered by the greatest number of people questioned were used by the greatest number.<sup>24</sup> In other words, it appears that although advertising changes the total amount of consumption to a very limited extent it does have considerable influence over consumption patterns.

In some fields salesmen influence consumer's choices more than does any other single factor. "During recent years consumers have shown a strong and growing interest in the artistic qualities of goods, not only in articles of apparel and home furnishing, but even in goods of the utmost utility. The design and other elements of applied art in goods have come to mean as much as their durability and other desirable qualities in use."<sup>25</sup> The choice of commodities which are bought in the main by style, design, color and utility is dependent largely on the persuasion of salespeople.

For some types of commodities, however, salesmen may do little to influence consumption. Package commodities which permit convenient branding are being widely sold by mechanical salesmen called robots. The coin-operated machines have grown rapidly since 1919 when the first census of them was taken. In the early years they were used principally to sell penny goods such as chewing gum, chocolate bars, candies of various kinds, peanuts and so on. "During the past ten years the use of automatic vending machines has spread to many new lines of goods including cigarettes, matches, postage stamps, paper drinking cups, handkerchiefs, toothbrushes, toothpaste, shaving cream, sanitary napkins, and other varie-

<sup>23</sup> *The Milwaukee Journal*, "Consumer Analysis of the Greater Milwaukee Market," 1937.

<sup>24</sup> Canoyer, Helen G., An unpublished Master's thesis—*The Importance of Brands in Merchandising Policies*—1930.

<sup>25</sup> Nystrom, Paul H., *Retail Store Operation*, p. 303, Ronald, 1937.

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ties of notions, toilet goods, and druggists' preparations." <sup>26</sup> The principle of automatic selling has been applied to sales in other fields such as gasoline, soft drinks, some grocery products, perfume, milk in school lunchrooms, shoe polishing, photomaton, gas meters, and in a limited way to lunchrooms. <sup>27</sup>

Despite possible improvements in automatic vending machines their use in the sale of higher-priced and unstandardized, unpackaged merchandise appears to be unsatisfactory. This is true because, with many goods, consumers want to compare different styles and colors and also because they want the help of the salesperson or of a friend in reaching their choice.

Advertising and sales promotion in general have come to play an important part in directing consumption; that is, the many forms of intensive selling do persuade people to buy and use many things they otherwise would do without. Over 100 years ago an early economist, Thomas Malthus, suggested that changes in production might take place more rapidly than changes in the desires of consumers. Whenever this should happen, more of some specific goods would appear than would be consumed, not because of lack of goods for exchange, but because of lack of aroused desire. He suggested that "demand creation" might be necessary if consumption was to keep pace with technological progress and machine production. History appears to have borne him out; that is, sales promotion has been necessary to urge people to take the products of existing farms, factories, and other producers.

Even with intensive efforts in this direction, however, many products of farm and factory have gone without buyers in recent years. Shoe factories, textile mills, automobile plants and so on have been operating only part time. In other words, although advertising has influenced consumption, it has not been successful in expanding the purchases of all goods as rapidly as the supply has increased. Consequently, some commodities have been produced in quantities far in excess of

<sup>26</sup> Nystrom, Paul H., *Retail Store Operation*, p. 843.

<sup>27</sup> *Ibid.*, p. 844.

demand; peaches have been left to rot on the trees or the ground, Tom Thumb golf courses have grown up to weeds, shoe factories have been abandoned within a few years after they were built, and retail store buildings have stood without tenants. It is said that the Empire State Building in New York City has never been filled. Evidently the problem of balancing consumption and production has not been solved even with the aid of sales promotion to move the products of industry.

#### CONSUMER CREDIT

The term "durable consumer goods" has been used earlier in this book. It refers to goods used by people for their personal enjoyment, comfort, or satisfaction, but which are not used up, destroyed, or totally consumed for a considerable period of time. Houses are one obvious example, while automobiles, books, pianos, pictures, chairs, and radios are others. Each of these things may be useful to its owner for a number of years and may be transferred from one user to another at any time. Suits of clothes, window curtains, and magazines are somewhat less durable and the first two of these, at least, are highly personalized so that they are less readily transferred from one owner to another. It is a conspicuous characteristic of such goods that a supply sufficient for consumption in a single day or hour cannot be separated physically from the total supply as can, say, an orange from a boxfull, or a sheet of writing paper from a ream. Consequently, if *ownership* of durable consumer goods is to be transferred, the transaction must involve a supply that can be consumed or fully used only over a considerable period of time.

Use of durable consumer goods can be provided to individuals by any of three methods of financing, namely: (1) the person may postpone such use until he has saved enough money to pay for the long-time supply; (2) the commodity may be rented to the user by the owner for a limited period of time; (3) the individual may borrow money and pay in full for the commodity, later repaying the loan from subsequent income. In this third method the buyer may borrow directly from the seller by using either an open charge account or an installment contract, or he may borrow from someone else. It

is mainly in connection with this third method of financing the use of durable consumer goods that the problems of consumer credit have arisen.

Consumer credit in the United States developed gradually from the time of the Civil War to the early 1920s. During the decade of the 1920s it expanded rapidly; in 1923 the total of such credit approximated \$4,500,000,000 while by the end of 1929 it was estimated to be \$11,000,000,000. Many types of consumer credit contributed to this expansion, but installment sales contracts handled by specialized finance companies accounted for the most striking increases.

This increase in consumer debt occurred because consumers came to accept the slogan "Pay As You Ride." They regarded their installment contracts merely as decisions to spend \$10 or \$25 or some other amount a month for the current use of a washing machine, a radio, or an automobile, or the complete furnishing of a new house, and not as a debt incurred for something already finished or consumed, like the doctor and hospital bills following an operation, or a loan to pay for last summer's trip to Europe. This attitude is responsible, in part, for the marked increase in the purchase of electric refrigerators and similar items, referred to in a previous chapter.

Consumers often need to curb their enthusiasm for this type of purchasing. That is, they must beware not to obligate their future income too deeply. We commonly hear the statement that one who buys on installments is mortgaging the future, but so is the man who rents a home and agrees to pay a stated amount per month for the next twelve months. The principal difference is that with installment purchases one pays the full price during the first part of the period of use (but not so far in advance as when cash is paid in full), while in renting a house, payments are spread over the entire period of use. If the consumer has planned his *future* consumption as well as his *present*, he should have no particular difficulty with his installment payments. A working rule has been suggested for the family of moderate or low income, namely, that it should not be involved in future obligations exceeding 10 percent of the expected monthly income.

In Table 24 are shown the percentages of retail sales for which consumers' credit was granted in the year 1929 and 1933, by types of stores. These data show that consumers make free use of credit in the purchase of many types of goods. With furniture, jewelry, and automobiles the percentage of credit buying is especially high, while with drug stores, variety stores, and filling stations the percentage is relatively low; that is, credit is more freely used with durable goods than with those that are quickly consumed.

TABLE 24  
PERCENTAGE OF TOTAL RETAIL SALES FOR WHICH CREDIT  
WAS GRANTED

United States, 1929 and 1933 \*

<i>Kind of Business</i>	<i>1929 Percent</i>	<i>1933 Percent</i>
Total .....	53	45
Drug stores .....	20	18
Variety, 5 and 10¢ and to-a-dollar stores .....	22	16
Shoe stores .....	29	26
Filling stations .....	31	30
Meat markets .....	39	32
Department stores .....	48	42
Grocery stores .....	49	43
Hardware stores .....	50	43
Women's ready-to-wear .....	53	52
Motor vehicles (new and used) .....	54	46
Jewelry stores .....	60	56
Coal and wood yards .....	66	57
Furniture stores .....	78	74

\* *Retail Distribution*, 1933, Vol. I, p. 22. Bureau of the Census.

Most of the credit granted to consumers by drug, grocery, or variety stores and filling stations takes the form of open monthly accounts. It is granted largely as a matter of convenience so that purchases may be paid for once a month rather than every time anything is bought and delivered. With automobiles, high-priced jewelry, large and expensive items of furniture such as dining room tables, refrigerators, or vacuum cleaners, installment payments are generally arranged to run from 12 to 24 months. Of particular interest is the use of

installment selling in the automobile industry. In Table 25 data on the percentage of passenger automobile sales made on the installment basis are shown. This method is also widely used in the furniture field as a means of consumer persuasion. In 1933 (a low year for installment sales) 71 percent of the furniture stores furnishing information on this subject were doing an installment business amounting to 50 percent or more of their net sales. Fifty-two percent of the stores did an installment business amounting to 70 percent or more of their net sales.<sup>28</sup> It appears to be true that the higher the proportion of installment business done by a store, not alone in the furniture field, the cheaper the goods it is likely to deal in. So popular has this method of buying become that many states are preparing uniform installment sales laws to regulate the rates of interest charged.

TABLE 25  
INSTALLMENT SALES AS A PERCENTAGE OF TOTAL  
PASSENGER AUTOMOBILE SALES, 1929-1935

<i>Year</i>	<i>Total Percent</i>	<i>New Percent</i>	<i>Used Percent</i>
1929 .....	64.0	62.6	65.1
1930 .....	63.8	62.3	64.8
1931 .....	61.3	62.8	60.4
1932 .....	48.6	54.6	47.0
1933 .....	56.8	56.8	56.8
1934 .....	56.5	54.6	58.1
1935 .....	61.2	58.2	62.9

The Department of Commerce has estimated that total installment sales in 1936 amounted to \$4,500,000,000. Probably about 25 percent of this was paid in cash, so the installment obligations accepted by consumers was about \$3,400,000,000, of which probably \$2,000,000,000 was still outstanding at the close of the year. In other words, consumers decided in 1936 to spend about \$2,000,000,000 in 1937 or later on the further use of goods which they first obtained in 1936. This very general acceptance of the principle of "Pay As You

<sup>28</sup> Marketing Service Division, Bureau of Foreign and Domestic Commerce, General Release, February 1, 1937.

Ride" has certainly affected the consumption habits of many people.

Installment purchasings may be an expensive luxury for the consumer. Interest charges frequently are high and they are likely to be padded with various "service" charges. The total charges often are larger than they seem to be. They may be stated as 6 percent, for example, while actually 6 percent is charged on the entire loan all the time in spite of the fact that it is being reduced each month. For example, if \$100 plus interest at 6 percent is to be repaid in 12 equal monthly installments, many companies add \$6 to the \$100 and divide by twelve. Actually this charges interest on the unpaid balance at the rate of nearly 12 percent, for the principal sum is reduced each month and averages over the period only about \$50. Anyone contemplating a purchase under an installment contract should examine the various charges carefully as well as all other features of the contract. A typical installment purchase application is given in the appendix.

A variation of installment selling has been developed in the form of the "Thrift Corporations." Their sole business is granting loans to finance consumer purchases at local stores and they are usually owned by the merchants of the community. The consumer selects his merchandise, arranges a loan for the full amount of the purchase, pays the merchant in "cash," and then repays the loan company the price of the goods plus interest.<sup>29</sup>

There are, perhaps, several reasons which the seller has for granting consumer credit, one of which is to influence consumer purchasing. This influence may result in an increase in the total consumption of material goods. It is more likely, however, to result in the consumption of some types of goods at the expense of other types. Perhaps as with competitive advertising it is most likely to result merely in a shift of patronage between brands of commodities or between individual merchants. These and many other devices shuttle in and out of the picture as millions of daily purchases are made.

<sup>29</sup> Wyand, *op. cit.*, p. 253.

## SUMMARY

Many factors other than monetary income affect the individual's capacity to consume. Thirteen of these factors are discussed in this chapter. It is not possible to give any quantitative measure of the relative importance of the different influences. Each is important in its own way, and there is great individual difference in the effect of the different ones on particular people. Two people with about the same ability, for example, may be exposed to very different degrees of uncertainty or of sales promotion, or the habits of the people with whom they are thrown may be different, or one may contract a serious illness. Such differences as these will modify both production and consumption in spite of the original similarity in abilities. Each individual will find it worth-while to study his position with respect to each of these influences, so that they may be turned as far as possible to his advantage.

## CHAPTER 9

### STANDARDS OF LIVING

#### DISTINCTION BETWEEN "STANDARDS" AND "PLANES" OF LIVING

**I**N ORDER to avoid the confusion that is common in the use of the terms "standard of living" and "plane of living" it is desirable that we set out clearly the sense in which we shall use each of them.

A *standard* may be defined as a "criterion," or a bench mark for comparison; or as "that which is established as a model or example by authority, custom, or general consent." In other words, a standard is a record or a unit of measurement of some sort against which an actual object or performance may be judged. Ten seconds might be agreed upon, for example, as a *standard* time for the 100-yard dash; anything faster than that might be called *excellent*, or *phenomenal*, while anything slower might be called *mediocre*, or *poor*. This illustration suggests that the standard should be possible of objective measurement and comparison, and also that it may be chosen quite arbitrarily. The term, *standard of living*, as we shall see presently, is at least partially possible of objective measurement, but its choice is certainly arbitrary.

A *plane* of living is the actual use or consumption of goods and services that has been reached or is in practice at a particular time by specific individuals and groups. In other places in this book we have spoken of "the pattern of consumption"; when this term includes *all* types of consumption it is identical with the plane of living. *Scale* and *level* of living are also used as synonyms for plane of living.

#### THE ESTABLISHMENT OF STANDARDS

The establishment of a standard, or standards, of consumption is not easy. This is true, in the first place, because the

final criterion of consumption is the satisfying of wants or desires, and personal satisfactions are subjective; that is, they are "feelings" rather than "facts" and there are no definite units for measuring them.

In the second place, there are many satisfactions which, as already pointed out in another connection, do not enter the commercial economic system; that is, things like the enjoyment of a sunset, or a swim in the surf, or a romp with a dog or a child, are outside our system of exchange-co-operation and generally are omitted from formal standards of living.

In the third place, standards of living are the products of experience and, as such, they are constantly changing. They mirror history and the psychological interests and attitudes of given people at a given time. It is a commonplace, for example, that the standards in art, clothes, games, food, and bathrooms of the middle ages were vastly different from those of today; and it has been pointed out earlier that a standard of living involving automotive transportation was impossible until technology had developed automobiles that were economically practical. Comfort in beds, variety and vitamins in food, speed in travel, cleanliness of person and clothing, are refinements of the last 100 years; so, also, are the radio, the telephone, sanitary plumbing, and practically all of modern medicine and surgery. It is only a long generation ago that when one of the wealthier families in southern Minnesota entertained guests overnight, some member of the household had to sleep in the haymow. A reading of *Life in a Medieval Barony*, by William Stearns Davis, or *Famine*, by Liam O'Flaherty, or any of Dickens' novels portraying the beginnings of the Industrial Revolution, or a view of the motion picture on the life of Henry VIII, will impress one with this fact of continuous change, in view of which a standard for yesterday is of little interest in measuring today's scale of living.

In the fourth place, even for today there will be many standards. "That which is established as a model or example by authority, custom, or general consent" differs greatly for different regions and communities. This means that many

standards may be desirable for a country like the United States in which conditions differ so widely among the different sections. Housing and clothing that are adequate in Florida, for example, might not keep people from freezing to death in Minnesota. Moreover, custom dictates that schoolteachers and farmers shall wear different clothes as shall also office clerks and factory workers. The fisher folk of Maine, the east-siders of New York, the Babbitts of the middle-western small cities, and the ranchers of Montana each have their pattern of living, accepted by general consent. The distinctions are not so great as they were before the time of rapid transportation, instantaneous communication, ubiquitous movies, and national advertising, but they still exist to baffle the maker of standards.

Finally, there will always be dispute as to whether a standard should be merely a measure of something already attained and temporarily accepted by a social group, or whether it should be an *ideal* towards which the group is straining. Except where otherwise noted, we shall stick to accepted standards that have been realized by enough in each group to make them appear practical of general attainment, leaving the reader free to establish his own ideal standards.

#### THE PURPOSES OF STANDARDS

Standards properly conceived will provide a measuring rod or pattern of consumption against which the actual plane of living of each group in society may be judged. Emphasis must be given, however, to the fact that different standards are applicable to different groups of people. Frequent reference is made to the "American standard of living," but it is clear that a single standard cannot be applied usefully to such heterogenous situations as exist in the United States. Professor Peixotto has called the present scale of living among the professional classes in the country "the American standard of living," because, she says, "the aspiration of all Americans strains toward the professional life and toward a professional standard of living."<sup>1</sup> It is not certain, however,

<sup>1</sup> Peixotto, Jessica, *Getting and Spending at the Professional Standard of Living*, p. 35, Macmillan, 1927.

that *all* Americans do strain toward the professional life and, perhaps, it would be very unfortunate if they did; some probably actively prefer to be trappers, or woodsmen, or farmers, or mechanics, or salespeople, or what not, and to live as these groups customarily do rather than as the present lawyers, doctors, or university professors live. Only if this is true can we continue happily to operate an exchange economy with its large total production and its colorful variety of life. The probability that people do have this diversity of preferences is supported, certainly, by a mass of evidence on individual differences in abilities, discrimination, and the like. It is supported, further, by the fact that people always have chosen a wide variety of personal activities in their choices both of work and of play. In any case it has been more common practice, and perhaps more useful, to apply the term "American standard of living" separately to each of several economic groups within the country. Under this usage of the term, the American standard of living for workmen, for example, would be that attained by the better-paid and more continuously employed wage earners in the common industries of the country. Even this concept might well be given separate consideration and measurement not only for different income levels but for different parts of the country as well. Whether or not the coal miner in Pennsylvania, the automobile worker in Michigan, the sheep herder in Montana, the cotton picker in Alabama, the packing-house hand in Chicago, and the butter maker in Minnesota, *should* live differently does not concern us here; the fact is that they *do*. The differences are so great that a leveling of the real income of workers and a standardizing of their patterns of consumption throughout the different regions would have a profound effect on the production programs and the general economy of the entire country. If *all* were leveled *up* to the standard of automobile workers, there would be a great increase in the production and consumption of houses, automobiles and gasoline, upper-middle-class clothing, and so on; if *all* were leveled *down* to the standard of coal miners, cotton pickers, or sheep herders, there would be a great decline in these and many other items.

Either a standard or a plane of living may be thought of as: (a) psychological feeling of satisfactions; (b) money income devoted to different lines of goods and services as a forerunner of consumption; or (c) actual use or consumption of goods and services in physical terms. We are forced, however, largely to disregard the first concept, because of lack of measuring devices. Consequently, we shall consider both standards and planes of living in terms of money expenditures and, whenever practical, in terms of physical quantities.

Because of the complications of changing levels of prices and changing money values of specific goods and services, however, it is necessary for clarity to use still another term. We shall confine the use of the terms *standard* and *plane* of living to physical quantities unless otherwise noted, while *cost of living* will be used in reference to the money expenditure necessary for any particular standard or plane at a particular time. Care must be taken with this latter term, of course, to make clear whether the *cost* refers to a standard or a plane of living.

In the present chapter we shall describe some of the methods used in establishing standards. Then we shall give their detailed measurements in terms both of proportion of income devoted respectively to food, clothing, housing, recreation, and so on, and in terms of actual physical units. In the following chapter we shall describe some of the planes of living that have been attained and point out the contrasts and discrepancies between attainment and standards. This will pave the way for discussion in Part III of some possible methods of raising the scale of living above the levels so far attained.

#### SOME ACCEPTED STANDARDS OF LIVING

Different methods have been used for arriving at standards of living. One is to study the actual consumption habits of people, and merely determine a typical or average consumption program for each group of people studied. In other cases, typical programs are determined and then adjusted in accordance with certain "ideal" or "scientifically constructed" scales of dietetic or other objectively determined requirements

for the well-being of the individuals in the group. Such adjustments are not always made, but they have been most frequent in food requirements because that is the most important single field of consumption and because it probably is easier to establish objective standards of nutrition than it is for the other lines of consumption. In fact, nutrition is the only field in which truly scientific estimates of consumption requirements have been made.

Even in nutrition, standards that are used commonly cannot be called scientific. To be so they would need to be stated in units of energy and other essentials in nutrition. Some attempts have been made in this direction; that is, some dietary standards have been stated in terms of calories of energy, units of fat, protein and starch, and supplies of minerals, vitamins, and roughage. Such standards are used at times by trained dietitians in hospitals when patients have certain types of digestive or other ailments. Expert supervision is required in connection with any such program. In general, however, the standards that have been prepared by experts are stated in units of common articles of food, care having been taken to provide sufficient quantities of each essential element in proper balance.

The "Minimum Quantity Budget for the Worker's Family at the Level of Health and Decency," for example, was established in 1920 by Royal Meeker when he was Commissioner of the Bureau of Labor Statistics.<sup>2</sup> It used data from workingmen's actual experiences and it listed goods and services to be bought during a year by the "average family." Such a commodity budget, once established, can be used as a standard in any community despite geographical price variations. Different budgets would result, however, from similar studies of people following different occupations and for families living in different climates.

Another example of a standard for consumption is that set up by the Chicago Council of Social Agencies. It is called the "Chicago Standard Budget for Dependent Families" and

<sup>2</sup> See Eliot, T. D., *American Standards and Planes of Living*, p. 502, Ginn, 1931.

is organized on the principle that "the minimum standard of living must furnish everything necessary for a manner of living that will make possible a high standard of physical, mental, and moral health and efficiency for adults, and mental growth and development of children and provision for their moral welfare."<sup>3</sup>

Such quantity budgets have been widely used in recent years to determine proper and adequate relief allowances. They have been used, also, in the arbitration of wage disputes. In some cities, relief allowances are given by distributing supplies of food directly to each family in accordance with established quantity allowances. In other cities, a standard supply of food is priced by the relief authorities each month and then the families on relief are allowed to spend an amount of money equal to the cost of the standard. In the cases of wage disputes, the *cost* of the standard quantity allowance at the time of the wage adjustment is the important item in the arbitration.

Another example is that of the standards prepared by the Bureau of Home Economics in the U. S. Department of Agriculture. This Bureau has published four standard diets to fit each of four levels of family income. We include here, by way of illustration, a table prepared from the Bureau data for one particular size and make-up of family in each income level. This table gives the physical quantities of various foods that are recommended by the Bureau for families under different financial circumstances. The Bureau data also include quantities required by individuals and by various-sized families (see Table 26).

These several standards that have been proposed by the Bureau of Home Economics for different income groups are determined in part by the pattern of prices that happens to exist at a particular time. That is to say, if meat should become cheaper than it now is relative to eggs and milk, for example, a shift might occur in the recommended amount of each. There are, of course, countless combinations of specific foods that might be used to supply the basic requirements for

<sup>3</sup> Andrews, Benjamin R., *Economics of the Household*, p. 152, Macmillan, 1935.

TABLE 26

SUGGESTED WEEKLY PLAN TO MEET THE DIETARY REQUIREMENTS OF A FAMILY OF FOUR—UNDER DIFFERENT INCOME CIRCUMSTANCES \*

<i>What to Include</i>	<i>Restricted Diet</i>	<i>Low Cost Adequate Diet</i>	<i>Moderate Cost Adequate Diet</i>	<i>Liberal Diet</i>
<b>Milk:</b>				
Fluid milk or corresponding quantities of canned or dried milk, or cheese ..... qt.	10½	17½	21	21
<b>Vegetables and fruits:</b>				
Potatoes and sweet potatoes ..... lb.	11	11	10	9
Tomatoes and citrus fruit (for restricted diet) Canned tomatoes only, except when fresh tomatoes or oranges are at the height of their season and very cheap..lb.	4	4	7	9
Leafy, green, and yellow vegetables ..... lb.	4	7	8	10
Dried beans and peas, peanut butter, and nuts..lb.	2	2	1	½
Dried fruits .....lb.	¾	1½	2	1
Other vegetables and fruits ..... lb.	3	7	15	26
Eggs ..... dz.	⅔	1⅓	1⅓	2⅓
Lean meat, poultry, and fish ..... lb.	2¼	4½	7	11
<b>Flour and cereals:</b>				
Flour, corn meal, rice, macaroni, spaghetti, and assorted breakfast cereals, as well as corresponding quantities of white and whole grain breads, other bakery goods and crackers ..... lb.	17	15	11	7
<b>Fats:</b>				
Butter, margarines, lard, oil, vegetable shortening, salt pork, and bacon, lb.	3	3¼	3	3¼
<b>Sugar:</b>				
Sugar, jellies, jams, honey, syrups, and molasses, lb.	3¾	3¾	3	3
<b>Accessories:</b>				
Coffee, tea, cocoa, baking powder, soda, vinegar, salt, spices, etc. .... cents worth .....	35	45	60	80

\* Bureau of Home Economics. Family consists of 2 moderately active adults, one boy age 10, and one girl age 8.

nutrition in proper balance. Consequently it is not necessarily true that any of the recommended diets represents the one most economical way to satisfy the nutritional needs of people. They do include, however, foods that are generally available at moderate prices and that are generally acceptable to American palates.

The restricted diet for emergency use suggested in Table 26 is believed to be slightly inadequate in calories and other essentials to maintain actively employed people in full vigor and efficiency. The minimum cost adequate diet is assumed to furnish sufficient food energy and healthfulness, but it is somewhat lacking in variety and in taste appeal. The other two are believed to be adequate in every way for average people.

Doubtless some people pay out more money than do others for the same physical quantities of food in each of the general classes shown in Table 26. This would come about, for example, if some people used more expensive cuts of meat, or imported canned goods such as Russian caviar, Scotch kippers, Italian olives, or Swedish herring, or added more condiments such as curry or chili to the diet. Thus it is seen that even in the food field no truly scientific ration or standard of consumption has been adopted for human beings.

It is very difficult to separate the questions of costliness and of true food values in this matter of standards. It used to be said, for example, that a food ration which included a liberal amount of white flour represented a high standard of living. It is still true that the Chinese are said to have a relatively low plane of living because they eat rice instead of wheat flour, which they do in part because the latter is too costly. Many people in India cannot even afford rice but must depend on the still cheaper millets; they are said to be on a plane of living still lower than that of the rice eaters, although if they had enough millet there might be no lowering of their efficiency due to this element in their diet. In the United States, in contrast, the per capita consumption of wheat flour has been declining for many years, not because it is too expensive, but because many consumers prefer and can afford a still "higher" scale of living with increased proportions of meat and of fruits and vegetables. The common diet

of the Chinese coolie is much cheaper than the "restricted diet" shown in Table 26, and yet it is, perhaps, as adequate from the standpoint of nutrition. In fact, whole-wheat flour, or even black bread or pumpernickel, is actually more nutritious than the finest patent flour, while rice with the husks left on is fully as nutritious as patent flour. Consequently the use of these materials might be said to permit a "higher" plane of living than our use of white flour on any "scientific" standard.

We must recognize, therefore, that dietary standards as used in this country are not matters of physiology alone, but that they are concerned closely, also, with social customs and individual tastes. In other words, physical measurements such as calories of energy, or units of fat, protein and starch, are not the sole determinants of the so-called ideal standards of food consumption.

The cost of any of the standards shown in Table 26 will change, of course, with changing prices. Which standard a particular family can afford will depend, therefore, not only upon the family income, but also upon the level and pattern of prices. Special family expenses for medical care, education, or other items also will affect the choice of standard for food consumption. In other words, which standard a family actually will choose may depend not only upon what it can afford financially, although that is an important limiting factor, but also upon the urgency and desirability of other forms of consumption.

One of the most comprehensive attempts to establish standards of living for different income groups in a particular region is found in the continuing studies of the Heller Committee of the Department of Economics at the University of California. Budgets showing the typical spending patterns of families of (1) an executive, (2) a clerk, (3) a semi-skilled wage earner in the San Francisco Bay region were drawn up originally in 1920 by a joint committee of the California State Civil Service Commission and certain faculty members of the University of California. At the time the object of the budget making was to measure the adequacy of the wages and salaries then being paid by the State. They were, therefore,

primarily estimates of the quantities of goods and services which were deemed essential for each given scale of living. These quantity standards could then be used to reflect the cost of each scale of living under any particular level and pattern of prices. Since 1923 the Heller Committee of the University of California has undertaken to price the articles in the budgets annually and, also, to revise the quantity budgets themselves whenever conditions have demanded.

Until 1927 there was only a slight revision of the articles and their quantities. Beginning with November, 1927, however, a quantity budget for an executive was used that differed widely in many respects from the original. This new budget was based upon estimates made by members of the Oakland Forum, a group of wives of professional men. In 1928 a series of interviews with housewives of wage earners resulted in a number of changes in the budget for a wage earner. Each year since then there have been some minor revisions in each budget, largely in the nature of substitutes for obsolete items or additions of new items like the radio.

In 1935 extensive revisions were made in both the clerk's and the wage earner's budgets on the basis of a study of actual expenditures of families in these groups. The major changes included the addition of an automobile for the wage earner and the clerk and inclusion of depreciation on the executive's automobile, an increase in the quantity and quality of meat in each budget, and an increase in the allowance for insurance. The net effect of these changes was to increase the cost of the standard budgets by about \$400 for the wage earner, \$375 for the clerk, and \$250 for the executive.

The standards originally set up in these budgets were those believed to be required for "health and decency"; but they made no adequate provision either for health emergencies, unemployment, or old age. The average American family never has carried enough insurance to give real security in the event of the husband's premature death; in fact, many families carry no insurance and many more have only enough for funeral expenses. Nevertheless the Heller Committee finally decided to include in all the budgets the premiums on a "family income" insurance policy taken out at the time of marriage

which would supply a small income for the next 20 years in case of the man's death within that period (and would thus protect the children through the school age), or a small retiring fund if he should live to past sixty-five. Recently the budgets also have included the individual payments required by the California unemployment insurance act, thus providing somewhat more security. The amounts of the California sales tax have been included as a required contribution to governmental activities.

Some of the important details of these budgets are summarized in Tables 27 to 33 inclusive. The details of the food budgets are not shown here, since they are closely similar to those already reported in Table 26 in this chapter; the clothing budgets are so detailed that they have been placed separately in Appendix C. In these tables the data are reported in physical terms whenever practicable. It has been necessary in some cases, however, to show only the recommended money expenditures for 1936. In all cases the totals are shown in dollars, thus making them standard cost-of-living budgets.

It may be pointed out, in the first place, that if the total national income produced in 1936 had been distributed equally among all families, the standard of consumption set for wage earners barely would have been reached by each family in the United States. In the second place, this standard for wage earners lacks provision for many desirable things. It provides no aid to the housewife, for example, either in the form of incidental help or commercial laundry and cleaning; it allows only \$3 a year for stationery and postage; the allowance for cigarettes for a family certainly is lower than the expenditure of many single college students; the husband must always shave himself; the wife can have a finger wave only once every two months; the family automobile is to travel only 5000 miles a year; no vacation expenditures are included; only \$2 is allowed for books and periodicals; electric refrigeration is not provided, to say nothing of air-conditioning for the house; no provision is made for education beyond the public schools; the allowance for leisure-time activities is low; emergencies are not provided for.

TABLE 27

TOTAL COST OF HELLER COMMITTEE STANDARDS OF LIVING IN SAN FRANCISCO REGION AT  
1936 PRICES FOR THREE INCOME GROUPS

	Executive	Percent	Clerk	Percent	Wage Earner	Percent
Total cost including income, payroll, and sales taxes	\$6,286.95	100	\$2,481.24	100	\$2,010.73	100
Income and payroll tax	121.44	1.9	11.12	0.4	9.01	0.4
Total cost less above items	<u>6,165.51</u>	<u>98.1</u>	<u>2,470.12</u>	<u>99.6</u>	<u>2,001.72</u>	<u>99.6</u>
Food	896.48	14.3	678.44	27.4	604.24	30.0
Clothing	756.45	12.0	358.86	14.5	230.00	11.5
Shelter	2,083.33	33.1	595.46	24.0	450.40	22.4
Miscellaneous						
Care of person	94.85	1.5	57.85	2.3	48.26	2.4
Leisure time activities	512.96	8.2	167.26	6.7	124.40	6.2
Automobile	519.21	8.3	294.40	11.9	288.40	14.4
Carfare	40.00	0.6	30.00	1.2	10.40	0.5
Insurance and savings	677.28	10.8	152.62	6.2	101.75	5.1
Medical care	275.00	4.4	75.00	3.0	75.00	3.7
Association dues	36.00	0.6	....	....	21.00	1.0
Education	101.15	1.6	5.15	0.2	5.15	0.3
Church and charity	111.00	1.8	18.00	0.7	18.00	0.9
Incidentals	61.80	1.0	37.08	1.5	24.72	1.2

TABLE 28

TOTAL COST OF HOUSING IN HELLER COMMITTEE STANDARDS FOR 1936

	Executive	Clerk	Wage Earner
Total cost of housing	\$1,205.25	\$360.00 *	\$270.00 †
Instalments & interest	892.80		
Taxes on house and lot (value of house and lot \$9,300)	175.96		
Repairs	78.89		
Water	27.00		
Garden	20.00		
Fire insurance	10.00		

\* Rent of 6 rooms, including water, @ \$30 per month.

† Rent of 5 rooms, including water, @ \$22.50.

TABLE 29  
TOTAL COST OF HOUSE OPERATION—HELLER COMMITTEE STANDARDS FOR 1936

	<i>Executive</i>	<i>Clerk</i>	<i>Wage Earner</i>
Total cost of house operation	\$607.72	\$143.36	\$118.91
<i>Light and fuel</i> .....	164.70	80.17	77.05
Electricity .....			61 KWH per mo.
Gas .....	127 KWH per mo.	71 KWH per mo.	2,348 cu. ft. per mo.
Coal .....	2,958 cu. ft. per mo.	2,358 cu. ft. per mo.	1 ton
Kindling blocks .....	3 tons for fireman	1 ton for stove	9 sacks
Logs for fireplace .....	12 sacks	9 sacks	
<i>Service</i> .....	1½ cords		
Cleaning and laundry .....	251.51	6.34	
Extra cleaning .....	1 day a week		
Gardener .....	3 days a year	2 days a year	
Care of children .....	2 days a year		
<i>Laundry sent out</i> .....	4 hours per week		
<i>Telephone</i> .....	\$2 per week	Occasional pieces	2-party line
	Single-party line	2-party line	
	Tolls and telegrams	Tolls and telegrams	
	at 50¢ per mo.	at 25¢ per mo.	
	54.00	27.00	24.00
	11.47	10.49	8.72
<i>House-cleaning supplies</i> .....			
Laundry soap .....	52 bars	104 bars	104 bars
Washing powder .....	9 boxes	12 boxes	12 boxes
Soap flakes .....	9 boxes		
Bleach .....	2 bottles	2 bottles	2 bottles
Starch .....	2 pounds	3 pounds	3 pounds
Cleanser .....	12 cans	8 cans	8 cans
Aluminum cleaner .....	4 boxes	2 boxes	
Furniture polish .....	1 bottle	1 bottle	1 bottle
Floor wax .....	1 pound	½ pound	
Silver polish .....	2 jars	1 jar	1 jar
Disinfectant .....	4 cans	4 cans	4 cans
Insect powder .....	2 cans	2 cans	3 cans
Miscellaneous supplies .....			
<i>Garbage removal</i> .....	65¢ per month	50¢ per month	50¢ per month
<i>Stationery and postage</i> .....	7.80	6.00	6.00
	14.24	7.36	3.14

TABLE 30  
TOTAL COST OF FURNISHINGS AND ANNUAL ALLOWANCE FOR REPLACEMENT.  
HELLER COMMITTEE STANDARDS FOR 1936

ITEM	EXECUTIVE			CLERK			WAGE EARNER		
	<i>Initial Cost at 1936 Prices</i>	<i>Annual Percent Replacement</i>	<i>Annual Cost</i>	<i>Initial Cost at 1936 Prices</i>	<i>Annual Percent Replacement</i>	<i>Annual Cost</i>	<i>Initial Cost at 1936 Prices</i>	<i>Annual Percent Replacement</i>	<i>Annual Cost</i>
Total furnishings . . . . .	\$4,412.49	...	253.31	\$1,584.10	...	90.05	\$1,045.25	...	60.14
Furniture . . . . .	2,543.80	4.0	101.75	903.51	4.0	36.14	579.15	4.0	23.17
Kitchen utensils . . . . .	133.05	10.0	13.30	60.20	7.0	4.21	52.25	7.0	3.66
Electrical equipment . . . . .	536.50	7.0	37.56	204.65	7.0	14.33	132.73	7.0	9.29
Linen, bedding, curtains . . . . .	507.56	12.5	63.44	225.82	10.0	22.58	169.51	10.0	16.95
China and glassware . . . . .	233.36	10.0	23.34	62.07	10.0	6.21	21.38	10.0	2.14
Silver . . . . .	315.84	Lifetime	....	73.74	2.0	1.47	52.15	2.0	1.04
Cleaning and laundry equipment . . . . .	8.36	12.5	1.04	5.89	7.0	.41	5.89	7.0	.41
Brooms, brushes, etc. . . . .	5.50	10.0	5.50	2.08	10.0	2.08	1.73	10.0	1.73



TABLE 32  
PERSONAL COST OF AUTOMOBILE AND OPERATION

<i>Item</i>	<i>(cash price)</i>	<i>(cash price)</i>	<i>(cash price)</i>
Total annual cost . . . . .	\$1,063.00	\$519.21	\$288.40
<i>Depreciation</i> . . . . .		180.94	83.17
<i>Operating cost</i> . . . . .	(10,000 miles)	233.15	146.72
Gasoline . . . . .	740 gallons		370 gallons
Oil . . . . .	70 quarts		30 quarts
Tires and tubes . . . . .	5 every 17,000 miles		5 every 20,000 miles
Greasing . . . . .	10 times		5 times
Repairs . . . . .	\$23.80		\$11.29
Garage . . . . .	(in housing)		\$3.00 per month
<i>Insurance</i> . . . . .	92.50		56.00
Public liability . . . . .	\$5,000-10,000		\$5,000-10,000
Property damage . . . . .	\$5,000		\$5,000
Fire and theft . . . . .	Comprehensive		. . . . .
Collision . . . . .	\$25 deductive		. . . . .
<i>Tar and license</i> . . . . .	12.60	8.51	8.51

TABLE 33

## TOTAL COST OF LEISURE-TIME ACTIVITIES \*

	<i>Executive</i>	<i>Clerk</i>	<i>Wage Earner</i>
Total cost .....	\$512.96	\$167.26	\$124.40
<i>Commercial amusements</i> . . . . .	73.24	34.68	33.88
Theater .....	6 times a year, 2 persons	2 times a year, 2 persons	3 times a year, 2 persons
Concerts .....	4 times a year, 2 persons	2 times a year, 2 persons	Twice a month, 4 persons
Movies .....	Twice a month, 4 persons	Twice a month, 4 persons	Twice a month, 4 persons
Opera .....	Once a year, 2 persons	Once a year, 2 persons	Twice a year, \$10.00
Football .....	Once a year, 2 persons	Once a year, 2 persons	
Other .....	Once a year, \$10.00	Twice a year, \$10.00	
<i>Social entertainment—</i>			
<i>guests at home</i> . . . . .	107.70	25.00	15.00
Dinners .....	4		
Luncheons .....	6		
Bridge parties .....	2		
Informal Sunday teas . . . . .	6		
<i>Vacations</i> . . . . .	2 weeks	2 weeks	Excursion only
Rent of cottage .....	\$42.80	\$26.00	15.00
Extra meals .....	\$49.28	....	
Fuel .....	\$5.00	4.00	
Extra on auto .....	\$5.00	5.00	
Incidentals .....	\$17.50	10.00	
<i>Tobacco</i> .....			
	55.62	3½ pks. cigarettes	23.43
	115.88	weekly	23.18
	2.85		2.85
<i>Gifts</i> .....	36.46		3½ pks. weekly
<i>Upkeep of radio</i> .....	Reading matter	Morning newspaper	Morning newspaper
<i>Reading matter</i> .....	Morning news- paper	Periodicals	Periodicals
	\$14.46	4.00	\$2.00
	12.00		
	10.00		

\* Tables 27 to 33 inclusive taken from the report of the Heller Committee of 1936.

In the standard clothing budget for the wage earner's family there are many items for which the allowance seems pitifully low. For example, the man of the house must wear his \$23 overcoat for 6 years, he can have a new suit only once in 2 years, his felt house slippers must last 4 years, his flannel bathrobe is supposed to be good for 8 years, and his billfold is replaced every 5 years. (Fortunately he does not have much money, so his billfold may last that long.) He is allowed 2 new neckties each year,  $2\frac{1}{2}$  pairs of shoes, 6 shirts, and 10 pairs of socks. His belt and sweater must last 3 years and his felt hat 2 years. The wife of the family has 3 pairs of shoes in her wardrobe, but buys only 2 new pairs each year. She possesses a total of 7 dresses and buys  $3\frac{1}{3}$  each year. Her bathrobe must last 6 years, her 2 coats 3 or 4 years each, her bedroom slippers 3 years, and her street hat 2 years.

The executive and his wife, of course, fare much better, but total income produced at present will not permit many people to live as they do. In fact, the total national income produced in 1936 would have permitted just about one-third of the total families in the United States to reach that level of consumption if nothing had been either given to the other two-thirds or used to increase the country's total capital. Even the total budget provided for the family of the clerk would have been possible for only about 70 percent of all the families of the country.

Some of the specific differences in clothing allowances for the different income levels may be pointed out. The executive is allowed a \$55 overcoat once in 3 years, a \$55 business suit each year, both a felt and a straw hat every year, and 6 new neckties each year. Each of these standards is materially greater than those given above for the wage earner. Even with the executive, however, the house slippers must last 4 years and the bathrobe 6 years. The wife of the executive has 6 pairs of shoes in her wardrobe and buys 4 pairs a year. She has a stock of 13 dresses and buys 5 new each year. She buys 3 pairs of gloves a year, but her evening wrap must last 6 years. She is allowed a winter coat at \$95 every second year. Even these allowances for executives do not seem conspicuous.

Of course individual families can, and do, depart from the

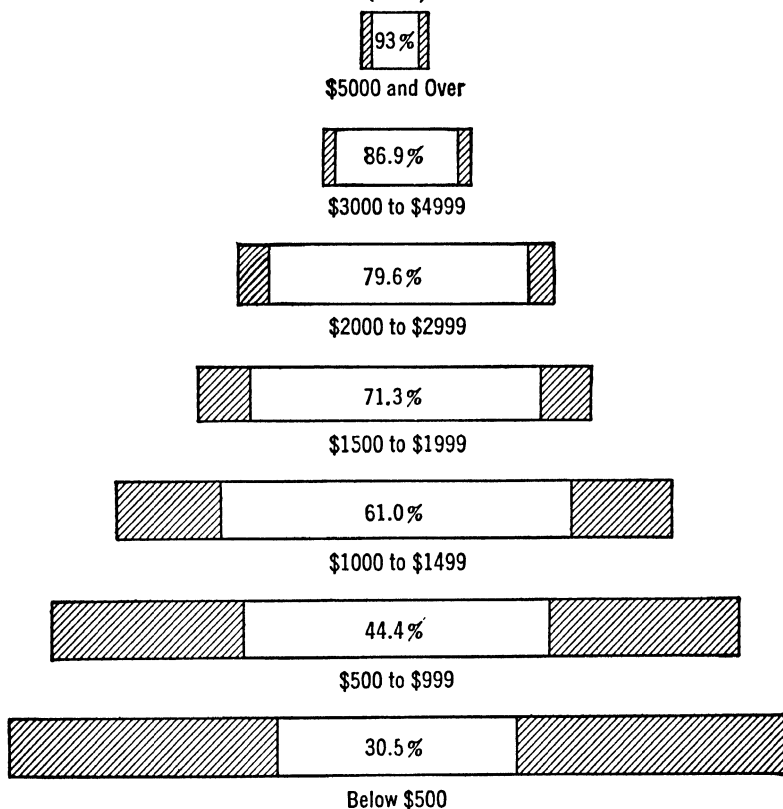
patterns of consumption set by these standards without anticipating any serious consequences. Some do not have automobiles, for example, although they are provided in the standard suggested for each income group. Wage earners or clerks who do not have automobiles may direct nearly \$300 a year to other types of expenditure in addition to the set allowances. In Fig. 36 there is shown graphically the proportion of families in each income class that does own automobiles; from these data it is possible to see the extent to which this particular departure from the standards has existed. Thus it is emphasized again that these standards are arbitrary, unscientific, and not necessarily representative of actual physical requirements of families and the individual members thereof. Nevertheless they serve to show the typical behavior of each income group adjusted somewhat toward "an ideal to be hoped for" by the opinions of experts and of leaders within the group itself.

The Heller Committee standards will be referred to again in the next chapter in connection with some comparisons between standards and actual levels of living.

#### COST-OF-LIVING STANDARDS

Standards of living frequently are described or defined only in terms of money costs rather than in terms of physical quantities. In these cases we have what we may call cost-of-living standards or the cost of a standard of living. Such standards may be determined in either of two ways, namely: (1) by setting up physical quantity standards and pricing the goods and services involved, as did the Heller Committee; (2) by studying money expenditures of families directly and reporting the findings in terms of dollars, or of percentage of family income, devoted to each of several categories of goods and services. In the use of the first of these methods the shifting level and pattern of prices are a constant interference with accuracy. In the second method one necessary assumption is that a particular distribution of expenditures by certain people is *prima facie* evidence that such expenditures are both necessary and desirable. This assumption may lack complete and scientific justification. Nevertheless, the fact that many people do use

**AUTOMOBILE OWNERSHIP IN 50 CITIES  
BY FAMILIES OF VARIOUS INCOME GROUPS  
(1935)**



**LEGEND**

Length of Bar--Relative Size of Income Class

-----Percentage With Automobiles

-----Percentage Without Automobiles

FIG. 36. The above diagram represents the ownership of automobiles in a sample of 50 American cities in 1935. Almost all of the families receiving an annual income of \$5,000 and over owned cars and over 30 percent of those with yearly income of less than \$500 had automobiles. (Source: "Consumer Use of Selected Goods and Services by Income Classes," Compilation of Department of Commerce, 1937.)

their incomes in ways that are closely similar does build up a presumption that there is something inherently right about such a proportioning of expenditures. Certainly if any family is considering an expenditure in one particular line of consumption that requires a percentage of income which is markedly different from the standard, such expenditure merits very careful study before it finally is made.

During the past half century some 75 cost-of-living studies have been made. From the collected data it is possible to discover the relative importance of various commodity groups in the total expenditures of consumers at different income levels. Many of these studies have been adjusted so that they might be combined and generalizations drawn from them with reasonable assurance of accuracy.

One of the most comprehensive studies of family income for the purpose of setting up cost-of-living standards at various income levels was carried out by the United States Bureau of Labor Statistics in 1918-1919, in co-operation with the National War Labor Board. This investigation covered 92 cities and towns in 42 states and included over 12,000 white families. The locations and the families were selected to give a representative sample of all low- and moderate-income people living under urban conditions throughout the United States. A summary of the findings is shown in Table 34.

TABLE 34

PERCENT OF EXPENDITURES FOR THE PRINCIPAL GROUPS OF ITEMS OF COST OF LIVING OF AMERICAN FAMILIES DIVIDED INTO INCOME GROUPS \*

Income Group	Number of Families	Size of Household	Average Total Expenditure	Proportion of Total for			
				Food	Clothing	Shelter	All Others
		Persons	Dollars	Percent	Percent	Percent	Percent
Below \$900 . . .	332	4.3	843	44.1	13.2	14.5	28.2
900-1,199 . . . .	2,423	4.5	1,076	42.4	14.5	13.9	29.1
1,200-1,499 . . .	3,959	4.7	1,301	39.6	15.9	13.8	30.6
1,500-1,799 . . .	2,730	5.0	1,537	37.2	16.7	13.5	32.5
1,800-2,099 . . .	1,594	5.2	1,756	35.7	17.5	13.2	33.5
2,100-2,499 . . .	705	5.7	2,055	34.6	18.7	12.1	34.5
2,500 and over	353	6.4	2,467	34.9	20.4	10.6	34.2
Total . . . . .	12,096	4.9	1,434	38.2	16.6	13.4	31.7

\* *Monthly Labor Review*, IX, p. 420.

Professor Paul Nystrom has made an interesting and valuable compilation from many of the cost-of-living studies. In this compilation he arrives at the range in percent of family income that may safely be used for various classes of expenditure at each income level. His estimates, which are shown in Table 35, are presented in sufficiently general terms so that they probably can serve as useful guides to consumers even when considerable change takes place in the level and pattern of prices.

TABLE 35

PERCENT OF FAMILY INCOME THAT MAY SAFELY BE ALLOTTED TO VARIOUS CLASSES OF EXPENDITURES AT DIFFERENT INCOME LEVELS \*

Classification	Bare Sub-	Min. for Health and Efficiency (Min. Amer-	Minimum	Comfort	Moderately	Well-
	sistence Level Percent	ican Std. of Living) Percent	Comfort Percent	Percent	Well-to-do Percent	to-do Percent
Food . . . . .	45-50	40-45	36-40	30-35	25-30	20-25
Clothing . . . . .	10-12	12-15	16-17	18-20	20-22	18-20
Rent . . . . .	14-15	20	20	20-22	20	20-22
Fuel and light	6					
Home Furnish-						
ings . . . . .	4	5	5-6	5-6	6	5
Misc. savings						
accounts . . . . .	20	18-22	22-24	24-27	28-35	30-40

\* Nystrom, Paul H., et sub., *Economics of Consumption*, p. 282.

Perhaps the most complete and careful summary of cost-of-living studies in the United States is that undertaken by the Brookings Institution and presented in the book *America's Capacity to Consume*. In Fig. 37 we copy the standard distributions of expenditures of families by income groups as they are reported in that study. The data are depicted separately for farm and non-farm families. It is interesting to note that these general standards or patterns appear to follow Engel's laws. That is, expenditures for food increase less rapidly with increasing income than do other groups; in the non-farm families, at least, the expenditures for "home" and for "other living" increase most rapidly. The contrasts between the farm and non-farm families are of interest also; with the farm families none of the expenses of living increase as rapidly as income, but savings increase at a very rapid rate.

### EXPENDITURES OF FARM FAMILIES BY INCOME GROUPS

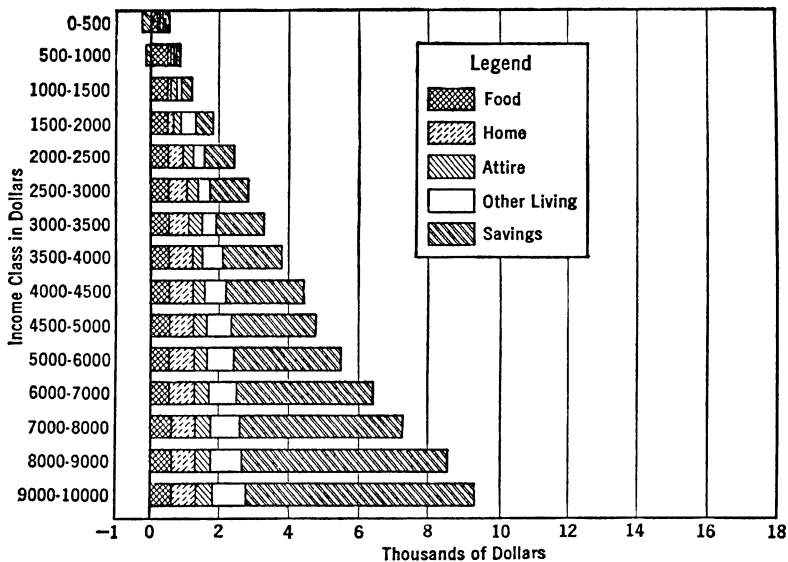


FIG. 37 A.

### EXPENDITURES OF NON-FARM FAMILIES BY INCOME GROUPS

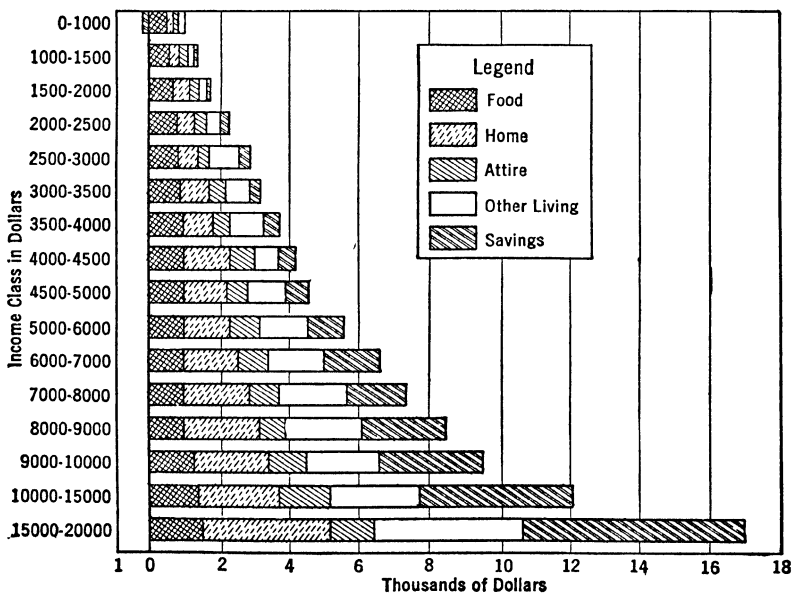


FIG. 37 B.

Perhaps we should emphasize again that standards derived in this way—that is, from studies of the average behavior of people—are not necessarily ideal standards. In fact, averages of human behavior generally are woefully low when judged from biological, economic or ethical viewpoints. Such standards should be thought of, then, as something to improve rather than as something merely to attain.

## SUMMARY

Standards of living, discussed in this chapter, should be thought of as devices against which to measure the scale or plane of living actually attained by anyone. Standards in this field are not easy to agree upon, for much of our living is subjective, emotional, a matter of tastes. Nevertheless, it has been possible to make some approximations that merit the attention of any who want to enrich their lives to the full limit permitted by their money income. These standards are discussed in this chapter, while in the next one they are compared with the scales of living which prevail in the United States at present.

## CHAPTER 10

### PLANES OF LIVING

#### PRESENT SCALE OF LIVING IN THE UNITED STATES

SOME people who have thought about the matter of standards of consumption believe that an entirely different method should be used in establishing standards. This belief arises from the feeling many people have that other people do not use their purchasing power most constructively. The use of purchasing power directs the development of industry and its employment of labor and natural resources, as already has been pointed out. Therefore, if there is unwise expenditure of purchasing power by individuals, unwise use of human and natural resources follows, which is, of course, too bad from the standpoint of those who make a fetish or god of efficiency.

One of the points that frequently is made in illustration of "wrong" direction of consumption is the ratio between total expenditures for public education and for certain non-essential goods and services. The recent scale of living in the United States included (1933-34) a total expenditure of \$1,940,133,433, or 4 percent of income produced, on public education. In the same year, the following estimated use of income occurred:

<i>Items</i>	<i>Total Expenditure</i>	<i>Percent of Income Produced</i>
Tobacco .....	\$1,344,000,000	2.7
Soft drinks and confections .....	1,229,073,000	2.5
Movies, etc. ....	600,000,000	1.25
Beauty parlors and toilet preparations	314,368,000	.65
Total of 4 classes .....	<u>3,487,441,000</u>	<u>7.20</u>

In other words, public education used only about 55 percent as much of national income as did the four specified classes of goods and services. Whether this is a wise or unwise use

of resources is, perhaps, a matter of personal opinion, but it appears to be what people want when they are allowed to "vote with their dollars." Of course, 120,000,000 Americans may well be foolish in their choices, but, in any case, the figures quoted above indicate the scale of living that has been reached in this country with respect to these particular items under conditions of free individual choice.

Before we can intelligently evaluate or criticize the present scale of living we must know of what that scale consists, not only for the items mentioned above but for many other things as well. Consequently we shall now consider some of the available data concerning the existing scale of living in the United States.

1. *Food.* In 1930 the Bureau of Foreign and Domestic Commerce published a bulletin on the apparent per capita consumption of foodstuffs in the United States. The estimates were derived from data on domestic production, adjusted for net import or export and for any use of each commodity for purposes other than human food. The findings of this study are summarized in Table 36. In this table the data are reported both in terms of annual per capita consumption and of weekly consumption for a family of four. This latter figure may be compared quite directly with the standards given in Table 26 of the previous chapter. For convenience in comparison, parts of the two tables are combined in Table 37.

From Table 37 several things are evident. In the first place the apparent consumption of whole milk was decidedly below the recommended standard; consumption of fruits and vegetables, in total, also appeared to be somewhat below the amounts recommended. On the other hand, the average consumption of meats, cereals, and sugar was well above the standard suggested for a moderate-cost, adequate diet. In connection with the consumption of milk it should be noted that the standards set in Table 26 were for families with two minor children; for adults the ideal requirements would be somewhat lower and the excess of consumption of meat over the standard would tend to offset the shortage in milk. The excess of consumption over standards in cereals and sugar perhaps may lead us to become a fat, uncomfortable, and in-

efficient race. Even with allowance for these discrepancies among the various classes of foods it appears reasonably certain that the total consumption of food is adequate, at least, for the maintenance of human efficiency.

TABLE 36

APPARENT PER CAPITA CONSUMPTION OF FOODSTUFFS IN THE UNITED STATES, 1926-1928 \*

	<i>Unit</i>	<i>Annual Per Capita</i>	<i>Weekly Per Family of Four</i>
Milk .....	qts.	65	5.0
Vegetables and fruits:			
Potatoes and sweet potatoes ..	lbs.	130	10.0
Tomatoes and citrus fruits ...	lbs.	65	5.0
Dried beans, peas, etc. ....	lbs.	13	1.0
Other fruits and vegetables ..	lbs.	260	20.0
Eggs .....	doz.	18	1.4
Lean meat, poultry, fish .....	lbs.	175	13.5
Flour and cereals .....	lbs.	215	16.5
Fats and oils .....	lbs.	42	3.2
Sugar .....	lbs.	100	7.5
Coffee .....	lbs.	13	1.0

\* Bureau of Foreign and Domestic Commerce. Domestic Commerce Series, p. 38.

TABLE 37

STANDARD AND LEVEL OF CONSUMPTION OF FOODSTUFFS—A COMPARISON  
Weekly for a Family of Four

	<i>Unit</i>	<i>Standard for Moderate Cost Adequate Diet</i>	<i>Apparent Actual Consumption Average Available</i>
Milk .....	qts.	21.0	5.0
Vegetables and fruits:			
Potatoes and sweet potatoes ..	lbs.	10.0	10.0
Tomatoes and citrus fruits ...	lbs.	7.0	5.0
Dried beans, peas, etc. ....	lbs.	1.0	1.0
Other fruits and vegetables ..	lbs.	25.0	20.0
Eggs .....	doz.	1.3	1.4
Lean meat, poultry, fish .....	lbs.	7.0	13.5
Flour and cereals .....	lbs.	11.0	16.5
Fats and oils .....	lbs.	3.0	3.2
Sugar .....	lbs.	3.0	7.5
Coffee .....	lbs.	...	1.0

More detailed studies of food consumption show that with increasing income there are important shifts in the proportions in which different classes of foods are used. At the lowest income levels the market basket is heavily weighted with bread, other cereal foods, and potatoes. At the higher income levels, even among wage earners, there are marked increases in the consumption of fresh fruits and vegetables, and in the consumption of eggs and meat. In Table 38 some of the most recent studies of actual food consumption are summarized and compared with the standard moderate-cost adequate diet already referred to.

These data show some interesting points of difference between eating habits in New England and in the southeastern cities, but no important deficiencies seem to occur in the diet of wage earners in either area. Consumption of milk, it is true, appears to be distinctly below the approved standard, as is that of fruits and vegetables in the lower income group from the south. These shortages are offset, however, by consumption above the standard for eggs, meat, cereals, fats, and sugar.

There is undoubtedly something of a problem of undernourishment in the United States. This problem evidently does not arise from a lack of total food produced, nor does it appear to occur among the families of employed workers in the cities where consumption has been studied recently. Whatever inadequacies there may be in food consumption appear to be due, therefore, either to unintelligent selection of foods or to unemployment and lack of income for particular families.

If it is true, as suggested, that an adequate food supply is now being produced in the United States this fact has an important bearing on national agricultural problems and policies. Even though the scale of living in the country generally could be raised there would be little additional demand for those agricultural commodities that enter into the food supply. This fact is illustrative of the general proposition that an increase in the scale of living would affect or improve consumption in certain classes of goods and services much more than it would in others.

Apparently the failure to reach a satisfactory standard of

living in the United States must be mainly in fields other than food supply, and it is interesting to keep in mind that in these other fields there is little opportunity to establish truly objective standards for consumption. Perhaps in some of these other fields there will be continuing strain and urge to raise the level of consumption. Even in the case of food, of course,

TABLE 38

AVERAGE WEEKLY FAMILY CONSUMPTION OF FOODS OF WAGE EARNERS AND LOWER-SALARIED CLERICAL WORKERS IN THE SPRING, 1935\*

(In Pounds)

	9 New England Cities		6 Southeastern Cities		Standard for Moderate Cost Adequate Diet
	†	‡	†	‡	
Milk .....	27.5	26.5	20.0	22.5	42.0
Potatoes and sweet potatoes	15.0	15.9	7.5	8.0	10.0
Other fruits and vegetables	35.1	45.7	26.8	37.5	33.0
Eggs .....	2.8	3.6	3.4	3.8	2.6
Meat .....	10.6	14.5	8.0	9.5	7.0
Flour and cereals .....	16.9	16.9	15.3	15.9	11.0
Fats and oils .....	4.0	4.2	4.8	5.0	3.2
Sugar .....	5.7	5.9	4.8	6.5	3.0

\* *Monthly Labor Review*, April, 1936.

† Families spending \$300-\$399 on food per year.

‡ Families spending \$500 and over on food per year.

there is opportunity for change toward standards with greater taste appeal, but changes in standards based entirely on subjective opinion of what "ought" to be consumed merit careful study before they are made.

2. *Housing*. It is difficult to establish standards of housing. It has long been held by students of the subject, however, that the dwellings and neighborhoods in which many American families live are of a character to injure the health, endanger the safety and morals, and interfere with the normal family life of the inhabitants. Perhaps this has been true for a third of our total population.

Edith Elmer Wood has long been studying housing conditions both here and abroad. In 1935 she prepared a report

on slums and blighted areas in the United States for the Housing Division of the P.W.A. We quote certain passages from that report.

Neither rent nor value, of course, is an exact guide to the quality of housing, but they supply, probably, as close an index as could be obtained without a structural survey. Under average conditions of buildings costs, land values, and rents in the United States, it may be conservatively stated that housing rented under \$20 a month or valued under \$2000 was obsolete or substandard in 1930. This was by no means true, however, in all localities. In the New York area virtually all rentals under \$30 connoted bad conditions, whereas in many parts of the South \$15 might command a fairly modern home and a \$1500 bungalow might fulfill all the requirements of health and normal living. There are not only geographical differences, but differences due to the size of the community. Caution must, therefore, be used in applying national averages in any specific locality. But it is highly probable that there was as much bad housing above the \$20-\$2000 level in high-priced areas as there was good housing below it in low-priced areas.

The 1930 census figures show 12.7 percent of rented non-farm homes in the United States, renting for less than \$10 a month, 10.8 percent at \$10 to \$14, and 10.5 percent at \$15 to \$19. Combining them, we get 34 percent throughout the country renting under \$20. The number of homes in the three classes totals 4,197,266.

Of owned non-farm homes, 7.6 percent are valued under \$1000, 5.4 percent from \$1000 to \$1499, and 5.1 percent from \$1500 to \$1999. They combine to form 18.1 percent of all owned non-farm homes. Their number is 1,896,048.

There are, thus, 6,093,314 non-farm homes, rented or owned, or 26.6 percent of all non-farm homes whose tenure is known, which may be presumed to be obsolete or substandard.

In respect to farm homes, it would probably be safe to say that from 75 to 80 percent are without any modern improvements or conveniencies of any sort. The lesser number would be just over five million homes.

If 6,000,000 non-farm homes and 5,000,000 farm homes are definitely substandard, the two constitute over 36 percent of our total housing. . . .

Originally good housing may become bad through prolonged neglect of repairs and upkeep. Much, however, was flimsily or shoddily built in the first place. Dilapidation is, in either case, one mark of bad housing, and inadequate space, especially too few rooms, is a mark of bad housing. The number of rooms needed depends on the size of the family. But a 1- or 2-room cabin or tenement does not permit a normal family life where there are parents

and even one child, much less when there are a number of children of both sexes and varying ages. . . .

Dark rooms and poorly lighted rooms are found chiefly in cities, where the high price of land has led to covering too much of the lot with buildings, and the early building codes did not forbid windowless rooms, borrowing their light from rooms adjoining. New York City has been the worst offender in this respect, still having about 290,000 rooms built before 1879 without windows to the outer air. But all large cities have them to greater or lesser extent; Boston, Philadelphia, Chicago, Minneapolis, San Francisco, and many smaller ones. Surveys in Des Moines and Grand Rapids revealed them. Greatly exceeding in number the wholly dark rooms are those whose windows look out on narrow courts and alleys, or side yards which are merely passageways.

Cellar and basement dwellings form another category of bad housing. Here, in addition to inadequate light, there is often dampness and frequently an excess of street-level dust.

Housing is substandard if each family is not furnished with an ample and pure supply of running water, with an indoor flush toilet for its exclusive use, with a bathtub or shower, and if, in a built-up community, it is not connected with the sewer system. The small and middle-sized towns, as well as the large ones, are very backward in these respects.

In 1934 a real property inventory was made in 64 important cities scattered throughout the United States. In this survey account was taken of the housing conditions and the need for improvements. In the 64 cities, 18.1 percent of all the dwelling units were found to be in bad physical condition; that is, they either needed some major repair or else were unfit to live in and not worth repairing. Some of the other conditions that were found are summarized as follows:

Dwellings made of wood . . . . .	83.5	percent	of	total
Dwellings over 40 years old . . . . .	16.7	"	"	"
Dwellings overcrowded . . . . .	16.8	"	"	"
Dwellings without running water . . . . .	5.0	"	"	"
Dwellings with neither gas nor electricity . . .	8.1	"	"	"
Dwellings without bathtub or shower . . . . .	20.2	"	"	"
Dwellings without indoor toilet . . . . .	13.5	"	"	"

The fact that a dwelling is made of wood is no evidence, of course, that it is substandard, for wood is certainly one of the best structural materials for residences. But when wooden houses are over 40 years old they are likely to become dilapi-

dated unless they are given special care. The other data given above speak for themselves. In Fig. 38 some geographic differences are noted.

Certainly it seems as though housing was one field of con-

DISTRIBUTION OF DWELLING UNITS WITHOUT PRIVATE INDOOR WATER CLOSET FACILITY AND WITHOUT BATHTUB OR SHOWER FACILITY BY GEOGRAPHICAL DIVISIONS (1935)

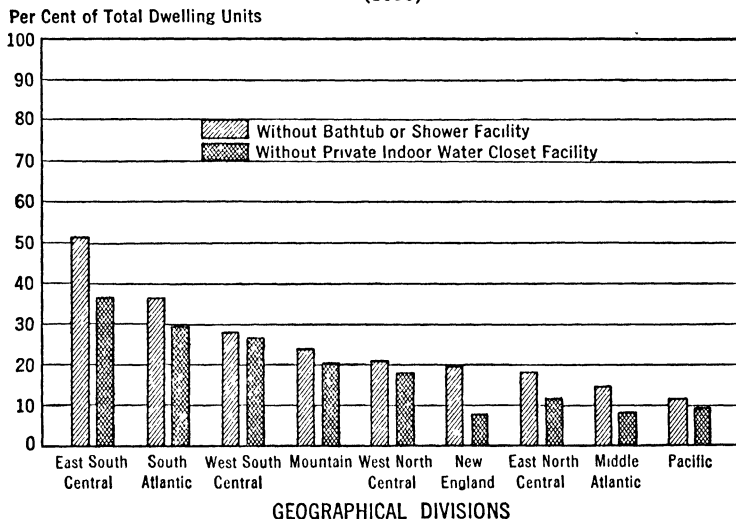


FIG. 38. The geographic differences in the distribution of dwelling units not equipped with bath and toilet facilities is indicated by the heights of the pairs of cross-hatched bars. Over 50 percent of the houses in the East South Central states did not have bathtubs or showers whereas just over 10 percent in the Pacific section were without such facilities. More houses in the East South Central section lacked toilet facilities than in the other geographical divisions, with the New England section ranking highest in this regard. (Source: *Markets for Plumbing and Heating Facilities in Residences*, Market Research Series Figure 12, Bulletin of Foreign and Domestic Commerce, 1937.)

sumption in which the level of living is not up to the standard that would be set by sensible people as one toward which we should strain. Some of the things that are being undertaken or suggested to improve the situation both here and abroad will be discussed in Part III.

3. *Home Operation.* The mistake sometimes is made of feeling that when the rent on a house is paid the entire prob-

lem of providing a place to live in has been taken care of. Of course we all know better when we stop to think. We know, for example, that we do not live without furniture, or fuel, or soap, or the many other things that help to convert a wooden, concrete, or brick box which we call a house into a home.<sup>1</sup> Reference to the Heller Committee standards in Tables 27, 29, and 30 will show the importance of some of the items of home operation, as determined by people who set those standards.

In the real-property inventory (1934) already referred to, it was found that 95.4 percent of all owner-occupied dwellings, and 87.5 percent of all rented dwellings in the 64 cities were lighted by electricity; less than .25 percent were lighted by gas, and the balance, apparently, by kerosene or gasoline lamps. Various fuels were used for cooking, as follows:

IN HOUSES		
	<i>Owner Occupied</i>	<i>Rented</i>
	<i>Percent</i>	<i>Percent</i>
Gas . . . . .	72.7	67.3
Electricity . . . . .	5.3	3.0
Wood or coal . . . . .	22.0	29.7
	<hr style="width: 50%; margin: 0 auto;"/> 100.0	<hr style="width: 50%; margin: 0 auto;"/> 100.0

Mechanical refrigeration was used in 21 percent of owner-occupied and 14 percent of rented homes.

If it is assumed that electricity is the present "ideal" energy for lighting, and that either gas or electricity is "ideal" for cooking and that mechanical refrigeration is desirable for all homes, it will be seen that there is room for considerable increase in each of these fields. Moreover, it has been pointed out by lighting experts that very few homes are lighted adequately for comfortable and strainless reading or other close work in the evenings.

The use of electricity and electrical gadgets may be a large item of cost in home operation. The Heller Committee standards ranged between 61 and 127 KWH per month for a family of four. Probably a minimum allowance for lighting alone, if any evening reading, sewing, or similar things are done,

<sup>1</sup> It is equally true, of course, that trappings alone, no matter how complete, do not make a home.

would be 30 KWH, and lighting might easily consume several times that amount. (30 KWH would permit one 100-watt lamp to burn for 300 hours; or one 100-watt, one 60-watt, and one 40-watt lamp for 150 hours each.) It has been estimated that other electrical appliances consume electricity in the average home about as follows:

Curling iron .....	1	KWH	per	month
Heating pad .....	1	"	"	"
Clock .....	1.5	"	"	"
Waffle iron .....	2.0	"	"	"
Washing machine .....	2.0	"	"	"
Kitchen mixer .....	3.0	"	"	"
Vacuum cleaner .....	3.0	"	"	"
Flat iron .....	4.0	"	"	"
Toaster .....	4.0	"	"	"
Percolator .....	4.0	"	"	"
Sandwich toaster .....	4.0	"	"	"
Radio .....	7.0	"	"	"
<hr/>				
Sub-total .....	36.5	"	"	"
Mangle .....	10.0	"	"	"
Oil burner .....	20.0	"	"	"
Refrigerator .....	70.0	"	"	"
Range .....	140.0	"	"	"
Water heater .....	250.0	"	"	"

The degree to which the Heller Committee standards permit the use of labor-saving and other electrical devices may be determined by comparing those standards with various combinations of the above items, including lighting.

The average consumption of electricity per residential customer in the United States and in the different geographical regions is given in Table 39. It will be noted that the average for the country as a whole is below the standard set for wage earners in the San Francisco region. Since it is well known that some families use quantities that are well above the average, it must follow that some consume much less than this minimum standard.

One important limiting factor in the use of electricity as a labor-saving, comfort-bringing form of energy in homes is the original cost of the necessary appliances. That is to say, in

the cases of these things there is both an original cost and a cost of operation that must be provided out of the consumer's income. The wiring and fixtures for lighting are generally included in the house rent, but the cost of the small appliances

TABLE 39  
AVERAGE ENERGY PER RESIDENTIAL CUSTOMER,  
KILOWATT-HOURS PER YEAR

<i>Geographical Region</i>	<i>1935 *</i>	<i>1933 *</i>	<i>1932</i>	<i>1931</i>	<i>1930</i>	<i>1929</i>
UNITED STATES . . . . .	678	598	618	605	551	492
New England . . . . .	595	533	532	510	467	415
Middle Atlantic . . . . .	593	525	537	538	483	441
East North Central . . . . .	688	598	626	610	580	526
West North Central . . . . .	695	608	621	590	545	501
South Atlantic . . . . .	872	712	710	661	589	520
East South Central . . . . .	752	583	616	592	530	440
West South Central . . . . .	640	561	542	508	470	415
Mountain . . . . .	762	687	706	702	692	556
Pacific . . . . .	830	780	862	861	793	635

\* Farm or rural customers, where separately reported, have been included with domestic, except in the Pacific region. The figures for 1935 and 1933 are not exactly comparable with other years.

listed above will range from \$175 to \$600, depending on quality; and these things generally do not come as part of the house. The major appliances listed above are priced about as follows:

	<i>Low</i>	<i>Average</i>	<i>High</i>
Mangle . . . . .	\$40	\$60	\$110
Oil burner . . . . .	200	300	500
Refrigerator . . . . .	100	160	400
Range . . . . .	90	125	300
Water heater . . . . .	100	150	300

Thus it is seen that to fully equip a house with these electrical devices would require an outlay at least equaling the total allowance for home furnishing and equipment in the Heller Committee's wage earner's standard (see Table 30).

In spite of the limitations set by high cost, the annual purchase of electrical appliances for domestic use is very large. In Table 40 the units purchased in 1935 are reported. The total retail value of these purchases was over a billion dollars.

The real-property inventory for Minneapolis (1934) showed that over 20 percent of all residential units lacked central heating in 1934, but were heated by stoves only. While it is possible, perhaps, adequately and comfortably to heat a home

TABLE 40  
ELECTRICAL APPLIANCES PURCHASED—1935

1. Incandescent lamps .....	\$707,000,000
2. Flashlight batteries .....	164,000,000
3. Radio tubes .....	65,500,000
4. Flashlight cases .....	6,000,000
5. Irons .....	4,816,000
6. Radio receivers .....	4,750,000
7. Clocks .....	2,310,000
8. Toasters .....	1,886,000
9. Refrigerators, domestic .....	1,567,000
10. Washing machines .....	1,390,000
11. Vacuum cleaners .....	1,200,000
12. Fans .....	993,000
13. Waffle irons .....	772,000
14. Heating pads .....	483,000
15. Mixers .....	448,000
16. Percolators .....	445,000
17. Sandwich toasters .....	440,000
18. Hot plates, grills .....	434,000
19. Heaters, radiators .....	342,000
20. Ranges .....	215,000
21. Oil burners .....	165,000
22. Water heaters .....	150,000
23. Ironing machines .....	141,000
24. Roasters .....	100,000
25. Cookers, casseroles .....	50,000
26. Stokers, domestic .....	41,000
27. Dishwashers .....	8,000

under Minneapolis winter conditions with stoves, that system certainly is neither the most efficient, nor is it conducive to the greatest comfort. This is another point at which the level of home operation appears to be below a standard reasonably to be desired.

4. *Durable Consumer Goods.* There are several durable consumer goods that enter into the consumer's budget in addition to his house. Attention has already been drawn, for ex-

ample, to the extent of automobile ownership in the United States (see Fig. 36). The extent of automobile ownership by farm families in different parts of the United States is reported in Table 41. In spite of the fact that the Heller Committee included automobile ownership in the standard for each income group, it may, perhaps, be questioned whether automobile ownership for every family is an ideal to be sought. If it is accepted as an ideal, there are many families for which provision is still to be made. It may be pointed out, moreover, that in spite of great progress in road construction and improvement during the past 20 years, still further major developments would be necessary if every family had a car. To accomplish this particular standard, therefore, it would be necessary for us to increase the production of automobiles, gasoline and other operating supplies, and highways to a very considerable degree. The problem of garage and parking space in New York City, for example, would be enormous if every family in the congested East Side had an automobile, while the congestion of traffic into and out of the loop district in Minneapolis would be almost impossible to penetrate if many more families used their own cars; and the death rate in both places doubtless would increase, at least temporarily, to startling figures. The slogan of a few years ago—"Two Cars in Every Garage"—is not necessarily a desirable one to have realized.

Radio receiving sets, which also have increased greatly in numbers recently, are at least less obviously and physically dangerous. A recent survey in Minneapolis indicates that 90 percent or more of all families now own one or more radios. If this is true for urban populations generally, and it appears to be, there has been a great change in at least one aspect of consumption during the first two decades of commercial broadcasting. The individual consumer is receiving recreation, amusement, education, news, in a volume almost undreamed of a few years ago and at a direct cost that is very low.

The total allowances for furniture in the Heller Committee standards are meager for the two lower-income groups. One has but to look at furniture advertisements, with the requirements of a four, five, or six-room house in mind, to realize how

sparsely furnished the average home would be with the allowance set. Of course, secondhand pieces can be purchased at

TABLE 41

NUMBER OF NON-RELIEF FARM FAMILIES OWNING CARS\*

Per 1,000 Families—1935-1936

(Families that include husband and wife, both native born)

<i>Locality</i>	<i>Number of Families in Each 1,000 Owning Any Car</i>
New England: White Operators	
Vermont . . . . .	73½
Central: White Operators	
New Jersey . . . . .	881
Pennsylvania and Ohio . . . . .	859
Michigan and Wisconsin . . . . .	939
Illinois and Iowa . . . . .	938
Mountain and Plains: White Operators	
Kansas and North Dakota . . . . .	965
Colorado, Montana, and South Dakota . . . . .	861
Pacific: White Operators	
Central and Southern California . . . . .	971
Oregon and Washington . . . . .	912
Oregon, part-time farm operators . . . . .	919
Southeast	
North and South Carolina:	
White operators . . . . .	707
White sharecroppers . . . . .	448
White self-sufficing farm operators (North Carolina only) . . . . .	204
Negro operators . . . . .	425
Negro sharecroppers . . . . .	355
Georgia and Mississippi:	
White operators . . . . .	622
White sharecroppers . . . . .	195
Negro operators . . . . .	246
Negro sharecroppers . . . . .	146

\* U. S. Department of Agriculture, Bureau of Home Economics, Study of Consumer Purchases.

relatively low prices by a few low-income families but that hardly seems the way to arrive at an "ideal" standard on a national scale.

Finally with respect to the consumption of material goods of all classes, attention may be called to two recent studies which show that people still desire more things to use. In the first of these studies, some 760,000 families in New York City were asked what things they urgently desired and would immediately purchase if their income increased to permit. The answers are summarized in Table 42.

TABLE 42

NUMBER OF FAMILIES OUT OF 760,000 THAT URGENTLY DESIRED CERTAIN TYPES OF MERCHANDISE 1934\*

<i>Item</i>	<i>Number of Families Desiring</i>	<i>Item</i>	<i>Number of Families Desiring</i>
Clothing .....	320,251	New Home.....	9,794
Furniture .....	169,046	Moving .....	8,921
Car .....	53,375	Vacation .....	8,387
Rugs .....	27,449	Piano .....	6,099
Radio .....	22,874	Vacuum cleaner.....	5,642
House furnishings ...	19,062	Travel .....	5,489
Electrical appliances..	15,249	Professional services..	5,337
Curtains .....	13,114	Sewing machines .....	3,583
Linens .....	12,962	Musical instruments ..	3,049
Dishes .....	12,276	Books .....	2,820
Kitchen equipment...	11,208	Washing machines....	2,668
Electric refrigerator..	11,055	Lamp .....	2,515
Repairs to home.....	10,293		

\* Study made by New York University.

The second study was made in Chicago. In it a large number of families, reaching over 10,000 in 1938, was interviewed in each of the years 1932, 1934, 1935, 1936, and 1938. While the number of interviews increased somewhat each year, the percentage at each income level was kept approximately constant. The interview method was also kept constant and each housewife was asked to indicate first, second, and third choices of what she planned to buy next. In Table 43 the first choices in 1935 and 1938 are listed for comparison. Radios and automobiles were important to more people in 1935 than any commodities were in 1938. Vacuum cleaners, curtains, linoleum and living room furniture were wanted by more people in 1938 than in 1935, while rugs, fur coats, and paint for the house

were wanted by fewer people in the later year. Demands change for durable goods, such as these in the list, both with fashion and with the degree to which wants have recently been filled.

TABLE 43  
WHAT PEOPLE WANT TO BUY

1935 Compared with 1938—Number per 1,000 Families  
(Items arranged in order of first choices in 1935)

<i>Item</i>	<i>1935</i>		<i>1938</i>	
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Rank</i>
1. Radio . . . . .	111	52	3	
2. Automobile . . . . .	97	53	2	
3. Rug . . . . .	54	29	11	
4. Fur coat . . . . .	50	40	7	
5. Furniture, odd pieces . . . . .	46	32	9	
6. Oil burner . . . . .	38	43	5	
7. Living room furniture . . . . .	36	46	4	
8. Vacuum cleaner . . . . .	32	57	1	
9. Electric refrigerator . . . . .	31	26	15	
10. Bedroom furniture . . . . .	30	38	8	
11. Electric clock . . . . .	28	22	20	
12. Decorate house . . . . .	24	24	18	
13. Washing machine . . . . .	22	27	14	
14. Coat of paint . . . . .	22	15	31	
15. Set of dishes . . . . .	21	28	12	
16. Lamp . . . . .	20	25	16	
17. Electric appliances . . . . .	19	17	27	
18. Curtains . . . . .	19	40	6	
19. Silver set . . . . .	18	16	28	
20. Linoleum . . . . .	17	31	10	
21. Piano . . . . .	16	15	30	
22. Wallpaper . . . . .	15	21	21	
23. Dining-room furniture . . . . .	15	23	19	
24. Stove . . . . .	15	15	35	
25. Bed linen and pillows . . . . .	15	25	17	

Perhaps it will always be true that, no matter what we have, we shall want more. At least it is likely that we shall continue to want other things than those we have. Certainly we have not yet reached the modest standards that have been set, and we are rather of the opinion that these standards should contain larger quantities of physical goods.

5. *Recreation.* Among the many things that enter into the consumer's scale of living is recreation. While the satisfying of desires in this field does result in the consumption of some material goods it is, nevertheless, concerned mainly with emotional or psychological satisfactions. For example, the Committee on Recent Social Trends estimated the annual expenditure for recreation in 1928-1930 at \$10,000,000,000. "This is at least 12 percent of the total income produced in those years and it therefore represents a considerable portion of human welfare."<sup>2</sup>

This national recreation bill is, of course, divided among individuals and families. The Heller Committee estimated that "leisure-time activities" should comprise 8.2 percent of the expenditures of the executive, 6.7 percent of those of the clerk, and 6.2 percent of those of the wage earner. Automobile expenditures were set up as follows: 8.3 percent for the executive, 11.9 percent for the clerk and 14.4 percent for the wage earner.<sup>3</sup> These percentages were broken down into \$73.24 for the executive, \$34.68 for the clerk and \$33.88 for the wage earner for commercial amusements such as movies and football; \$107.70, \$25.00, and \$15.00, respectively, for social entertainment; and \$121.21, \$45.00 and \$15.00, respectively, for vacations.<sup>4</sup> The actual expenditures vary from these so-called standards, depending upon the many factors discussed above. For example, in Philadelphia percentage expenditures for recreation ran from 3.4 percent to 6.1 percent, whereas in Pittsburgh they ran from 5.2 percent to 6.0 percent<sup>5</sup> and in five widely separated cities it ran from 4.9 percent to 5.8 percent.<sup>6</sup> None of these actual percentage expenditures reached the standard set by the Heller Committee for even the clerks despite the fact that the full gamut of incomes was included.

The division of the \$10,000,000,000 expended nationally on recreation in accordance with specific recreational activities is of interest here. The American Automobile Association esti-

<sup>2</sup> Vaile, R. S., *Consumption in the Depression*, p. 22.

<sup>3</sup> See Table 27, p. 203.

<sup>4</sup> See Table 33, p. 208.

<sup>5</sup> See Tables 47 and 48, pp. 238 and 239.

<sup>6</sup> See Table 49, p. 240.

mated that in 1933, at least \$3,000,000,000 were spent on automobile-touring vacations. "Twenty-eight million people, in eight million cars traveled an average of 3276 miles in 14 days and spent an average of \$7.00 per day."<sup>7</sup> In 1935 there were over 209 million visitors to national parks and over 30 million automobiles.<sup>8</sup> It will be recalled in this connection that the Heller Committee's estimate allowed only 5000 miles a year for the total use of automobiles for the clerk and the wage earner.

"The next largest item in the ten-billion-dollar recreation estimate is one and a half billion dollars for moving pictures." It has been estimated that in 1936 80,000,000 persons attended movie theaters weekly.<sup>9</sup> This is an equivalent of an attendance once a fortnight for every man, woman, and child in the population, which is just the standard set for each income group by the Heller Committee.

Another contributing part of the national estimate is the admission fees to college football. The average attendance at all colleges for the 9-week normal playing period in 1936 was 16,000,000 people.<sup>10</sup> Using \$3 as a conservative estimate of the average price per ticket we have \$48,000,000. College football is just one of the many phases of commercial recreation, however. Public support of professional games and sports is strong in the United States. Professional football, baseball, tennis and boxing must be considered before the picture is complete.

Another part of the recreational picture, although not included in the national estimate, is provided by data on magazine calculation. In Table 44 are presented data on the circulation of ten leading magazines, material in which is useful for entertainment and recreation.

With an estimated population of 127,000,000<sup>11</sup> in that year there was an average of one of the ten magazines to every 4.7 persons or approximately one per family. When we realize

<sup>7</sup> Vaile, R. S., *Consumption in the Depression*, p. 23.

<sup>8</sup> Survey of Current Business Supplement (1936), p. 74.

<sup>9</sup> Mimeographed release of the Department of Commerce. Bureau of Foreign and Domestic Commerce, Marketing Research Division, reprint from "Motion Pictures Abroad."

<sup>10</sup> *All Sports Record Book—1936*.

<sup>11</sup> *Recent Social Trends*, p. 2, McGraw-Hill, 1933.

that there are hundreds of magazines in the United States we can only guess at the individual's or the nation's magazine bill. This, of course, is not the entire bill for periodicals but only the small portion of it which is paid directly by the consumer.

TABLE 44  
CIRCULATION OF TEN LEADING MAGAZINES AS OF  
OCTOBER, 1934

<i>Magazine</i>	<i>Circulation</i>
1. <i>American Magazine</i> .....	1,930,238
2. <i>American Weekly Magazine</i> .....	5,770,066 *
3. <i>Collier's</i> .....	2,337,238
4. <i>Delineator</i> .....	2,280,442
5. <i>Good Housekeeping</i> .....	2,105,493
6. <i>Ladies' Home Journal</i> .....	2,572,328
7. <i>McCall's Magazine</i> .....	2,368,818
8. <i>Pictorial Review</i> .....	2,012,276
9. <i>Saturday Evening Post</i> .....	2,818,535
10. <i>Woman's Home Companion</i> .....	<u>2,565,734</u>
Total .....	26,771,178

\* Not listed in the Standard Rate & Data Service list of General Magazines.

The Bureau of Census collected considerable information on places of amusement for the year 1935; their summary of consumer expenditures in some 37 thousand establishments is shown in Table 45.

6. *Recent Percentage-of-Expenditure Data.* A more common method of representing levels of living is in terms of percentage of total income expended for classes of consumption. The first of these so-called studies was made by Ernst Engel in 1857 in terms of percentage of income devoted to the major commodity groups. (See discussion in Chapter 6.) There followed other budget studies but of necessarily limited scope. Because of the influence of occupation, relative price change, amount of income and geographical location nothing more than approximate knowledge has been made available. One of the most dependable of the modern studies of scales of living was made by Warburton of the Brookings Institution and the data are summarized in Table 46.

TABLE 45

CONSUMER EXPENDITURES IN PLACES OF AMUSEMENT: 1935

<i>State and Kind of Business</i>	<i>Expenditures (add 000)</i>
Total for United States .....	\$699,051
Amusement devices .....	4,360
Amusement parks .....	8,982
Bands and orchestras .....	4,611
Baseball and football clubs, sports and athletic fields, and sports promoters .....	25,273
Bathing beaches (not including municipals) .....	2,218
Billiard and pool parlors, and bowling alleys .....	43,271
Boat and canoe rental service .....	1,479
Circulating libraries (commercial) .....	3,039
Dance halls, studios, and academies .....	14,831
Horse and dog race tracks .....	32,466
Riding academies .....	2,448
Skating rinks .....	1,396
Swimming pools (not including municipal) .....	1,938
Theaters, legitimate stage and opera; and theatrical pro- ductions .....	19,630
Theaters, motion picture (including motion picture the- aters with vaudeville).....	508,196
Other amusements.....	24,913

The wealthy and well-to-do, including all families with incomes over \$10,000 and unattached individuals with incomes over \$5000, constitute only 2.4 percent of the population. These two groups however account for 6 percent of the total spent by all families and unattached individuals for food, 19 percent of the total for shelter and home maintenance, 16 percent of the total for attire, and 33 percent of the total for "other living." On the other hand, the subsistence and poverty group, including families with incomes under \$1500 and unattached individuals with incomes under \$750, constitute 41 percent of the population. Yet they account for only 27 percent of the total spent by all families and unattached individuals for food, 17 percent of the total for shelter and home maintenance, 17 percent of the total for attire, and 11 percent of the total for "other living."

This is not a universal level of living, however. Expenditures vary for each income group within even a limited geo-

graphical area. A careful comparison of Tables 47 and 48 will indicate that although expenditures of the income classes varied in some degree for each commodity group, yet the variation was somewhat more pronounced for food, clothing and housing. (See also Fig. 39.)

Data in these tables show that in Philadelphia the percent-

TABLE 46

CONSUMPTION EXPENDITURES OF FAMILIES AND UNATTACHED INDIVIDUALS BY BROAD ECONOMIC GROUPS (IN BILLIONS OF DOLLARS) \*

GROUP	EXPENDITURES					Totals †
	<i>Income</i>	<i>Food</i>	<i>Home</i>	<i>Attire</i>	<i>Other Living</i>	
Wealthy (\$25,000 and over) . . . . .	18.3	0.4	2.2	1.0	5.3	8.9
Well-to-do (\$10,000 to \$25,000) . . . . .	8.7	0.7	1.8	0.8	2.3	5.6
Comfortable (\$5,000 to \$10,000) . . . . .	12.9	1.9	3.3	1.5	3.4	10.1
Moderate circumstances (\$3,000 to \$5,000) . . . . .	17.5	3.8	4.4	2.3	4.3	14.8
Minimum comfort (\$1,500 to \$3,000)	24.6	7.6	6.2	3.6	5.0	22.4
Subsistence and poverty (under \$1,500)	10.9	5.4	3.6	1.9	2.4	13.3
All groups . . . . .	92.9	19.8	21.5	11.1	22.7	75.1

\* Leven, Moulton, and Warburton, *America's Capacity to Consume*, p. 88.

† Including direct taxes and philanthropic contributions.

age expenditures for "food," "fuel," etc., "personal care," "automobile," "clothing," for just the higher income groups, "gifts," "education," and "other transportation" were higher than in Pittsburgh. For "community welfare," "vocation," "recreation," and "furnishings and equipment" percentage expenditures varied between the two cities whereas for the remaining commodity groups, expenditures were a larger percentage of annual total expenditures in Pittsburgh than they were in Philadelphia.

Comparisons of percentage expenditure in other cities in this geographical region would show similar disagreement. We

**EXPENDITURE-PATTERN, WAGE EARNER FAMILIES  
CHICAGO, ILL., 1935-36**

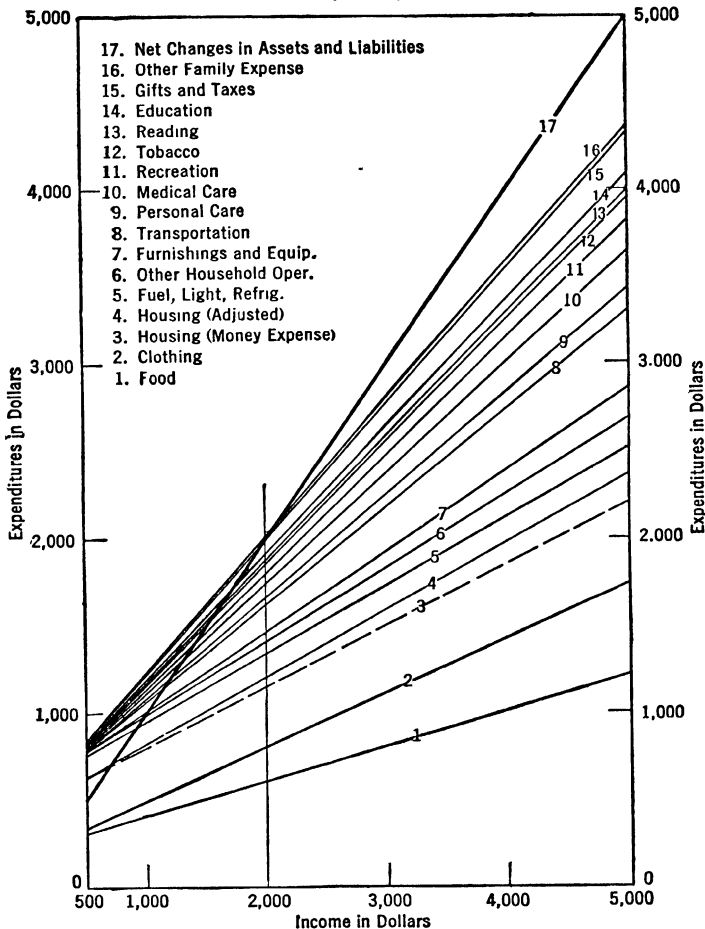


FIG. 39. The expenditure-patterns for 2,610 wage-earner Chicago families is represented by a series of straight lines. The average expenditures for the 17 categories of consumption are cumulated, layer on layer (line 2 on line 1, etc.), until the position of the uppermost line, 17, represents the amount of total expenditure or total income, whichever is greater.

In order to get the distribution of expenditures for the various categories of consumption at any income level erect a vertical line from the horizontal scale at that income division. The vertical line will cut each of the layers so that the distances along it will measure the amount expended for the item of consumption included within the segment for that income level. Such a line has been erected at \$2,000 income. It crosses 17 just below its intersection with 16, indicating that the total income did not quite cover total expenditures. For incomes less than \$2,000, total expenditures were considerably above income, while for incomes over \$2,000 some family savings are indicated. (Source: Kaplan, A. D. H., "Expenditure Patterns of Urban Families," *J. of the Am. Stat. Ass.*, March, 1938, p. 86.)

TABLE 47

## DISTRIBUTION OF ANNUAL CURRENT EXPENDITURES BY FAMILIES AT DIFFERENT ECONOMIC LEVELS IN PHILADELPHIA, 1933-35 \*

Item	WHITE FAMILIES						
	Families with		Expenditure Per		Consumption Unit of		\$700 and Over
	Under \$200	\$200 and \$300	Under \$400	\$400 and \$500	Under \$600	\$600 and \$700	
Number of families....	25	83	96	82	70	39	41
Average number of members in economic family .....	7.17	5.64	4.34	3.95	3.28	2.77	2.56
Average number of consumption units per family .....	6.43	5.09	4.00	3.64	3.06	2.68	2.45
Average total current rent expenditure ....	\$1,070	\$1,292	\$1,361	\$1,632	\$1,856	\$1,976	\$2,062
	PERCENTAGE DISTRIBUTION						
Expenditure for:							
Food .....	49.1	43.0	40.7	36.2	35.9	32.3	29.3
Clothing .....	9.9	10.1	9.6	11.2	10.5	12.3	10.4
Housing .....	13.0	15.1	16.2	15.5	15.1	14.8	15.7
Fuel, light and refrigeration .....	9.4	9.6	8.8	8.2	7.8	7.0	6.0
Other household operations .....	3.5	3.3	3.5	4.5	4.2	4.0	4.2
Furnishings and equip.	2.2	1.8	2.8	3.4	3.6	5.1	5.3
Automobile purchase, operation and maintenance .....	.6	.9	2.0	1.8	3.3	5.0	7.2
Other transportation .	3.1	3.7	3.7	3.9	3.7	3.6	3.4
Personal care .....	1.9	2.3	2.0	2.1	2.3	2.0	2.5
Medical care .....	2.4	2.3	2.8	3.5	3.6	3.4	3.7
Recreation .....	3.4	4.3	4.8	5.5	5.8	6.1	5.7
Education .....	.4	.6	.6	.2	.2	.3	.3
Vocation .....	.1	.3	.3	.4	.4	.2	.3
Community welfare ..	.8	1.3	1.5	1.5	1.5	1.4	1.3
Gifts and contributions to persons outside the family..	.2	.6	.6	1.7	1.5	2.1	2.8
Miscellaneous items ..	...	.8	.1	.4	.6	.4	1.8
Total current expenditure .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* *Monthly Labor Review*, June, 1937.

see, therefore, that even within such narrow geographical limits, levels of living vary, at least when measured in terms of percentage of income spent on different types of consumption.

Within a wide geographic range the data now available in the Bureau of Labor Statistics study of consumption shows a

TABLE 48

DISTRIBUTION OF ANNUAL CURRENT EXPENDITURES BY FAMILIES AT DIFFERENT ECONOMIC LEVELS IN PITTSBURGH, 1933-35 \*

Item	WHITE FAMILIES						
	Families with Expenditure Per Consumption Unit of						
	Under \$200	\$200 and Under \$300	\$300 and Under \$400	\$400 and Under \$500	\$500 and Under \$600	\$600 and Under \$700	\$700 and Over
Number of families....	11	64	76	65	54	38	38
Average number of members in economic family .....	6.58	5.83	4.41	3.60	3.14	2.82	2.15
Average number of consumption units per family .....	5.83	5.22	3.92	3.31	2.92	2.66	2.08
Average total current rent expenditure ....	\$1,005	\$1,298	\$1,396	\$1,478	\$1,593	\$1,711	\$1,767
	PERCENTAGE DISTRIBUTION						
Expenditure for:							
Food .....	42.8	41.0	36.1	33.6	28.6	29.5	24.7
Clothing .....	10.7	11.4	10.9	10.4	8.9	9.6	9.2
Housing .....	14.6	16.1	18.7	20.0	20.6	19.5	20.0
Fuel, light and refrigeration .....	7.7	7.3	7.1	6.8	6.3	5.0	5.2
Other household operations .....	3.6	3.4	3.4	3.7	3.9	3.5	4.9
Furnishings and equip. Automobile purchase, operation and maintenance .....	2.0	2.1	4.4	4.6	5.1	6.0	4.2
Other transportation..	.3	1.5	2.1	2.6	5.6	5.5	12.8
Personal care .....	4.4	3.3	3.6	3.6	3.0	3.1	2.5
Medical care .....	1.9	1.9	1.9	1.8	1.6	1.8	1.6
Recreation .....	3.0	3.9	3.3	3.4	5.9	4.3	4.0
Education .....	5.8	5.3	5.6	5.4	5.3	6.0	5.2
Vocation .....	.4	.3	.1	.3	.2	.5	.1
Vocation .....	.9	.2	.1	.3	.3	.4	.7
Community welfare ..	1.5	1.6	1.6	1.6	1.4	1.9	2.2
Gifts and contributions to persons outside the family..	.1	.4	.7	1.2	1.9	1.9	2.1
Misc. items .....	.3	.3	.4	.7	1.4	1.5	.6
Total current expenditure .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Monthly Labor Review, June, 1937.

similar small but noticeable variation in expenditure. A tabular summary of the expenditures of the wage earners and lower-salaried workers of somewhat comparable incomes who were questioned in different cities is presented in Table 49.

An additional important factor which causes levels of liv-

ing to differ is occupation. In the following table the reader, by comparing the percentage distribution of expenditures of the wage earners and university professors, will note the ap-

TABLE 49

AVERAGE CURRENT EXPENDITURES OF FAMILIES OF WAGE EARNERS AND LOWER-SALARIED WORKERS IN PARTS OF THE U. S. (U. S. BUREAU OF LABOR STATISTICS), 1933-34 \*

Item	<i>Manchester, N. Hampshire</i>		<i>Detroit, Michigan</i>		<i>Richmond, Virginia</i>		<i>Birmingham, Alabama</i>		<i>N. Orleans, Louisiana</i>	
					White				White	
Number of families studied.	147	600		198		202		321		
Average members of family . . . . .	3.83	3.68		3.78		3.67		3.80		
Average current expenditures . . . . .	\$1,399	\$1,593		\$1,542		\$1,461		\$1,299		
		<i>Percent</i>		<i>Percent</i>		<i>Percent</i>		<i>Percent</i>		<i>Percent</i>
Food . . . . .	34.5	32.3		29.4		30.6		35.6		
Clothing . . . . .	12.3	11.8		10.9		11.3		10.6		
Housing . . . . .	13.5	15.1		16.4		12.5		15.9		
Household operation . . . . .	13.0	10.4		12.7		13.3		10.9		
Furnishings and equipment . . . . .	4.7	4.0		3.9		4.4		3.2		
Transportation . . . . .	6.6	10.7		8.8		9.2		7.8		
Personal care . . . . .	1.9	2.0		2.0		2.4		2.4		
Medical care . . . . .	3.7	4.1		5.4		5.3		4.2		
Recreation . . . . .	5.3	5.8		4.9		5.7		5.7		
Education . . . . .	.4	.6		.6		.5		.4		
Vocation . . . . .	.6	.2		.1		.5		.2		
Community welfare . . . . .	1.9	.9		1.8		1.6		1.2		
Gifts, etc. . . . .	1.0	1.6		1.8		1.9		1.4		
Miscellaneous . . . . .	.6	.5		1.3		.8		.5		

\* *Domestic Commerce Bulletin*, October 10, 1936.

preciable difference for the items of food, housing, clothing and miscellaneous.

The proportion of total expenditures going for food among faculty members was over 13 points lower than among the wage earners but the proportion spent for housing by wage

earners was 12 points less than among faculty members. The fuel and light, furniture and furnishings, were similar, but the proportion spent for clothing was 3 points greater among wage earners, while the miscellaneous item was 5 points greater for the faculty group. The demands of academic life are quite different from those of industry and commerce and this difference exhibits itself as we have seen through different levels of living. This is, of course, but one illustration of the

TABLE 50

THE PERCENTAGE DISTRIBUTION OF EXPENDITURES AMONG THE MAJOR BUDGET ITEMS FOR UNIVERSITY PROFESSORS AND FOR WAGE EARNERS\*

*The Percentage Dist. of Total Expenditures for*

<i>Item</i>	<i>Wage Earners</i>	<i>University Professors</i>
Food .....	38.2	25.6
Clothing .....	16.6	13.5
Housing .....	13.4	25.0
Fuel and light.....	5.3	4.5
Furniture and furnishings.....	5.2	5.1
Miscellaneous .....	21.3	26.3
Total .....	100.0	100.0

\* Chandler, M. A., *Distribution of Expenditures and A Cost of Living Index for a Professional Group*, p. 17.

effect of occupation on social customs and consumption patterns.

Costs of living are likewise affected by the type of community in which families work and live. The Brookings Institution has made use of various studies of average amounts spent for major commodity groups and has drawn a general picture of the character of the expenditures of American farm and non-farm families. Fig. 37 in this chapter graphically presents the data.

The student will note very little difference in the amount spent for food—what difference there is no doubt can be explained by the consumption by the farm group of home-grown foods. There is a somewhat greater difference between the groups for clothing expenditures. The farm group apparently wears more durable clothes than does the urban group. The

urban group spend more for the "home," whereas the farm group saves more consistently for all income classes shown for both groups. A decided contrast between the two groups lies in their expenditure for "other living." Engel's laws of living state, in substance, "that the measure of improved living of a group of families is to be found in the proportions of the total spendable income allocated to this miscellaneous group."<sup>12</sup> It appears that the non-farm group is more able to attain an "improved living" although perhaps part of the income apparently available for such improvement is actually absorbed by necessary expenses like carfare to and from work.

7. *Personal Savings.* The nation-wide study of consumer purchases undertaken jointly by several federal agencies during the years 1935-1937 has made possible several types of comparison for which data have previously been lacking. Among these is the changes in net worth of individual families during the years' study; that is, the net increase or loss in economic assets of all sorts owned by each family. In Table 51 is presented a comparison of families in seven small cities in the Middle West and of farm families in Michigan and Wisconsin. From this table it can be noted that 35 percent of the small-city families and 50 percent of the farm families showed a loss in net worth in 1935-1936. Another 15 percent of the families in the small cities showed practically no gain. In other words, half of each of these two representative groups consumed all, or more than all, of their current income and ended the year poorer than they started. Thus it appears that an income of at least \$1250 was necessary that year under either of these two sets of conditions if families were to "break even," and a very considerable part of the total population failed to get that much.

*Conclusion.* From the data presented in this chapter we see that there are important discrepancies not only among levels of living but among the so-called standards as well. By and large, experience seems to prove that the proportion of income spent for clothing and rent remains fairly stationary but the proportion spent for "development" or "miscellaneous" decreases as income decreases, whereas an increase in income

<sup>12</sup> Zimmerman, C. C., *Minnesota Bulletin*, p. 255.

leads to a decrease in the percentage spent for food and an increase for development. There will, of course, be considerable variation in these movements. Given identical incomes, two families will pursue different buying routines because of

TABLE 51

CHANGES IN NET WORTH FOR FAMILIES LIVING IN SMALL MID-WESTERN CITIES AND ON MID-WESTERN FARMS, 1935-1936 \*

INCOME CLASS	SMALL CITIES		FARM FAMILIES	
	Number of Families	Average Changes in Net Worth	Number of Families	Average Changes in Net Worth
\$ 0- 249 .....	...	...	13	\$-1,153
250- 499 .....	61	\$-171	54	-358
500- 749 .....	229	-88	114	-204
750- 999 .....	409	-42	177	-103
1,000-1,249 .....	467	-1	197	-12
1,250-1,499 .....	425	27	169	100
1,500-1,749 .....	343	82	115	198
1,750-1,999 .....	281	162	80	285
2,000-2,499 .....	215	225	93	544
2,500-2,999 .....	361	360	25	871
3,000-3,999 .....	209	747	30	1,128
4,000-4,999 .....	56	1,183	...	...
5,000-9,999 .....	59	1,892	...	...

Note—Family income in the small cities included the non-money value of imputed income from owned homes and rent received as pay, as well as money income. For the farm families, income included net money income from farm and non-farm sources, value of farm-furnished goods used for family living, and value of inventory change in livestock and crops stored for sale.

\* Mimeograph releases of Bureau of Home Economics study of consumer purchases.

differences in education, social position, occupation, number in the family, health, environment and the other factors discussed in Chapters 7 and 8. The family which spends according to the so-called standards or "ideal" percentages may in the end receive less of real value than the family which ignores them in order to solve its individual problem. As Agnes Donham points out, each family should base its plan for expenditures upon estimates made after consideration of the individual problem with all the existing circumstances. She suggests

the following six adjectives which, applied to the groups of expenditures, may assist in determining a minimum amount required for each group.<sup>13</sup>

1. Adequate food—indicates not a fixed sum to be spent for food, but a fixed standard of food for nourishment which cannot be reduced if the health and efficiency of the family are to be maintained.

2. Suitable clothing—indicates no definite amount of money assigned as a minimum to be spent for clothing but indicates a minimum necessary to protect the body and the individual's health and social standing.

3. Essential home operation—indicates a minimum standard but does not fix an amount except for particular problems. These expenditures should be proportioned to those for food, shelter and clothing.

4. Safe shelter—a minimum amount should be allowed in order to avoid danger to the family morals and health and to protect one's self-respect.

5. Constructive savings—indicates provision for the future needs of the family.

6. Reasonable development—acknowledges the need of every family or individual for recreation, health, education, personal expenses, etc. These expenditures can, of course, be determined only after the minimum requirements for food, clothing and shelter have been provided.

Standards and planes must be referred to each individual within the group. There are general guides which, we have pointed out, can be applied to specific cases when they are properly adjusted to the particular problems involved. It is necessary to provide for "adequate shelter," "reasonable development" and "provision for the future." The formal budgets prepared for the "average family" under hypothetical conditions very seldom are applicable to the needs of any particular family. Intelligent adjustments must be made before such budgets are useable.

Throughout Part II we have examined the level and distribution of income in terms of consumption. It has become

<sup>13</sup> Data taken from S. Agnes Donham, *Spending the Family Income*, pp. 87-90, Little, Brown, 1936.

clear, perhaps, that total income does not permit consumption equal to standards that have been set for different groups of people. Moreover, the standards themselves are low for a very large part of our total population.

Attention has been called to the tendency toward increasing leisure and leisure-time activities, which would seem to imply that our requirements for other things have been met. We must emphasize again, however, the basic necessity of *producing* before we can *consume*. No scheme for increasing human welfare can succeed if it fails to recognize this relationship. Neither trust-busting, governmental regulation, socialization of income, nor any other political program can effectively improve conditions unless it results in increased production; and to increase production will probably require an increase in use of both energy and intelligence on the part of each individual citizen.



*Part III*

**THE CHANCES FOR IMPROVEMENT**



## CHAPTER 11

### INCREASING REAL INCOME

#### INTRODUCTION

**E**ARLIER in this book we discussed several of the basic concepts with which the science of economics is concerned (see especially Chapter 3). It was pointed out, for instance, that a *flow* of goods and services is the essence of income and that income, in turn, is the substance of consumption. Moreover, it was taken for granted that one of the principal aims of any social system is to maximize the flow of income to living individuals without impairing the heritage left to posterity. In Part II it was made abundantly clear that the flow of income has never been sufficient to satisfy the people of any generation. Despite great advances in scientific knowledge and in technical processes it remains true that production is inadequate, in total, to satisfy people's wants.

We have said that production must take place factually and chronologically before income can flow or consumption occur. Perhaps we have not been clear and complete as yet, however, in our definition of production. Consequently we start this third part of our study with some further consideration of this term.

Production may include any adaptation of environment which results in an increase in human satisfactions or enjoyment. This definition applies, of course, to all fields of human activity such, for example, as farming, mining, manufacturing, retailing, the showing of movies, horse racing, house painting, and what not. It suggests what is to be included in total production, but it fails to provide either methods or units for measurement. This is a lack which is not easily overcome.

The businessman may define production as any change that will command a price. Whenever any person or group is paid by someone else for baking bread, or shining shoes, or piloting

an airplane, or mining coal, or singing songs, or clerking in a retail store, or managing a factory, the payment is *prima facie* evidence of production. Perhaps this is nearly always an accurate concept of production from the standpoint of one getting one's share of the total product in return for one's efforts. It should be remembered, however, that not all useful activities command a price. The things one does for oneself, the work of the mother in a home, voluntary social-service work, and free amateur concerts are illustrations of activities that may give great satisfaction to people, but that are not paid for. Consequently, the total of things paid for by consumers is less than the total of things produced for the benefit or satisfaction of consumers. Nevertheless this concept of production has the merit of affording an opportunity for objective measurement of that part of production which enters our system of exchange co-operation.

This businessman's concept of production is not always a safe one, however, for the individual consumer or for the commonwealth. It will be recalled, in this connection, that one important element determining the value of any particular good or service is its scarcity relative to the desire people have to possess it; when supply increases, the value of each unit decreases, while when supply decreases the value per unit goes up. Sometimes a limited supply of a good will sell for enough more per unit than will a large supply so that its total value is greater than that of the larger supply. It was pointed out in Chapter 8 that whenever the demand for a good is inelastic, a small supply will sell for more total dollars than will a larger supply; small cotton crops, for example, have often brought the growers more total money than have large crops. Consequently, whenever individuals or groups can control the total supply of any commodity for which the demand is inelastic, they may be able to make more money by restricting the amount offered for sale. Milk producers and distributors, for example, restrict the amount of milk offered to city consumers as whole milk so that the price will remain consistently high; they then sell the remainder of the milk in the form of butter and other products for which the demand is more elastic. The results of such a policy of controlled marketing are indicated

in Fig. 40. In such cases the curtailment of supply would seem, by the test of market value, to have constituted production. From the standpoint of the "producer," at least, it is just as "productive" as any other method of obtaining purchasing power. From the standpoint of people as consumers, however, there surely is a very real difference between the contribution of the farmer who grows wheat and of the incendiary who sets fire to it, even though each might happen to have

ALTERNATIVE USES FOR A COMMODITY AND THEIR  
EFFECT ON TOTAL VALUE

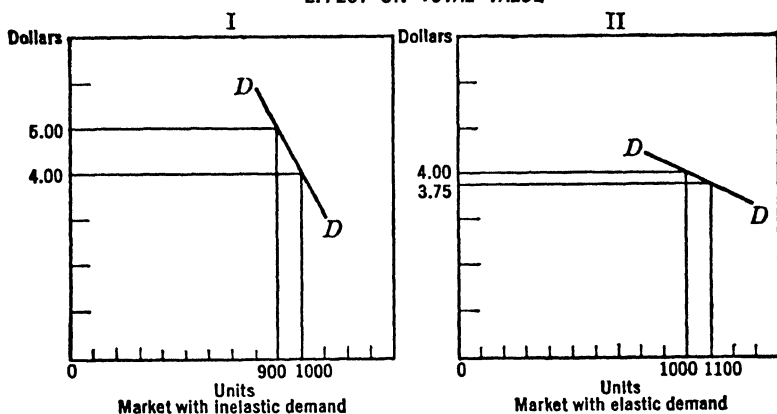


Fig. 40. If a product may be sold in either of two markets, in one of which the demand is inelastic while in the other it is elastic, the amount of the product offered in each of the markets may be controlled to the advantage of the seller. Milk, for example, appears to be such a product; the demand for milk for whole-milk consumption is relatively inelastic, while the demand for milk to convert into butter and other dairy products is relatively elastic.

For purposes of illustration, we might assume that dairy farmers in a particular area have 2,000 units of milk to sell and that if they offer half the supply for each of the two uses, both will bring the same price; that is, in each market 1,000 units would sell for \$4.00 per unit, or a total revenue of \$8,000. Now if the amount offered as whole-milk could be restricted to 900 units, the price might rise as shown in the figure to \$5.00 a unit or a total value of \$4,500 in that part of the market. The remaining 1,100 units might then be sold in the dairy-products market at \$3.75 per unit, as shown in the figure, or \$4,125. The total sales in the two markets now would be \$8,625. Thus, if the supply offered in each market can be controlled, the total revenue can be raised by restricting the amount offered in the market with the inelastic demand. The consumers in this market suffer the higher price. Milk and some other commodities with alternative uses are, in fact, often controlled in this manner.

exactly the same effect on the total value of the crop. And it is to be remembered that, in the last analysis, consumption is the sole end and purpose of all production; production is a means to this end, but it must be positive if increased total consumption is to result from it.

In spite of this word of caution, it is recognized that in the present work-a-day world individuals may increase their personal purchasing power—and through it, their consumption—in any of three ways or combinations of the three, namely:

1. By increasing their output of goods or services (production in the narrow sense).
2. By increasing other people's desire for the particular wares which they would exchange (advertising and sales promotion—including "selling" oneself).
3. By making their particular wares relatively scarce (restrictive programs of all sorts).

Decision to influence production values in any of these ways may rest either with individuals (rugged individualism), with non-political groups (such as corporations, trade unions, or consumer co-operatives), or with political groups (such as state or federal legislatures, soviet officials, or administrators of a national agricultural program). There is continuous quarrel among the advocates of different ways of making these decisions. For example, certain governmental authorities have recently proposed that Coney Island should be changed radically in the interest of the general public, to which *The New Yorker* has replied:

Reluctantly we have to oppose Commissioner Moses' plan to turn Rockaway and Coney Island into decent replicas of Jones Beach. It is inspiring to think of cleanliness and order and a sort of preparatory-school morality descending on those infested sands; on the other hand, there are unfortunately many perturbed and disreputable spirits to whom minatory young men in blue coats and duck trousers, and archery butts, and little tables under gaily striped umbrellas, will be forever matters of suspicion and hatred. These young men and women love shooting galleries and bars with sawdust on the floor and the jungle beat of a nickel piano. It is their theory of American liberty that the beaches belong to the people to desecrate as they please, and they do not like to be whistled at when their conduct exceeds what seems to them an arbitrary

propriety. Mr. Moses, we think, falls into the error of supposing that everybody likes the same things he does—that the standards of beauty and pleasure are universal. This is arrogant. It is arrogant for any man to imagine that he can landscape the human heart.

We are not concerned at present with the rights and wrongs of this particular controversy—with the question, that is, as to whether Coney Island is to remain the Coney Island of tradition at the behest of those who like it as it is, or is to be changed to something else at the behest of someone else. We are interested to point out, however, that, whenever there is departure from the test of the market place in the decision of such questions, the measurement of production becomes hazy if not entirely impossible. Perhaps if groups of people could be prevented from combining to control and to restrict the supply of their particular economic good (and thus increase their purchasing power at the expense of consumers) the ability to command a price would be a true and democratic measure of production. It is in the belief that this would be the case that many people have urged the continuation of the competitive system. Within that system, however, have grown up large organizations, such as corporations, holding companies, trade unions, and financial institutions, which frequently and almost inevitably resort to the use of the third method of “increasing production”; that is, they restrict output at times in the attempt to affect favorably their share in purchasing-power income even though the total social product is reduced thereby. As we go on to consider the possibilities of increasing income for the individual and for the commonwealth, we need to keep clearly in mind the distinction between an increase in production measured in terms of goods and services for people to consume, on the one hand, and an increase in production measured in terms of the purchasing power of certain groups obtained through a planned scarcity of the things they sell, on the other hand.

#### NEW INDUSTRIES AND INCOME

The production of goods and services is constantly changing. This is due to the interplay of at least three important forces, namely:

1. Changes in the availability of raw materials through, for example, the depletion of soil fertility, the opening of new irrigation projects, the exhaustion of mines and wells, the discovery of new mineral deposits, and the like.

2. Changes in the techniques of processing such, for example, as the introduction of the electric blast furnace, the use of aluminum to lighten trains, the belt-line system of factory operation, new methods of extracting dyes from coal tar, improvements in the generation of electricity, and the like.

3. Changes in the ways in which people satisfy their desires such, for example, as the attendance at movies and listening to the radio as principal forms of recreation unknown fifty years ago, the change in the type of swimming suits worn by different generations, the dancing of the Big Apple in place of the old square dances or the waltz.

The fact of change in production resulting from the interplay of these forces is evident everywhere. Perhaps a brief consideration of the recent economic developments in Minnesota will be sufficient to suggest some of the important ways in which these changes affect production and consumption within a particular region although, of course, the effects are not exactly the same in all regions.<sup>1</sup>

Instability and change are shown clearly in the rise and fall of industries in Minnesota. For three-quarters of a century Minnesota has been characterized by the pioneer development that is typical of young communities. Early in the history of the state two industries became dominant. One of these was lumbering and the other flour milling. Both were based on the productivity of the land and both were natural to a new country. As the state has matured, however, the prominence of these two industries has declined. Their rise and decline may be traced briefly to illustrate the ebb and flow that is inevitable until a community has matured. Probably, in fact, some such series of changes will continue indefinitely, although at a slower rate.

Since 1910 there has been essentially no increase in the total amount of land used in farm crops. The intensity of land use has increased, however, ever since the turn of the century.

<sup>1</sup>The material that follows concerning Minnesota industries is adapted from Stevenson and Vaile, *Balancing the Economic Controls*, pp. 39-56, Univ. of Minn. Press, 1935.

Wheat, which was the primary crop for many years, has become of secondary importance. In the southern part of the state, particularly, corn has largely replaced wheat as a field crop. Throughout the state, livestock industries have increased to major importance. This change in the relative importance of different types of agricultural products in the farmers' income is illustrated in Table 52.

TABLE 52

## GROSS CASH SALES FROM MINNESOTA FARMS

(Expressed as percentages of total sales)

<i>Year</i>	<i>Field Crops</i>	<i>Livestock</i>	<i>Livestock Products</i>
1910 .....	59.6	19.3	21.1
1915 .....	50.2	28.9	20.9
1920 .....	42.5	31.7	25.8
1925 .....	34.4	36.0	29.6
1930 .....	21.2	42.5	36.3

The development of livestock industries which is shown by these figures represents an intensification of agriculture. This intensification is reflected in the fact that the total agricultural income of the state has been increased by the change which, in turn, makes possible greater total consumption of goods and services by the farmers of Minnesota and their families than was possible thirty years ago, even though there has been no increase in the amount of land in use. This has resulted partly in an increased income per family and partly in more families on farms. In this particular case the effect of intensification has been felt in city industries as well as on the farm, for the increase in the number of people gainfully employed in the butter and meat-packing industries is greater than the decrease in the number employed in flour milling. Even the decline in the lumbering industry has been offset in large part, so far as employment is concerned, by increases in employment in tourist resorts that occupy the districts formerly covered by commercial timber. As changes occur in the industrial pattern of a region, more productive uses may be found for the natural and human resources with a corresponding increase in the opportunity for total consumption.

The search for new industries, the products of which will add to general well-being and enjoyment, continues. A generation ago the automobile revolutionized our ideas concerning travel, sight-seeing, out-of-doors living. The movie and the radio came shortly afterwards almost as net additions to our forms of recreation. Aluminum and rayon are comparatively new raw materials that permit the fashioning of new types of merchandise. The chemical industries are continuously reporting new ways of refining or combining materials to make them more useful to consumers without increasing the human labor that must be expended on their preparation. Television, stratosphere flying, completely revamped housing in which full air-conditioning will be only one feature are among the developments that people may look forward to with reasonable assurance during the next few decades. As science and industry combine to make these and other things possible, consumption will change and the lot of people as consumers may be improved greatly.

No important change of the sort just suggested can take place painlessly. The radio industry upset and permanently reduced the phonograph industry, rayon displaced many employees in cotton and silk mills, while mechanical refrigerators have thrown many icemen out of work. This sort of unfortunate effect of progress seems inevitable. Certainly, as already pointed out, if no change is to be made in industry because of the danger of such effects, we shall continue with the same old, inefficient methods for a long time. We cannot too strongly emphasize the fact, therefore, that these new developments and others like them should come only as the result of intelligent planning on the part of many people; their final accomplishment will require, also, much painstaking effort. Moreover we would point out that, with a few conspicuous exceptions, those people who put forth the most intensive and intelligent efforts in production will continue to have the lion's share of the new products and their enjoyment.

#### MANAGEMENT PRACTICES AND INCOME

Improvement in the scale of living need not wait, however, upon the development of new industries. Any increase in the

efficiency with which production is carried on in existing industries may add to the real income of the community; that is, it will release some labor and other resources which, if wisely put to work at other things, will increase total production. This will be true regardless of whether the improvement occurs in those industries that cater to local trade or in those that produce for inter-regional trade.

An increase in the output of local industries would add directly to commodities and services available for consumption. If such an increase occurred through improved efficiency without increase in total cost, the enlarged output could be paid for with the same exchange that now commands the present output. That one change would enrich people in general—that is, would give them more things to consume—and no individual would be made poorer thereby.

Similarly, if the production of things for inter-regional trade were more efficiently performed, there would be more goods available to exchange for commodities and services which are not produced to advantage in the home community.<sup>2</sup> There is ample supply of diversified natural resources and enough workers of all sorts in almost every region in America so that lack of ability to envisage, organize and manage industries is likely to be the most important limiting factor in the production of income.

Of course, improvements in efficiency cause temporary maladjustments and individual hardships in industry just as do new industries. Dial telephones increased the efficiency of telephone systems, but they displaced the operator girls; new-type boilers have greatly increased the efficiency with which coal is burned, but they have reduced the need for coal miners; electric washing machines have decreased the need for washerwomen. It must be remembered, however, that the greatest social problems still are those concerned with increasing total production. People on the whole seek that end even at the cost of considerable temporary maladjustment.

The problem of increasing income seems clearly to involve, as one very important element, the application of scientific

<sup>2</sup> In the next chapter there is a fuller discussion of regional specialization and the chance it gives to increase total consumption.

management to individual plants and then the extension of this application to matters of general industrial and regional control. The Employment Stabilization Research Institute, in its studies in Minnesota, found that neither individual concerns nor whole industries in that state were, on the whole, adequately and efficiently managed. In one of its publications the Institute suggested that many firms would do well to adopt the following program for the improvement of their plants.<sup>3</sup>

1. Each plant should periodically consider its layout and the flow of materials in process; determine the operations necessary to be performed on each product; the order in which the operations should be performed; the location of each production center required in the processing, and the flow of materials in process.

2. Production centers, or points at which operations are performed, should be considered with respect to light, working conditions, receipt and disposal of materials, plant transportation systems, equipment used, and possible changes.

3. Control of materials should be considered with regard to the possibility of developing standard raw material requirements; the establishment of minimum and maximum inventories; and the control of the movement of materials in process.

4. Processes should be considered with regard to the suitability of the machinery and equipment that is being used and that which is available; the capacities of the worker; the means of testing applicants for these capacities; the "one best way" of performing the job; and the work content of each job.

5. By organizing unfilled orders and analyzing them, it becomes possible to pre-plan their production. Knowledge of the workers and machines, and of the requirements of unfilled orders makes it possible to lay out a production program and to schedule its movement through the processes.

6. Each plant should install some means of knowing its costs, thus making it possible for whole industries to get on a comparative cost basis.

7. Markets should be analyzed to ascertain what changes are taking place and the condition of the market at any given time. Industries may thus measure the demand for their own products, and the compilation of data on the productive capacities of the industries will make it possible to plan production accordingly.

8. A clearance of information on wages and income will make it possible to measure the consumer demand in the region. The rela-

<sup>3</sup> Filipetti, George, *Scientific Management—An Aid to Industrial Control*, pp. 51-52, Univ. of Minn. Press, 1933.

tion of demand for producer goods to supply will serve to forecast the possibilities and limitations to be placed upon the manufacturers of such goods.

9. Comparison of the local industrial situation with general business conditions and the condition of related industries that are national in scope will make it possible to adopt a course of action based upon these facts.

10. Classification of jobs and the requirements of each will make it possible to select the persons best able to do the work, to train people according to the demand for particular services, and to adjust the available labor supply to the requirements of industry.

However, group action and industry management are needed to supplement individual action and plant management in order to achieve full development and stability. By group activity small manufacturers can secure results which they could not otherwise obtain, results which it is quite possible for a large plant to accomplish independently. A large unit may be able to develop a well-selected and well-trained labor force because it can carry a personnel department with the requisite skill to accomplish this purpose. A small plant cannot afford such a department, but a group of small plants may be able to do so. A large plant may be able to afford a statistical department to collect, organize, and interpret market data and to develop other managerial devices. This would be quite impossible in a single small plant, but not in a group of small plants. A monopoly can determine the basis upon which its operations should be expanded and contracted by collecting facts and trends and relating productive capacity to the market. If there are a number of plants no one of them can do this, but a group of plants acting as a unit may achieve a similar result. Highly developed research is possible in the large plant and impossible in the small unit, but a group of small units may carry on such research through group organization. A large integrated plant may readily measure the output required to meet previous sales; then once it has estimated its probable future sales, it may adjust output in the succeeding operations accordingly. A group of small plants combined in horizontal and vertical associations can do likewise. Knowledge concerning the best methods in the various functional aspects of business may be available to large units

because of their wide contacts; group activities may bring to members similar information, and in this case their adoption may be effected more easily and quickly in the small plants than in the large units.

Within the region are companies engaged in production for local consumption. These companies require an analysis of the total sales of each of their products for local consumption; the changes in consumptive power of the local area; a knowledge of the local productive power to fill these needs, and of outside forces likely to affect them. Companies selling over a wider area will need a clearance of information with the producers selling over that area, probably through the horizontal type of organization.<sup>4</sup>

And finally, trade associations either private or social are suggested which should act as central agencies for the clearing of information. Data on trade, current data on production, stocks on hand, consumption, current price levels of essential commodities, statistics of active and idle plant capacity, and information on costs and profits for related industries would be collected. Such a system, regional or state-wide in scope, would supply valuable integrated statistics.

Such plans aim to make the present economic system operate more efficiently and effectively. Because our consumer income, and therefore our consumption, is limited by the results of the economic machine, its effective operation is of paramount importance to us.

#### TECHNOLOGICAL IMPROVEMENTS AND INCOME

Another way of increasing real income is through improvements in technology. Beginning with the industrial revolution, with its harnessing of steam power, the machine has increasingly displaced human labor, not only because much heavy work could be done by machines which men were not strong enough to perform but also because machines could be speeded up to greater and more uniform production than could men. In some fields the increase in efficiency has been more striking than in others. In agriculture the greatest change has taken place in the production of grain and hay crops. Table 53 presents data which show the decrease in the

<sup>4</sup> Filippetti, *op. cit.*, pp. 54-55.

amount of man labor used to produce wheat, corn and cotton.

It is interesting to note the great decrease in man labor per 100 bushels of wheat where machines have been substituted for

TABLE 53

ESTIMATED AMOUNTS OF MAN LABOR USED TO PRODUCE AN ACRE OF 100 BUSHELS OF WHEAT AND 500 POUND GROSS-WEIGHT BALES OF COTTON FOR DESIGNATED PERIODS \*

	Yearly Average for		
	1872-82	1898-1902	1928-32
<i>Wheat:</i>			
Man labor per acre:			
Prior to harvest ....hours	6	5	3
Harvest ..... " "	11	7	4
Total, hours .....	17	12	7
Acreage harvested ...acres	36,160,000	49,929,000	58,722,000
Production .....bushels	476,061,000	694,576,000	844,640,000
Yield per acre .... " "	13.2	13.9	14.4
Man labor per 100 bushels..hr.	129	86	49
<i>Corn:</i>			
Man labor per acre:			
Prior to harvest ....hours	28	22	14
Harvest ..... " "	18	16	12
Total, hours .....	46	38	26
Acreage harvested ...acres	62,857,000	94,319,000	102,393,000
Production .....bushels	1,609,966,000	2,441,882,000	2,557,071,000
Yield per acre .... " "	25.6	25.9	25.0
Man labor per 100 bushels..hr.	180	147	104
<i>Cotton:</i>			
Man labor per acre:			
Prior to harvest ....hours	67	62	48
Harvest ..... " "	52	51	37
Total, hours .....	119	113	85
Acreage harvested ...acres	15,125,000	25,675,000	40,535,000
Production (500 pound gross-weight bales) ....	5,917,000	10,177,000	14,656,000
Yield per acre (pounds gross lint) .....	194	198	181
Man labor per bale ...hours	304	285	235

\* National Resources Committee, *Technological Trends and National Policy*, p. 101, June, 1937.

man power so extensively. On the other hand the decrease in man labor per bale of cotton has been less marked largely because there has been slower introduction of machinery in this field.

In manufacturing there has been a similar increase in the

output of goods relative to labor employed. In Table 54 data are summarized to show the changes that have taken place in output per worker in the manufacturing industries since the turn of the century.

TABLE 54  
ALL MANUFACTURES IN THE UNITED STATES

Year	Number of Wage Earners (Millions)	Value Added by Manufacture		
		In Current Dollars (Billions)	In 1926 Dollars (Billions)	Per Wage Earner in 1926 Dollars (Thousands)
1899 .....	4.7	4.8	9.2	19.7
1909 .....	6.6	8.5	12.6	19.1
1919 .....	9.0	24.8	17.9	19.9
1929 .....	8.8	31.9	33.5	38.0

The increase in the value added by manufacture per wage earner during the decade of the 1920s is phenomenal. Perhaps the price index used to adjust the current dollar figures for changes in the price level (see Chapter 3) has not compensated completely for the change in price. Even with a liberal allowance for error in this respect, however, the increase in accomplishment per worker would be large, and it has been accompanied, as already noted, by a decline in the length of the worker's day. This increase is largely the result of increased efficiency of operation of factories and of improved technical processes. It is associated with increases in the use of mechanical devices, electrical power, time and motion studies to eliminate unnecessary motions, the discovery of new chemical, physical and biological processes, and the like. In all probability further significant improvements in the techniques of manufacturing will be accomplished in the next few decades. Certainly, as was pointed out in the section above, our engineers and experts in production management already know many ways in which efficiency can be increased. If and when these improved techniques are adopted, our national ability to consume will be materially increased.

Perhaps it should be emphasized at this point that the types of efficiency about which we have been speaking are not limited to any particular form of socio-political organization.

That is to say, an increase in the use of mechanical power relative to human labor, or the saving of effort resulting from time and motion studies, or the economies of large-scale production, will have the same effect on the total capacity to consume in a communistic, a fascist, a democratic, or a monarchial society. These economies are the result of better understanding of the chemical and physical laws underlying engineering, and man-made laws have no direct effect upon them. Municipal power plants and government-operated railroads may be more efficient than similar enterprises under private ownership if, and only if, their management makes better use of engineering principles and skills. The form of socio-political organization may, however, either encourage or discourage the application of these physical laws to specific situations in production. Long-range planning of public works such as highways and sewer systems, government aid in widespread soil conservation or reforestation, and search for better methods of farming, are examples of successful effort on the part of governmental agencies in this country to increase efficiency.

One illustration of the inter-relations between physical laws and political laws in our economic life may be cited from the chain-store field. There seems to be no question but that chain stores have been able in general to distribute groceries and some other commodities at retail more economically than the older types of retail institutions—that is, with less expenditure of human effort. In many states, however, the legislative bodies have tried to offset these physical-engineering advantages by special chain-store taxes or other anti-chain legislation, thus interfering with the full use of efficient methods. Perhaps the advantage that is afforded to the independent merchants through such legislation is socially desirable since it permits this group of citizens to hold their existing places in the community, but it must be remembered that there is a direct cost to consumers in higher prices.

Another illustration of this interplay between physical and political laws is found in the field of public utilities. In the operation of street railways and telephone systems, for example, there are undisputed engineering economies in monop-

oly operation—that is, a single concern operating a single system can furnish the desired services with less expenditures of human effort than would be required to operate two competing systems. Moreover, in the early days of railroading, the competing lines frequently used different widths of tracks so that it was impossible to transfer cars directly from one road to another. This was done, in part, so that a single line would be sure to get full-length hauls. Obviously it interfered with the full usefulness of the railroads and made parallel, competing lines more common than they otherwise would have been. Even more recently there has been lack of standardization of electric power facilities in some parts of England. Power companies used either direct or alternating current in different voltage so that consumers could not shift their patronage among the companies without buying new electric equipment. This was a particular hardship wherever a person moved from the territory of one company to another, for he would need to replace his electric iron, radio, refrigerator, and so on. In cases such as these it has been customary for legislatures to grant exclusive franchise privileges to single operators in order that there might be standardization and that advantage might be taken of the resulting economies.

Our political action in these two illustrative cases appears to have been predicated on different attitudes towards the benefits to be derived from efficient operation. Without going into the relative merits of the political action taken in the two cases, we should nevertheless urge that as long as total national income is inadequate to meet the desires of people as consumers, careful attention should be given to the effect of any legislation on the efficiency of production; legislation which retards the development of efficiency needs to be justified on other grounds.

The repercussions of the increasing substitution of machine power for man power are of both temporary and permanent nature. Temporarily they may cause unemployment and other maladjustments in income; later they may result in increased total production and conservation of energy. It is the difference between these two types of effects, perhaps, that leads to some confusion in thinking about improvements and

to some inconsistency in political action concerning them. The immediate effect almost always includes a measure of unemployment and maladjustment of both physical and human resources. Moreover, the history of technological change is full of sharp and violent oscillations which have been—and remain—hard to predict. Consequently the first social reaction is likely to express itself in an effort to prevent the change. The later effect, however, is almost certain to be an increase in total income, which is, of course, what people in general earnestly desire. It seems desirable, therefore, that there be moderation in the suddenness of technological change, but that the coming of the change should not be delayed unduly. Both governments and corporations have been guilty at times in the past of restricting industrial progress for the benefit of special groups, but against the interests of consumers in general.

One principal reason for delaying the introduction of processes into industry lies in the durability of the machines and equipment already in use. The owners of these items of capital desire to continue to use them rather than to pay for the labor and raw materials necessary to produce new ones. Business enterprises are started, in fact, on the assumption that there will be a market demand for their products over a period of time in large enough total quantity finally to pay back all of the costs of erecting and equipping the plants. If a new, lower-cost process is introduced, the owners of the old plants can no longer obtain the income they anticipated from them. Consequently they attempt to delay the introduction of the new process, by purchasing the patent rights or in some other way, until their present machinery has been used long enough to have paid for itself, or to need major repairs, or both. Governmental agencies, also, must obtain new funds if they are to put in improvements, and new funds are hard to raise. Consequently, although a state university may develop in its laboratories some excellent methods for air-conditioning class rooms, it may delay installations at least until they build new buildings and perhaps longer.

The National Resources Committee has recently (1937) studied carefully the relationships between technology, labor

income, and consumption. As a result of this study the committee has published the following recommendations: <sup>5</sup>

1. The reports herewith presented reveal the imminence of a few very important inventions that may soon be widely used with resultant social influences of significance. Since these inventions may deeply affect planning, it is recommended that a series of studies be undertaken by the planning agencies herein recommended or by existing planning boards, with the aid of such natural and social scientists as may be needed, on the following inventions: the mechanical cotton picker, air-conditioning equipment, plastics, the photo-electric cell, artificial cotton and woolen-like fibers made from cellulose, synthetic rubber, prefabricated houses, television, facsimile transmission, the automobile trailer, gasoline produced from coal, steepflight aircraft planes, and tray agriculture.<sup>6</sup>

2. A special case of the influence of invention is technological unemployment. It is recommended that a joint committee be formed from the Department of Labor, the Department of Commerce, the Department of Agriculture, Bureau of Mines, Interstate Commerce Commission, Social Security Board, and the Works Progress Administration with such other co-operation as may be needed, for the purposes of keeping abreast with technological developments and ascertaining and noting the occupations and industries which are likely to be affected by imminent technological changes and the extent to which these inventions are likely to result in unemployment. It is recommended that such information be made available through the appropriate departments to the industry and labor likely to be affected.

3. In view of the findings regarding the importance of technology and applied science, it is recommended that the federal government develop appropriate agencies for continuous study of them; and more specifically that there be set up in the respective departments science committees with the definite function of investigating and reporting at regular periods on the progress and trends of science and invention and the possible and economic effects flowing therefrom as they affect the work of the departments and of the agencies to whom they render service. Copies of such reports should be supplied to the National Resources Board and it is recommended that insofar as is feasible they be made available to the various city, county, and state planning boards, and to the public.

4. Since the patent laws have considerable influence on the rate of technological progress, it is recommended that the whole system

<sup>5</sup> National Resources Committee, *The Technological Trends and National Policy*, p. viii.

<sup>6</sup> For further interesting suggestions see, for example, Furnas, J. C., *The Next Hundred Years*, Reynal, 1936, and William Haynes, *Men, Money, and Molecules*, Doubleday, Doran, 1936.

be reviewed by a group of social scientists and economists. This review, unlike others dealing with specific reforms, technical operations, scientific aspects, or ethical implications should be concerned with the articulation of the patenting process with the fundamental processes of human progress and the types of economic systems. From such basic relationships the better adaptation of the system to changing conditions can be worked out in the necessary detail.

5. It is recommended that the Science Committee of the National Resources Committee, with the co-operation of other scientists that may be needed, make an investigation of the adequacy of the reporting of inventions and of discoveries in applied science and advise on the feasibility (a) of more coverage, (b) of selecting those more socially significant, and (c) of assembling of such data in some central location or locations.

6. The most important general conclusion to be drawn from these studies is the continuing growth of the already high and rapidly developing technology in the social structure of the Nation, and hence the hazard of any planning that does not take this fact into consideration. This pervasive interrelationship, so clearly manifest throughout the pages of this report, points to one great need, namely, a permanent over-all planning board. Such a board is needed to give breadth of consideration to the variety of factors which affect specific plans. This board would take its place in the governmental pattern as co-ordinator for the many special planning boards, of which there are now 47 state boards, 400 county boards, and 1100 city boards. The Technology Committee, therefore, makes to the National Resources Committee, as a major recommendation of this report, the creation of a National Resources Board, as recommended by the President's Committee on Administrative Management in their report of January 8, 1937.

It is clear that the National Resources Committee feared, when it made this report, that technological improvements would be developed and put into use in the future as in the past in such a way that the income of many individuals would be affected adversely for a time. The world has long sought for a method by which such changes could be made without serious interference with established employment and flow of income. The problem is by no means easy to solve. If new inventions and processes are held out of use, progress in production is retarded; if they are put into use without careful planning of all related industries, unemployment and other maladjustments are sure to follow. Synthetic cotton and wool already are realities to the chemists. If businessmen should

introduce them rapidly, the southern Negroes and share croppers, and the western sheepherders would present some serious problems in re-adjustment; if these products are held off the market, on the other hand, we shall continue to spend more than necessary of our total energies in the production of cloth.

Certainly the suggestions of the National Resources Committee would provide a better basis than we have employed in the past for anticipating changes and for doing something about their effects before they occur. Intelligent adjustment to changing industrial conditions can only be made when full information concerning developments is at hand. The question will be raised in some quarters as to who should collect and interpret the necessary information. Some would desire that all such things be undertaken by governmental agencies, while others would feel that business organizations, such as trade associations, are better fitted for such tasks. Perhaps the job might be divided, with some governmental agencies collecting and publishing an increasing amount of information concerning technical developments and trends, but with private business organizations continuing to interpret the information and to make the decisions concerning production that seem to be in their individual interest. Perhaps, however, the location of the agency that undertakes these things is much less important than the job; the important thing would seem to be an increase in general knowledge so that the risks of business uncertainty may be reduced to a minimum.

#### SUMMARY

Since it is abundantly clear that the flow of income has never been sufficient to satisfy people, we constantly attempt to increase total production; that is, so to modify our environment and adapt it to our uses that personal satisfaction and enjoyment are increased. This desirable result may be brought about in any of several ways. The discovery of new industries, based either on new raw materials or on new inventions, offers possibilities limited only by the extent of people's constructive imagination. Improvements in management practices and personnel relations in existing industries offer important chances for increasing total real income. If all the

known and proven improvements in these lines were put into operation at once, the increase in goods available for consumption would be very great. Doubtless in some lines it would be so great that the goods could hardly be sold at any price.

New industries and technological improvements in old industries cause readjustments in the prices of commodities, in the distribution of money income, and in the consumption patterns of individuals. Sometimes these readjustments are violent and are accompanied by unemployment and other unfortunate results. Consequently careful attention needs to be given to the time and rate of development of innovations.

## CHAPTER 12

### SPECIALIZATION AND INCOME

#### THE PRINCIPLE OF COMPARATIVE ADVANTAGE

**A**NOTHER way of increasing real income of consumers is through wiser personal and geographic specialization. In this chapter we first illustrate briefly what these terms mean. Then we point out the principle on which rests the hope of increasing real income through specialization. Finally, we discuss separately the present stage of both geographic and personal specialization, as well as the forces that influence the degree to which they are carried on at a particular time.

Let us take, as our first example, a simple case of specialization between persons.

A young physician is just opening office to begin his first practice. Consequently his practice is very light and he has an abundance of time upon his hands. In such circumstances he will probably handle all the record-keeping and correspondence himself, take care of his own instruments and mix his own powders. In time, however, if he is a competent physician, and has the proper manner, and is located in a city of appreciable magnitude, he will have more practice than he can handle alone and attend to his records and correspondence besides. At this point, he will hire a "secretary" who will do this latter work, answer phone calls and make his appointments for him and the like. It will be of advantage for him to do this because in the extra time released to him he will be able to look after enough additional patients to more than pay the salary of this secretary. Perhaps he pays the secretary \$80 per month, and his gross income will be increased by twice this amount. This is possible, of course, because physicians are much better paid for their time than are secretaries. Furthermore, the chances are that a properly trained secretary will keep his records and write his letters in less time and better than he can. Thus there is a saving both ways. Now if his practice grows still more, he may employ a nurse to help him look after his patients during office calls, and take care of his instruments and supplies. As a next step, he may take in a young physician as a partner and let him handle the rou-

tine time-consuming cases. He now devotes his time to handling only the important or difficult cases. He is now a full-fledged city physician! Each step in his progress to this end, unless taken prematurely, has been to his economic advantage. Each step has released more of his time for the doing of more important things. Each step has increased his *net income*, because it has increased his *gross income* more than his expenses. Each is a step toward greater specialization.

As suggested by this illustration each person tends to do those things which he can do to best advantage; but this does not mean that tasks are always performed by those who can do them best. In fact, quite the contrary is the case. In the example of specialization by persons given above, the secretary did the record-keeping better than her employer-physician could have done it. However, many a small-scale business man in the country could do a better job of bookkeeping than his bookkeeper. Many a manager could do a better job of supervising the details of operation of his plant than do his foremen. Many a store operator could do a better job of selling than many of the salesmen. But if the businessman kept his own books, he would have little time left for matters of general policy; and if the store manager spent his time waiting upon customers, no one would be left as competent as he to do the buying.

Many a person in the world today is not doing the thing for which he is best fitted or best trained, but instead something else which no one else can do so well as he, even though he is not especially apt at doing it. There was other work to do and no one else especially fitted for it, and so he stepped in and did it. A parallel case is that of a coach building up a football team. He may have a man who would make an excellent tackle, but he is well supplied with tackle material and is short of material for the fullback position, and so takes his most promising tackle out of the line and makes a fullback of him because he will make a better fullback than any other available man. The individual man may not show up as brilliantly in consequence; but the team as a whole will win more games. Hence, although in general the individual is usually found doing the task for which he is best fitted, there are many occasions when it is a task for which he is only fairly well fitted, but for which no one better fitted is available. There is a tendency, it is true, for the individual to do the thing he can do best; but it is only a tendency, and it is frequently offset by countertendencies.<sup>1</sup>

Similarly, communities and areas tend to produce many things for local use, but they also produce some things in excess of local demands, which are exported in exchange for

<sup>1</sup> Adapted from Black, John D., *Production Economics*, pp. 129-136. Holt, 1926.

other things not easily produced in the area. In Minnesota, for example, wheat flour, packing-house products, butter, refrigerators, and some other things are produced in excess of local use and are exchanged with other regions for rubber, gasoline, oranges and a host of other things. Iowa is an important part of the corn-hog belt; the South is noted for its production of cotton; England receives raw materials from many places and ships manufactured goods all over the world. Sometimes the trade between areas crosses political boundaries, while in other cases it does not. This is another way of saying that political and economic areas need not, and frequently do not, coincide.

Decision to specialize either personally or regionally is dependent upon the Principle of Comparative Advantage. The businessman, thinking of the day-to-day transactions in his business, is likely to state this principle about as follows: a region will do well to export those products which are lower in price within its borders than elsewhere and to import those that are higher in price at home than abroad. The differences in prices at home and abroad just referred to must exceed, of course, the cost of transportation. The individual who is attempting to decide what he should do with his time will phrase the Principle of Comparative Advantage in much the same way; it will be wise to undertake those activities for which others will pay the highest price for one's time, and to purchase those goods the making of which would require the foregoing of earnings greater than their price.

#### GEOGRAPHIC SPECIALIZATION

Geographic specialization has been carried to such a point that world society is a closely knit integrated economic structure. Each country and, in fact, each section within each country is dependent to a considerable extent upon other regions for many commodities. Elaborate transportation and communication systems have been built up to facilitate interchange of goods, and to give to each area the benefit of the other areas' advantages. The result of this interdependence is an integrated economic organization within each country, composed of highly dependent areas. Certain strategic points

—metropolitan centers—act as clearing houses in the exchange of goods. Here the surplus goods from the metropolitan area are concentrated and from here goods are sent out to other areas needing those products.

Rivalry between metropolitan centers frequently is keen. In the development of the Mississippi Valley, for example, Chicago and St. Louis competed for the trade of the Twin Cities. Earlier, Boston, New York, and Philadelphia had been in strong rivalry for supremacy in eastern commercial circles. San Francisco and Los Angeles each desire to be the maritime center for trade with the Orient. North Carolina is attempting to develop cotton mills that will partially displace those in New England, as the shoe factories of St. Louis already have, and as the flour mills of Buffalo have partially displaced those of Minneapolis. This sort of rivalry is occurring continuously throughout the world. In some of its broad aspects, the rivalry between cities is well depicted by Fig. 41.

Moreover, specialization and rivalry are as natural between different countries as they are between areas within any one country.

There are two reasons why countries are not self-sufficing; the one is physical and the other economic. In the first place, no country has a climate or a geology suitable for the production of all commodities. Wheat cannot readily be produced in the tropics, nor can bananas be grown in the frigid zones. Thus a great deal of international commerce arises out of the interchange of commodities which may be produced only in certain areas. Such trade is mutually advantageous since it enables the consumers in each country to choose from a wider variety of goods, and to improve their standard of life.

Much trading between nations arises also out of the fact that the growing season differs between the northern and southern hemispheres. For example, improvements in transportation and refrigeration have brought a considerable supply of fresh fruits and vegetables to European markets from the southern hemisphere. Further, during the summer and fall months, locally grown produce and some fruits furnish a fresh supply in northern United States; during the winter and spring months a continuous supply of produce from the South, where the growing season is different, is available.

A second reason why countries are not self-sufficing is economic. As pointed out before, all marketing is based on comparative advantage and specialization, as between individuals, or between areas.

Although a certain commodity may be produced by many nations, they cannot all do it equally well. One nation may have some advantages over the others, due to more favorable climatic conditions, to better natural resources, to more efficient labor, or for other physical or social reasons. Tea could be produced in the United States; but not nearly as advantageously as it is being done in the Orient. Bananas grow abundantly in Central America; they could be grown in Minnesota—under glass. Climatic conditions may be so favorable for wheat in one country that an average yield of 20 bushels per acre is obtained; another country differently located may be able to produce only an average of 10 bushels per acre.

These differences between areas and nations tend to result in specialization. Each area will produce what it is best suited for and exchange its surplus for some other goods. It is worth while

#### METROPOLITAN RIVALRY

x Vancouver	* Winnipeg	* Toronto	* Montreal	* Amsterdam
Victoria				
	□ Duluth		* Boston	* London
x Seattle	* Twin Cities	* Chicago	* New York	
		* Cleveland		
	□ Omaha			
* San Francisco	* Kansas City	* St. Louis	* Baltimore	
		* Cincinnati		
* Los Angeles			* New Orleans	* Paris

\* Stars are metropolitan centers.

x Crosses are centers of metropolitan promise.

□ Squares are ambitious but subordinate cities.

Vertical lines, if drawn, would pass through centers of equal age.

Horizontal lines, if drawn, would pass through centers of unequal age.

No attempt has been made to show exact longitude or latitude.

FIG. 41. Each mature metropolitan center serves as a nucleus for a large surrounding area. This center is a place where raw materials from the hinterland are concentrated and processed; consequently, many transportation lines converge here. Then finished products are sent out, often to a wider territory than that from which raw materials come. In order that a territory may be fully developed, it is essential that the metropolitan center provide facilities for financing production and trade. This is done through banks and similar institutions.

Within each metropolitan area there is some rivalry among the minor cities and towns, particularly in regard to retail trade. This rivalry leads, of course, to an overlapping of retail markets, with considerable consumer purchasing in cities other than the one in which the purchaser resides. Inter-city trading is especially common when there is easy transportation between cities, when many residents own automobiles, and when the newspapers from one city circulate widely in others. Generally, of course, the direction of inter-city trading is from small cities to larger ones. (Source: Vaile and Slagsvold, *Market Organization*, p. 265, Ronald Press, 1930.)

as individuals to trade with the people of other communities when and only when their prices make it profitable to do so. Goods are produced and sold in order to obtain funds with which to buy other goods. Individuals, areas, and nations will generally produce those things which give them the largest money income. This is generally the same as saying that those goods will be produced which require the least effort and hence may be produced at the least cost in comparison with the cost elsewhere. This principle of trade is fundamental both in domestic and international marketing.<sup>2</sup>

If each region and country specialized in the production of the goods which it could produce most advantageously, and exchanged the surplus for other goods, a social gain would result since more and a greater variety of goods could be produced and therefore consumed. The United States buys rubber from British Malay, coffee from Brazil, and tea from the Orient, because those goods cannot be advantageously produced at home. In exchange we produce and export cotton, wheat, automobiles, and other goods which may be more advantageously produced here. If such a policy were followed for more commodities by more countries each country could enjoy a greater variety of goods, and at a lower cost.

However, beginning in the latter part of the nineteenth century and accelerating in the twentieth century, the advance of science and technology began to weaken the necessity for interdependence of regions and countries. The development of electrical power weakened the influence of coal deposits in the localization of industries. "It is believed by many—the evidence thus far is certainly inconclusive—that the development of electrical power may become an important factor tending toward the decentralization of industry and toward greater national and local self-sufficiency."<sup>3</sup> Moreover, the rise of modern chemistry has made possible the raising of crops in regions by nature not advantageous to them. For example, Germany has reached a position of virtual self-sufficiency in food—a prospect hardly dreamed of by anyone two decades ago.

Moreover, the terrific impact of the war resulted in an

<sup>2</sup> Vaile and Slagsvold, *Market Organization*, pp. 275-76. Ronald, 1930.

<sup>3</sup> Hansen, Alvin, *International Economic Relations*, p. 106. Univ. of Minn. Press, 1934.

almost universal craving for the utmost measure of self-sufficiency as a means of national security.

War engenders, of necessity, an intense political nationalism. This in turn develops and strengthens the trend toward economic self-sufficiency. One can well understand that Germany, starved into submission by the war and the post-armistice blockade, is willing to pay a very considerable price for self-sufficiency in food and the essentials of national defense. Even England, threatened with quick annihilation in the event that her navy could not keep the seas open, has for the first time in a hundred years acquired a frame of mind tolerant to the protection of British agriculture. There are, of course, also important economic considerations, growing out of changes in the structure of world trade, which dictate this new British policy.

A strong impulse was thus given in many countries to develop those industries which were important for the feeding of the population and for the manufacturing of munitions and of other war materials. This meant a more or less drastic reorientation of the productive channels, of capital investment, and of the use of natural resources. In some countries it meant a forced industrialism and in others the development of agriculture on an uneconomic scale. Vested interests were thus created whose very existence supported those who wished on other grounds to achieve and maintain economic self-sufficiency.<sup>4</sup>

An additional impetus toward nationalism is found in the depression of 1929-1935. During this period of drastic maladjustment of production and consumption many governments came to the conclusion that their citizens could be kept more fully employed if no foreign-made goods were permitted in their markets. Consequently trade barriers were carried to heights never dreamed of before.

Quota restrictions, barter arrangements, clearing and compensation agreements, exchange control, government trading monopolies, import control boards, and complicated bilateral trade agreements involving not only tariff schedules but also the control of foreign exchange, the liquidation of debts, and the financing of future trade—all these present a picture of a world moving more and more toward a regimentation of international trade and finance. Under the impact of this powerful movement toward controlled or regulated trade, the principle of equality, best exemplified in the un-

<sup>4</sup> Hansen, Alvin, *International Economic Relations*, p. 108. Univ. of Minn. Press, 1934.

conditional most-favored-nation treatment, is being superseded by the principle of special bargaining and special advantage.<sup>5</sup>

It seems, as Mr. Hansen has pointed out, that modern communities, suffering from economic instability, appear to be willing to make considerable sacrifices of economic progress and even of real income in the interest of greater economic security. Moreover, to the mass of the population the international exchange of goods is of no great significance for the maintenance of a high standard of living. Many people feel that their own community possesses great productive power and capacity. They do not feel impoverished by any lack of things which in their view they cannot themselves produce. They are horrified, perhaps, at the failure of industry to function swiftly and continuously, but many have the suspicion that international complications and entanglements, which might have been avoided, are in part to blame. In any event, the belief is widespread that a reorganization of the internal system of production is more important for the achievement of a high standard of living than is the maintenance or revival of international trade.

It is quite understandable, especially under modern conditions, that this should be the view of the great majority of modern nations. It is quite natural for a people to wish to produce at home everything that it is possible, within reason, to produce. The economic law of comparative advantage is not easily understood, the repercussions upon the domestic economy of international policies that cause international strain are not readily traced to their intricate and obscure causes. It is not to be wondered at that the practical man in the street turns aside from these difficult speculations and seizes firm hold of benefits that lie close at home. Politicians everywhere find it difficult to get votes for an international program but can easily insure an election on domestic slogans.<sup>6</sup>

In the face of all the artificial trade barriers which have been erected, international trade goes on. The final result, however, of a continued policy of nationalistic protection must inevitably be a restriction of world trade to an exchange of those indispensable commodities that cannot be produced in

<sup>5</sup> Hansen, Alvin, *op. cit.*, p. 116.

<sup>6</sup> Hansen, Alvin, *op. cit.*, pp. 108-109.

the home country or, at least, that cannot be produced except at *prohibitive* cost. This would greatly curtail the operation of the principle of comparative advantage, and would result in inefficient use of labor and other resources in each country. Such an unwise choice of production activities would necessarily reduce the total income rather than increase it.

Perhaps it may be well at this point to insert a statement concerning location of industry in general. In theory, the problem of location of industry is simple. The concerns that can produce goods most cheaply can undersell their rivals. These concerns will survive and their rivals will disappear. Goods generally cannot be produced at the same cost throughout a large area. Proximity to raw material, or to power, or to labor, or to the market—each of these things has an important bearing on costs. The relative cost of transporting raw materials and finished products is important; so also are taxes, site rent, accessibility to buyers and sellers, and technical considerations such as water supply and climate. Out of a complex such as this someone must decide what industries have a chance of proving productive in each locality.

Certainly the market is one of the controlling factors in the location of industries. It appears to be the most important factor with those industries that are scattered widely, about in proportion to the population, such, for example, as bakeries, laundries, small machine shops, job printing, retail shops, and the like. It has far less effect, on the other hand, on the canning of vegetables, and practically none on the mining of diamonds. There is need for careful study of location factors as we contemplate possible expansion of production, and yet without such expansion consumption cannot be increased.

In connection with future industrial developments it must be remembered that pioneer industries will be of less importance than formerly. This follows from the facts that population expansion has largely ceased and that large accumulations of capital have already taken place to accommodate production needs. The new industries of the future will lie, perhaps, mainly in those lines of production referred to in Part II, which are already being undertaken but in which the output is clearly too small to permit people to have all they want

for consumption, and in new industries which have not yet been thought of, or for which the technical details have not been worked out to a practical point.

#### PERSONAL SPECIALIZATION

The wise individual choice of occupation is of importance not only because it results in increased total product as well as increased exchange power, but also because

approximately  $\frac{2}{3}$  of the life span of the average man is devoted to gainful employment. Of these years half of the waking hours are commonly spent in active work, if vacations, illness and involuntary idleness are left out of consideration. In any community the satisfactions of life are dependent upon the character of the occupations in which the people are engaged. Among the 40 percent of the population customarily employed for monetary gain and among the additional 20 percent who are housewives, the nature of the daily tasks is the leading determinant of the real meaning and quality of living. The quality of the job goes far to set the tone, pitch and tempo of leisure as well as of working hours. In an age of economic interdependence and specialized subdivision of labor the welfare of the community rests upon the maintenance of balance in the numbers in the different occupational groups.<sup>7</sup>

It is important that individuals specialize in those occupations where there is opportunity for employment—they should choose those fields which are not overcrowded. Fig. 42 portrays the rates of increase among the major occupational groups from 1870 to 1930, and thus shows what the total opportunity for employment has been in various lines. In Figs. 43 to 46 inclusive the increase in the number of workers in selected occupations is given. From these data it is possible to make some reasonably accurate forecasts of what occupations will offer employment in the immediate future.

Wise individual choice of occupation depends, first of all, on available information regarding occupational opportunities. Such information has been meager. The data reported on the graphs referred to above are not in sufficient detail for the purpose; they do not show, for example, the relation between the numbers who have sought employment and those

<sup>7</sup> Hurlin and Givens, "Shifting Occupational Trends," in *Recent Social Trends*, p. 268. McGraw-Hill, 1933.

**TREND OF MAJOR OCCUPATIONAL GROUPS**  
(gainful workers 16 years of age and over)  
1870-1930

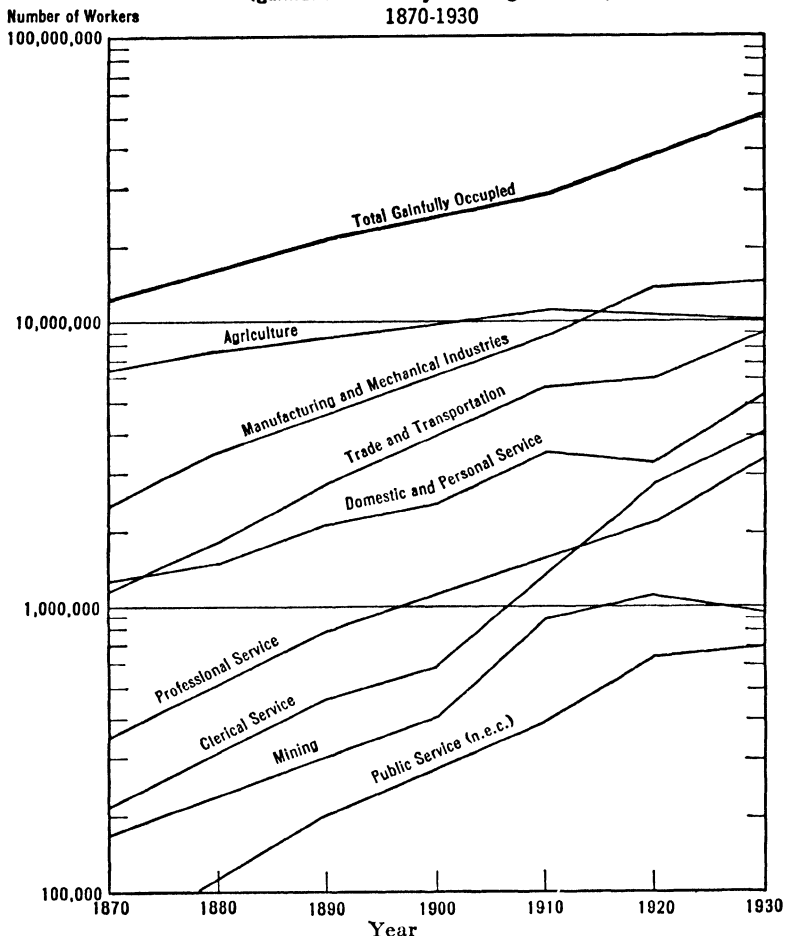


FIG. 42. Employment data for eight major occupations are plotted on a logarithmic vertical scale in order that rates of increase among these major fields can be readily compared. The upper line shows that the total number of gainful workers sixteen years of age and over increased at virtually a constant rate up to 1910; after that year there was a slight increase in the rate of increase. Of the eight groups, the four service occupations plus Trade and Transportation appear to have had the most rapid and consistent rate of increase for the longest period, whereas Agriculture seems to have had the least.

The following four figures (43-46) show the growth in the number gainfully employed in the various subdivisions of the four most rapidly growing occupations. (Source: Hurlin and Givens, "Shifting Occupational Patterns," *Recent Social Trends*, p. 280, McGraw-Hill, 1933.)

actually employed in the various lines. To be sure, separate and unrelated studies of certain fields have been made from time to time by private and governmental institutions but the findings have not, as a general rule, been available to the public. An example of such studies is that of the *Supply and Demand of College Teachers* made by Professor J. G. Umstatted at the University of Minnesota in 1933. The data were supplied by workers in 184 institutions of higher education. One quotation from Professor Umstatted's report is sufficient to indicate the type of information thus made available.

The ratio of 0.51 for the grand total of men indicates that the number of appointments of men reported was only 51 percent as great as the number of doctorates conferred. The corresponding ratio of 1.18 for women indicates that 118 women were appointed for each 100 receiving doctorate degrees. The ratios were greater than 1.00 for men in the fields of art, medical science, mines and metallurgy, English, and engineering; and for women in the fields of home economics, medical sciences, agriculture, French, speech, education, and English. Ratios of 0.50 or lower occurred for the men, in order from lowest upward, in religious education, psychology, science, philosophy, agriculture, history, Latin, pharmacy, education, forestry, and for women in psychology, science, religious education, Latin, history, mathematics, and the "Classics."<sup>8</sup>

Assisting new workers in finding positions that offer some promise of permanence, bringing older, experienced workers and appropriate jobs together, and providing those choosing occupations with information as to the needs and opportunities for labor in various industries scattered throughout the nation are the purposes of the nation-wide system of Federal-State Co-operative exchanges provided by the Wagner-Peyser Law of 1933. If and when this program is completed not only will satisfactory placement on the initial job and speedier re-employment for those forced into idleness be effected, but a vast amount of information concerning job specifications and requirements as well as data on the overcrowded condition of fields of employment will be available to assist the individual on the threshold of production.<sup>9</sup>

<sup>8</sup> Umstatted, J. G., *Supply and Demand of College Teachers*, p. 39.

<sup>9</sup> Data for this paragraph taken from Yoder, Dale, "Reorganizing the Public Employment Service," Harvard Business School Alumni Association Bulletin, February, 1935.

**GROWTH OF SELECTED OCCUPATIONS**  
**Trade and Transportation**  
**1870-1930**

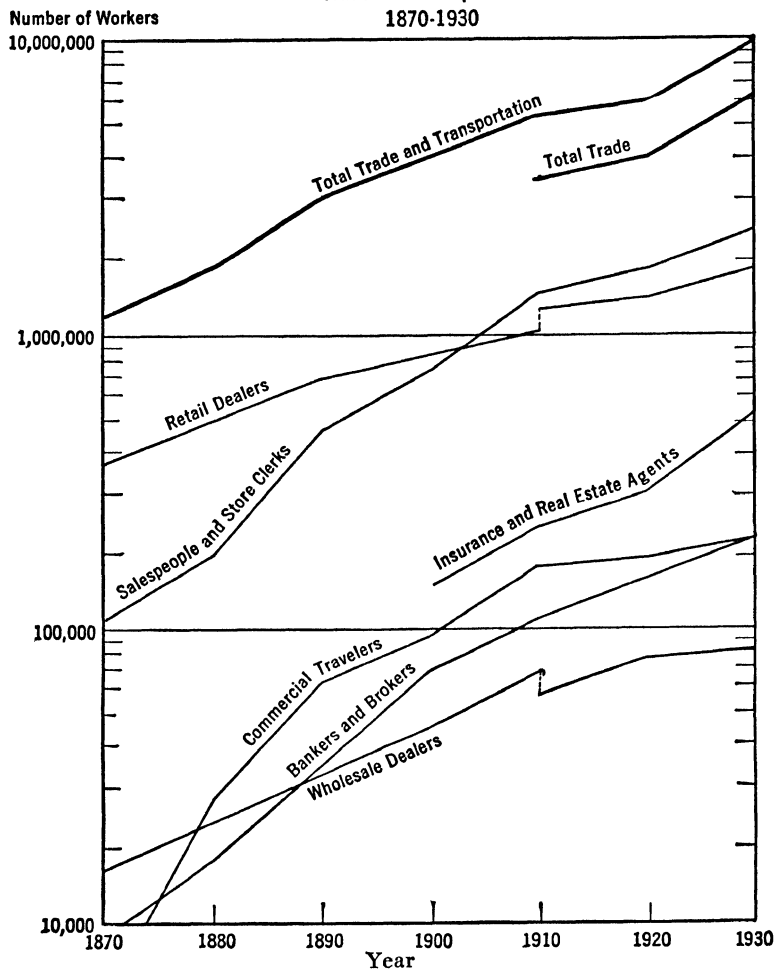


FIG. 43. The combined category of Trade and Transportation is, numerically, the most important major occupational group outside the basic producing industries. It is comprised of a large and growing troop of workers engaged in moving, storing, selling, and financing the exchange of goods. A striking aspect of recent occupational changes is the growing importance of this group of occupations. (Source: Hurlin and Givens, *op. cit.*, p. 287.)

**GROWTH OF SELECTED OCCUPATIONS**  
**Clerical Service**  
**1870-1930**

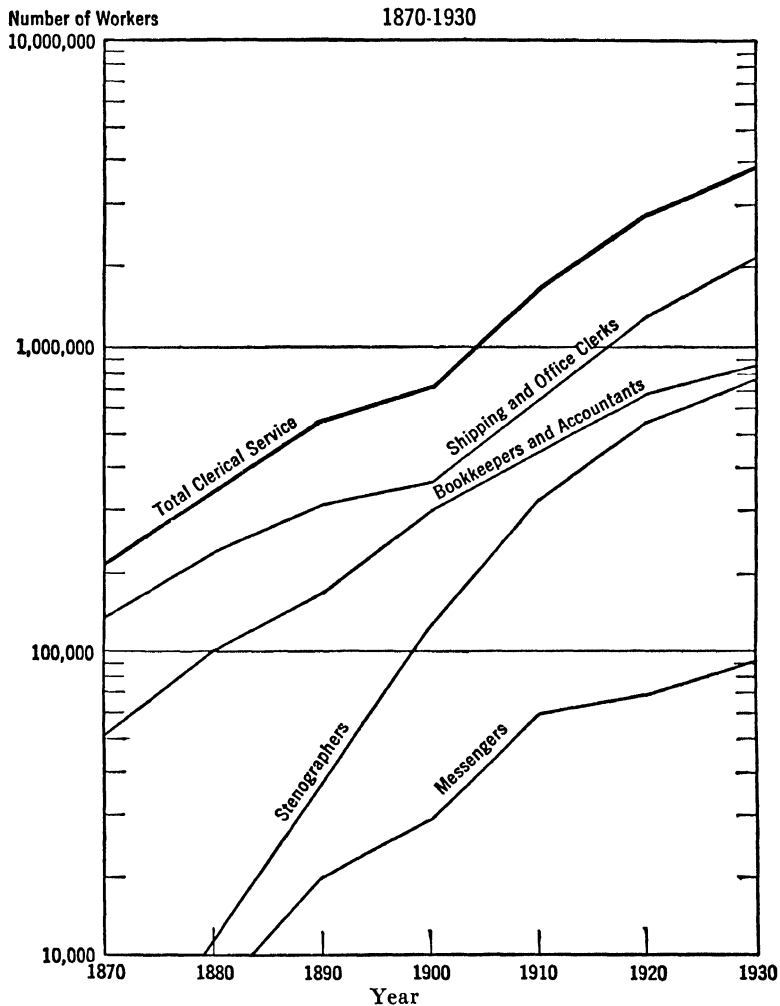


FIG. 44. The clerical group has grown in spite of the rapid introduction of labor-saving office machinery. Since 95 percent of all stenographers are women, the importance of women in clerical occupations is indicated by the growth from a negligible number in the seventies to a total rapidly approaching 800,000 in 1930. (Source: Hurlin and Givens, *op. cit.*, p. 288.)

The Public Employment Services have accomplished something already along these lines.

The dearth of accurate, detailed information concerning available labor supply is well known. While estimates of unemployment are provided from several sources, these give only the most general totals. With practically no exception, only national totals are available from these estimates. Information concerning states or local communities is available in only a few states where local censuses have been prepared and then only as of the date of the particular census. With the exception of these few censuses, information is almost entirely lacking concerning the characteristics of the job seekers. I am informed that our inventories are the sole large sample which gives information concerning such details as occupational classifications, industrial background, age, sex, and color.

The results of our first two complete inventories, those of December, 1935, and July, 1936, were recently published under the title *Who Are the Job Seekers?* This was accompanied by our publication, *Filling Nine Million Jobs*, summarizing the detailed reports of our work during the 2 years through June 30, 1936. These publications are in great demand.

We are now engaged in the preparation of a third complete inventory of all active registrants taken as of April 1 of this year (1937). The pool of information resulting from these reports will have an even greater usefulness as the information becomes available over a lengthening period of time.<sup>10</sup>

Much effort must be directed towards the co-ordination between economic opportunities, testing of the individual's abilities, and his training. One major cause of labor-turnover and individual maladjustment is the square peg in a round hole. Anything which reduces turnover and maladjustment by accurately fitting the worker's abilities to job requirements, fitting square pegs into square holes, is net social gain. Moreover, individuals must take advantage of the opportunities that are offered for testing, training, and placement if any system is to be effective.

In this connection, the operation of the clearance system of the Federal-State Co-operative exchanges is especially important.

<sup>10</sup> Proceedings of the Twenty-fifth Annual Convention of the International Assn. of Public Employment Services, Bulletin No. 14, U. S. Institute of Labor, pp. 6 and 7.

## GROWTH OF SELECTED OCCUPATIONS

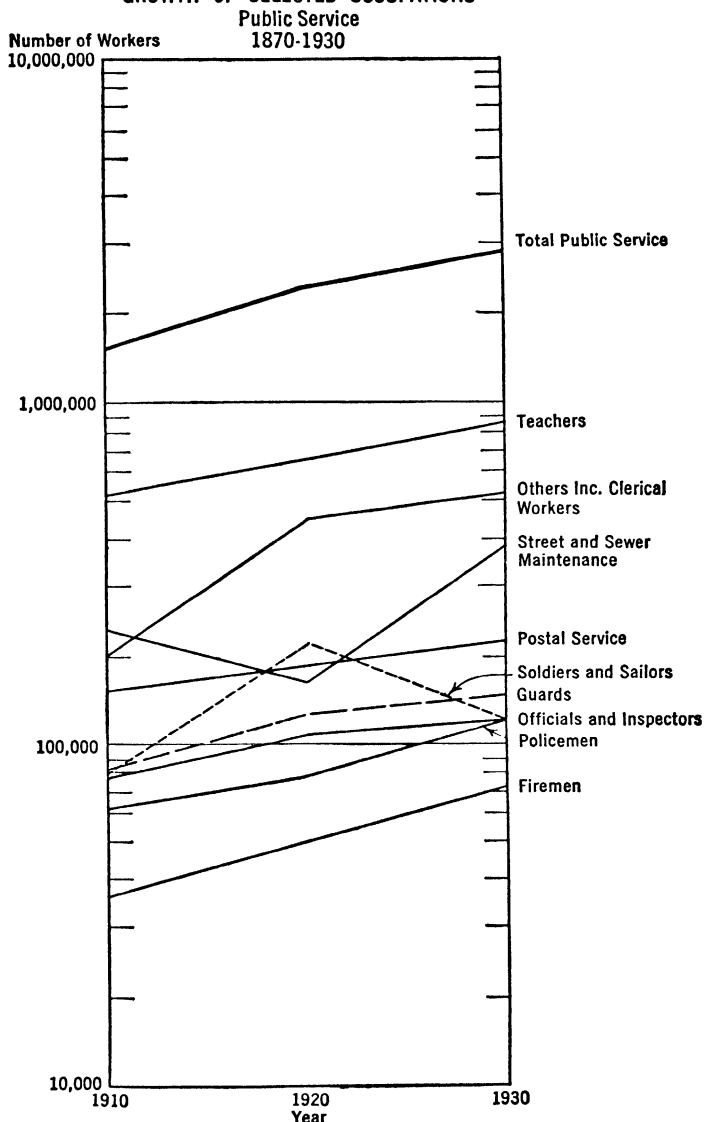


FIG. 45. There were more than 1,500,000 persons in 1910 in the field of public service while in 1930 the total had increased to 2,750,000. The teaching profession was clearly the largest of the public service occupations throughout this period measured in total numbers whereas the *rate* of increase in number of firemen seems to have been greater over the *entire* period than in any of the other fields. (Source: Hurlin and Givens, *op. cit.*, p. 291.)

With the progress of industrial recovery, the task of securing qualified workers in particular localities assumes greater difficulty. To meet this situation, which in some sections has already become pressing, the development of an adequate yet simple method of clearance has been a prime consideration of the Employment Service. We all constantly hear much comment upon shortage of skilled workers and the unfortunate effect in retarding recovery that results from these shortages. Operation of a clearance system goes far to prevent losses resulting from lack of qualified workers. Only the national system of employment offices, using common terms and uniform standards, can supply a useful clearance service.<sup>11</sup>

If men are needed for a particular job in a community the Employment Service first tries to fill the jobs from its active file, from people, that is, who are known to be available. If not enough men are found in that list, the file of names that have not been renewed recently is turned to. Then other contractors and labor unions may be interviewed for possible candidates. Finally, the order is placed in "clearance"; that is, other offices of the Employment Service are notified of the opening, and competent people who are unemployed in other communities are urged to move, either temporarily or permanently, to the site of the available job.

Another governmental service, that would be of great assistance if it could be more fully carried out, is the collection and prompt dissemination of detailed information on employment and unemployment by regions and specific industries. This information might be sent out by press releases and the radio in much the same way as crop, market and weather reports are now handled. Perhaps this would make possible more intelligent decisions than are now made on the part both of employers and of employees.

Not the least important consideration concerning the desirability of particular jobs is their relative regularity or seasonality. In a recent survey of industry in Minneapolis, St. Paul, and Duluth it was found that 62 percent of all employees were in seasonal industries. The amplitude of fluctuations in the seasonal firms was 19 percent in Minneapolis, 32 per-

<sup>11</sup> Proceedings of the Twenty-fifth Annual Convention of the International Assn. of Public Employment Services, Bulletin No. 14, U. S. Institute of Labor, p. 6.

**GROWTH OF SELECTED OCCUPATIONS**  
**Professional Service**  
**1870-1930**

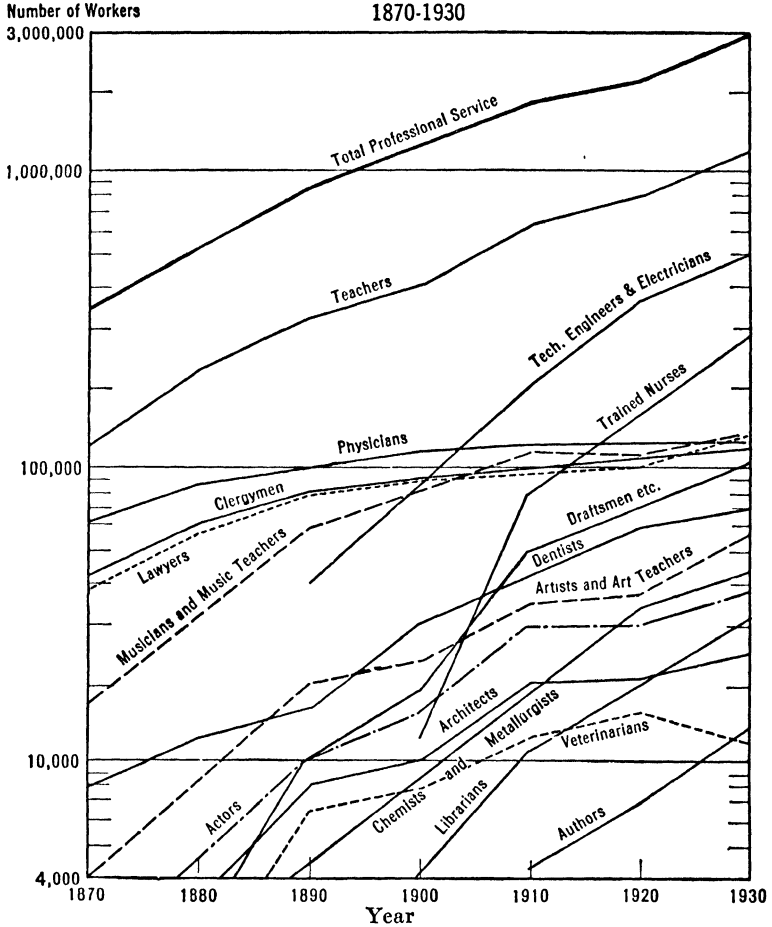


FIG. 46. The number of gainful workers sixteen years of age and over in the professional group was almost ten times as large in 1930 as in 1870. Changes in the individual professions show the great increase in designers, draftsmen, and inventors during the machine age which period gave birth to technical engineers and electricians. Since 1910 the medical profession has grown less rapidly than population. This relative decline in number of physicians has been partially offset by the remarkable growth of hospital facilities and personnel (see the increases in nurses). (Source: Hurlin and Givens, *op. cit.*, p. 300.)

cent in St. Paul, and 99 percent in Duluth.<sup>12</sup> Since different industries are affected in different seasons, there is a proportion of the working population idle throughout the entire year. It may be, for example, that the dock workers in Duluth are idle during the winter months, while the lumber workers are actively engaged in timber cutting. The dock workers and the lumbermen generally, however, are different individuals. Thus each group has only a part of a year's work although the total employment figures for the city may be fairly constant. Each industry tends to maintain a group of workers sufficient to carry it through the peak season, which creates a sort of floating reserve that is, in fact, a surplus of labor. Frequently the wages paid in the seasonal industries are insufficient to support a family throughout the year. Moreover it is psychologically difficult for individuals or families to save a portion of a half-year income to spread over another half-year. Consequently, the community must provide some form of relief for many of the seasonally-employed people during the off season. The existence of seasonal unemployment reduces, of course, the total volume of production that might be realized if labor were more fully utilized, and thus limits our *total* capacity to consume as well as curtailing the consumption of the families employed in the seasonal industries.

There are two ways in which seasonal unemployment may be reduced:

1. By stabilizing employment within each individual firm.
2. By shifting workers between firms with different seasonal peaks.

There are many cases in which stabilization by individual firms is impossible. Lake shipping, lumbering, harvesting and canning are illustrations. The habit of consumers of greatly increasing their purchases in some lines during the Christmas holidays makes it impossible for retailers to maintain a stable

<sup>12</sup> The difference between the number employed in the maximum and the minimum months divided by the number employed in the minimum month gives the amplitude expressed as a percentage. The amplitude of 99 per cent found in Duluth shows that employment in the maximum month was almost double that in the minimum month.

force throughout the year. Some manufacturers, perhaps, can do more than they have in evening up employment, through manufacturing for stock during dull sales seasons, but to do so increases their market risks.

An effective program of dovetailing employment requires:

1. A centralized system of employment exchanges.
2. A thorough job analysis in all seasonal industries.
3. A basic training program designed to enable workers to shift successfully from one firm or industry to another.

The Employment Stabilization Research Institute made some progress in these matters in Minnesota and similar work has been done elsewhere. Nowhere, however, has the problem been handled adequately. More job analyses need to be made and their validity recognized. Then additional opportunities need to be provided for short-cut methods of training workers for the new skills and operations involved in shifting between industries. Finally both employers and employees must be willing to co-operate in bringing about the necessary seasonal shifts.<sup>13</sup>

An analysis of the training needs of adult workers was undertaken from the extensive case records of employed and unemployed individuals studied in the Occupational Analysis Clinic conducted at the University of Minnesota by the Employment Stabilization Research Institute. While this study referred mainly to depression conditions, its results have a bearing on seasonal unemployment as well. It was found that, "a surprisingly small number of individuals were found to be in need of retraining. This finding is in harmony with the fact that technological change plays a far less important role in causing unemployment during a depression than popular writers have claimed. Nevertheless a considerable number of the unemployed were judged to be in need of more training. Of a total of 1186 adult workers not occupationally adjusted, the clinic staff recommended more training for 501 and retraining for only 23. Of the men who were advised to take more training, 169 were directed toward professional and busi-

<sup>13</sup> The material in this section on seasonality is abstracted from Stevenson and Vaile, *Balancing the Economic Controls*, pp. 21-25, Univ. of Minn. Press, 1935.

ness pursuits such as drafting, reporting, engineering, teaching; 126 were directed toward clerical types of work and 124 toward the skilled trades. Of the women, 51 were directed toward clerical work, 44 toward professional and business types of work, and only 10 toward skilled work (beauty parlor work and dressmaking).

The clinic aided many of the unemployed to undertake some form of training in an existing training agency. Careful records were kept regarding the training of 189 of the persons. In 126 cases the training was in harmony with the recommendations of the clinic staff, but in 63 cases the unemployed persons insisted on taking training that was not in harmony with the recommendations of the technical staff. An important difference between these two groups in the degree of success in the training courses was disclosed by the follow-up study. *More than three-fourths of those who took the training recommended were successful and fewer than 6 percent were unsuccessful. Of those who took a training course not recommended two-thirds were unsuccessful in their courses and fewer than 5 percent were successful.*<sup>14</sup>

In spite of these favorable results it must be admitted that occupational diagnosis is still an imperfect art; more imperfect, perhaps, than medical diagnosis and some other processes of analysis. The co-operation of individuals and of labor groups with the best local agencies for making such diagnosis would seem to offer a splendid opportunity for improving the methods and, then, for lessening both industrial and individual maladjustment. It is to be hoped, therefore, that research in this field will be continued and that there will gradually come into being a series of competently staffed employment agencies equipped to test, diagnose and recommend lines of action for a large number of unemployed or maladjusted individuals. If the occupational clinic at the University of Minnesota could be repeated throughout the country, our national income, as well as that of the particular individuals directly concerned, would be greatly increased. The occupational research program of the United States Employment Service already is compiling a rapidly growing list of job descriptions throughout the industry. In this way many similar jobs are being

<sup>14</sup> Paterson and Darley, *Men, Women, and Jobs*, pp. 50-51, Univ. of Minn. Press, 1936.

found in unrelated industries, which fact increases the possibility of moving employees between industries. Moreover, the distinguishing characteristics of successful workers in different occupations are being studied as an aid in predicting the chances of any individual doing well at a particular job. In these ways some progress is being made in finding groups or "families" of jobs—perhaps as many as 30 jobs in 10 industries—which are enough alike so that workers may be transferred from one to another with only a brief retraining or other adjustment. Progress along these lines doubtless will continue until mobility of laborers is much greater than it has been in the past.

Wise choice of occupation and efficient performance after the choice are both dependent in considerable measure upon the educational regime through which a person passes. Basically, one principle of public education has always been to prepare people better to perform the many tasks set by the scale of consumption of society. The educational system should be geared, therefore, to the needs and abilities of individual students in their efforts to find their most useful place in society. There is much evidence, unfortunately, that our educational system is not so geared at present.

Since it is true that the workaday world requires the performance of many tasks and that these tasks involve the use of different skills, techniques, and abilities, it follows that the ideal educational system should give different people different training about in proportion to society's demand for the various occupations. Not everyone need go to a classical high school and still fewer have any real reason for attending a liberal arts college. Perhaps, however, training in the mechanical arts, in homemaking, in taste and judgment in consumption, could be substituted, in part, for the present formal curriculum to the advantage both of the individual directly concerned and of society in general. In fact, of course, there have been important developments in this direction, but the opportunities are by no means fully met.

Indication of the lack of wise attitude toward the desirability of certain types of education is found in a survey made by the Testing Bureau of the University of Minnesota. In

this survey the occupational choices of high school senior boys and girls were tabulated for a five-year period in the early 1930s. About 40 percent of the boys indicated a choice in the professions of medicine, engineering, law, and scientific research. The choices of the girls were equally centralized on teaching, commercial occupations, and nursing. Obviously any such high proportion of engineers, doctors, and lawyers would far exceed society's demand for these types of services. It is equally true, although perhaps not so obvious, that far less than 40 percent of high school senior boys have the peculiar combination of interests and abilities required for satisfactory performance in these professions.

If formal education is to serve its greatest usefulness with respect to occupational choice and performance, then parents and others responsible for children may need to take a somewhat different view of its possibilities and its limitations. In place of the present concept of identical opportunity for every student there might be substituted the concept of equally adequate opportunity for training in the field for which the individual is fitted, whether that field be the highest professional endeavor or the common run of workaday jobs of the world. The testing, advising, and guiding of students throughout their school career in accord with their abilities and accomplishments, on the one hand, and with the economic opportunities for employment, on the other, might well become an integral part of the educational system.

Perhaps it may be pointed out in passing that until governmental agencies more clearly define the field and more nearly solve the problems connected with public education—with which government long has been concerned—there is arrogance in the suggestion that new governmental agencies undertake new and important fields of endeavor on the assumption that such agencies can do the job better than can private individuals. The social progress that might be expected from sound and intelligent bureaucratic leadership in the fields of education and training is very great, but as yet the opportunities in the field have been very imperfectly realized.

The exact extent of increase of production and of capacity to consume that would follow wiser regional and individual specialization cannot be determined. Probably not even an intelligent estimate can be made. It seems perfectly clear, however, just from observations of the inefficiencies that surround us, that the opportunities for improvement in these directions are enormous. These opportunities present one of the enticing new frontiers still open to wise and courageous leadership.

## SUMMARY

In an age of specialization the choice of specialty is highly important. If economic income is to reach its full measure the choice of special activity, both for individuals and for regions, will need to be made with care. Each person and each region will try to do those things that will give them the highest income, and to buy from those other persons or regions where prices are lowest.

Geographic specialization is based upon such things as deposits of certain minerals, soil and climate favorable to certain crops, nearness to certain markets, available transportation facilities, and so on. Some of these things are permanent forces while others are much more temporary, but they each have an effect on the location and development of industries. Sometimes location of special industries is affected by political actions such as tariffs and embargoes: these may serve to *offset* the natural advantages, but they do not *remove* them. Economic areas for specialization differ for different commodities and rarely coincide exactly with political areas.

Wise personal specialization involves two types of consideration. The interest and aptitude or ability of the individual is of great importance to the successful choice of occupation. The "salability" of one's accomplishment is equally important. This latter depends, in turn, upon two factors: the desire that others have for one's product; and the number of other people who are making or doing the same thing.

Information concerning occupational opportunities has always been of the hearsay or hit-and-miss sort. Governmental agencies recently are undertaking to improve this situation. The federal employment service, co-operating with the social

security service, soon should possess much valuable information to guide people in their choice of occupation. This guidance, already well started, deals both with the aptitudes of the individual and with the demands of industry. Public programs in training of youth and retraining of adults are being modified and developed in order that people may more readily and profitably fit into industry's attempt to supply the demands of consumers.

## CHAPTER 13

### MORE INTELLIGENT USE OF INCOME

#### INTRODUCTION

**D**URING the World War of 1914-1918 several new slogans became popular. Among them was: "It is Smart to be Thrifty." An attack upon consumer waste was made along a broad front in order that men and materials might be available for carrying out the war. Food wasted in garbage pits, for example, was reduced materially during war years. Previously it had been customary in "polite" society to leave a portion of food on each plate, but that became unpatriotic and, consequently, impolite. As a result it was unnecessary to spend as much time and energy on production and preparation of food as formerly, thus leaving more time and other resources to be devoted to other things; the "other things" in this case being connected directly with the war. In times of peace the same opportunity exists for economy in consumption with a chance to use the resources conserved in an enlarged program of recreation or in any other way that consumers may elect.

The extent of consumption wastes is enormous. Perhaps all of these wastes may be placed in one or another of two classes, namely: (1) those that merely lead to uneconomical use of resources, and (2) those that result in injury to the consumer. It has been said, for example, that the wardrobes of American women contain enough outmoded, but otherwise good, dresses to clothe all the destitute in the country. Perhaps this is an exaggeration, but the quantity of such clothing is known to be large: the Chinese in San Francisco alone collected 700 bales of partly-worn clothing to send war refugees. Organizations like the Salvation Army and Goodwill Industries provide orderly and charitable handling for a considerable part of the clothing that is no longer wanted because it

is out of style or otherwise obsolete. Even with such agencies, however, many articles of clothing are never completely used up. Moreover, the food that is wasted through careless handling, delivery of excess quantities, hotel and family waste in New York City alone is said to be sufficient to feed an entire city variously estimated at from 50,000 to 100,000 population. These are illustrations of the first class of wastes. The use of narcotics, strong liquor, overindulgence in strenuous athletics, poorly planned diets that result in obesity, undernourishment, or indigestion are illustrations of consumption that results in injury to the consumer; so are automobile accidents and other injuries due to careless use of things that are want-satisfying and harmless when used with sufficient care.

Since we realize that income, as at present produced and used, is inadequate to meet all of our desires it certainly seems only sensible to give attention to the possibilities of its more intelligent use.

#### CHANGES IN THE DISTRIBUTION OF INCOME

Attention has already been called to the claim that people with small incomes may make better use of what they have than do people with large incomes and that, therefore, the total well-being of people in any community would be greater if income were more evenly distributed among people. This claim is made on two principal assumptions, namely: (1) that people with high income are likely to be careless in their choices among expenditures, and (2) that a high level of consumption makes each satisfaction less intense than is the case when the level of consumption is lower. The case does not seem to be proven for either of these assumptions, although either or both of them may be true.

Shortage of income may make people careful in expenditure and there doubtless are many thrifty individuals with whom this has actually been the case. On the other hand, carelessness in expenditure may be combined with carelessness in other matters to result in low income. The direction of the causal relationship is not clear, but it is probable that individual cases can be found, some of which have run each way.

It is true, both physiologically and psychologically, that

the continuous repetition of a particular stimulus finally results in a lessened response on the part of the individual receiving the stimulation. This may be due either to the satisfying of desire, or to fatigue, or to both. There is great difference, however, in the time and rate of this decline in response both among various sorts of stimuli and among different individuals. Moreover, when the repetition is not continuous, but intermittent, an increase in response may continue for a long time. It is true, of course, that very few people will get as much satisfaction out of a second Thanksgiving Day dinner, with all the courses from oyster soup, through turkey, to mince pie, on any one day as they did from the first one, but occasional eating of expensive exotic foods such as mangoes and caviar may result in marked intensification of satisfaction. Fear and other mixed emotions may prevent a person's ever enjoying airplane rides if he takes one only once every five years, but if he can afford to—and does—go up every day the fear tends to disappear and the enjoyment may become very great. Illustrations of this sort could be multiplied to indicate that it is not necessarily true that the forms of consumption purchased with high incomes give less satisfaction per dollar spent than do the forms purchased with low incomes. It will be agreed, of course, that when the consumption of actual necessities for nourishment and warmth is insufficient to maintain individual efficiency, the commonwealth suffers, but beyond that point it is difficult if not impossible to know what distribution of income will be for the greatest total good.

In the light of what is known about human behavior it is probably safe to say that there are some families at the upper part of the income scale whose satisfactions would be reduced very little if their incomes were materially reduced. At the lower end of the scale, on the other hand, there probably are many families whose satisfactions would be materially increased if their incomes were increased. As already pointed out, however, it is not likely that the total of human satisfactions would be maximized with *equal* distribution of income for the simple reason that people are not equal in their abilities to enjoy various sorts of goods and services. If the psychol-

ogists are right in saying that people with a high degree of ability along a few lines are likely to have high abilities in many lines, then it would follow that people who can make wise decisions and important contributions in production probably can get great satisfaction out of consumption. In point of fact, however, we know that it often is true that one member of a family contributes to the production program of a country and *receives* the resulting income and that then he has little time or energy or interest left for consumption; other members of the family (who do not necessarily share his abilities) then *consume* the income. To the extent that this is the case, a re-distribution of income might result in an increase in social well-being, but as already pointed out there is no known way by which income can be apportioned to the ability of individuals to get satisfactions from it.

Moreover, it has been pointed out that the maintenance of capital has, in the past, been almost entirely done by people with large incomes. If incomes were equally distributed, some other method of deciding what should be saved and invested in new capital plant would probably need to be employed. This would, perhaps, involve governmental or some other form of group control of this important phase of economic activity.

Even though we were sure that we wanted some different distribution of income than we have, a nice adjustment would be difficult to bring about. Some important adjustments or redistribution of income have, however, recently taken place. It will be remembered that, in part, the concentration of incomes has resulted from concentration of ownership of property which, in turn, has come about through the mechanism of the large corporation and through inheritance. The large corporation has increased the bargaining power of property owners so that they may have obtained a larger share of income than they would have without this special power. Moreover, inherited ownership has given income to certain individuals who did nothing personally to "earn" it. Recent attempts to lessen these two advantages or sources of individual income have taken two principal forms which may be discussed separately.

In the first place, labor unions have been organized to obtain strong group bargaining power that may be used to negotiate with the corporate owners of capital. The matters that are submitted to negotiation include the direct change in the proportions of income going respectively to labor and to capital. When labor unions are successful in these negotiations—that is, when wage increases are granted—it is likely that reduction of some large incomes of the employers occurs and that the medium or small incomes of the employed are increased. In other words, a leveling of income is likely to be one result of labor union activities.

Certain important repercussions may follow this outcome of negotiations. If the income remaining to the employer-capitalist is reduced below an amount satisfactory to him, he may either close down his plant and thus throw employees out of work temporarily, or he may search out new labor-saving techniques which will have a similar result on unemployment. In either of these cases the apparently favorable results from the group bargaining would prove to act like boomerangs; that is, the forces would move in circles and return to embarrass or injure the employees. While some labor union negotiations undoubtedly have resulted favorably to employees from both the short-run and the long-run standpoints, the power of united action must be used with care unless it is to prove injurious rather than beneficial. It is too early to know how many of the labor disputes of the 1930s have really benefited labor, but it is clear that not all of them have.

The second method used in leveling the distribution of incomes among individuals is effected through the medium of taxation. It has long been a principle of taxation both here and abroad that assessments and collections of government revenue should be proportioned somewhat to the individual's "ability to pay." During recent decades, particularly, income taxes have come into use as an important source of public revenue. These taxes are usually arranged so that very low incomes are exempt entirely, and then the rate of tax increases as income increases. In Minnesota, for example, the *rates* of tax that are applied in the state income tax to different amount of taxable income are as follows:

<i>Taxable Income</i>	<i>Rate Percent</i>	<i>Accumulated Tax at Upper Limit of Income</i>
\$1,000 .....	1	\$ 10.00
1,000-\$2,000 .....	2	30.00
2,000- 3,000 .....	3	60.00
3,000- 4,000 .....	4	100.00
4,000- 5,000 .....	5	150.00
5,000- 7,000 .....	6	270.00
7,000- 9,000 .....	7	410.00
9,000-12,500 .....	8	670.00
12,500-20,000 .....	9	1,345.00
Over 20,000 .....	10	.....
Tax on 50,000 taxable income .....	..	4,345.00
Tax on 100,000 taxable income .....	..	9,345.00

These state income taxes are in addition to those levied by the federal government. The *rates* used by the two assessing authorities are different, but the principle of progressive taxation is used by both. Almost all states now levy some income tax in addition to the federal tax, but the rates differ materially among the states. Under the Act of 1936 the tax imposed on income by the federal government is as follows:

1. Net income, which may be defined roughly as gross income less necessary expenses, is the base of the tax. Income from state, county, city, etc., bonds, part of the Federal debt, gifts and life insurance is excluded from gross income.

2. Taxable net income for purposes of imposing the surtax or progressive rates consists of net income less the following deductions:

- a. Single person ..... \$1,000
- b. Married person ..... 2,500
- c. Each dependent of taxpayer ..... 400

3. Taxable net income for the imposition of the normal or flat rate consists of net income less the deductions under (2) above, plus further deductions as follows:

- a. Interest on bonds of the United States and of certain government corporations.
- b. Ten percent of the earned income. All net income up to and including \$3,000 is assumed to be earned net income, but in no case will more than \$14,000 be considered earned net income.

- 4. The normal rate of the tax is 4 percent.
- 5. The surtax rates for the lower brackets are as follows:

	<i>Percent</i>
\$4,000 taxable income or less . . . . .	none
Excess over \$4,000 and not over \$6,000 . . . . .	4
“ “ \$6,000 “ “ “ \$8,000 . . . . .	5
“ “ \$8,000 “ “ “ \$10,000 . . . . .	6
“ “ \$10,000 “ “ “ \$12,000 . . . . .	7
“ “ \$12,000 “ “ “ \$14,000 . . . . .	8
“ “ \$14,000 “ “ “ \$16,000 . . . . .	9

and so on, but by irregular income intervals and by irregular increases in rates up to a tax of 75 percent on all surtax income over \$5,000,000.

Thus a person in Minnesota with a taxable income of \$12,000 would pay a state income tax of \$630 and a federal income tax of \$600, or a total of \$1,230. It will be noted that at the higher income levels a very considerable amount of purchasing power is taken from its original recipient by these income taxes.

Inheritance or estate taxes also are used by the federal and some of the state governments. In the use of these taxes, also, the principle of progressive taxation is employed—that is, the larger estates are taxed at a higher rate than are the smaller ones. The details of the Minnesota inheritance tax levies are shown in Table 55.

It will be noted that the closer the blood relationship, the smaller the tax: but in all cases a considerable portion of large inheritances is taken by government, especially when both state and federal taxes are considered.

The federal inheritance tax law exempts estates of \$50,000 or less from levy and makes some other allowances that we need not cite here. After these allowances, net estates not in excess of \$10,000 carry a tax of 2 percent. The schedule of rates on larger net estates is shown in the table on p. 303.

Thus, while individuals with large estates can still pass on to their heirs considerable ownership of property, the combination of state and federal estate taxes does serve to redistribute a substantial part of the very large accumulations.

By no means all of the tax collections come from the income

and inheritance taxes discussed above. In fact the tax on real property is much the largest single source of public revenue, amounting to between 75 percent and 85 percent of the total state and local revenues. Federal funds are not raised

TABLE 55  
MINNESOTA INHERITANCE TAX LEVIES \*

<i>Person, Association, or Corporation to Whom Transfer Is Made</i>	<i>Exemption</i>	<i>Excess Over Exemption but Not Over \$15,000</i>	<i>\$15,000-\$30,000</i>	<i>\$30,000-\$50,000</i>	<i>\$50,000-\$100,000</i>	<i>Over \$100,000</i>
Wife or lineal issue of decedent . . . . .	\$10,000	1%	2%	2½%	3%	4%
Husband, adopted child of lineal issue or adopted child of decedent. . . . .	10,000	1½	3	3¾	4½	6
Lineal ancestor of decedent . . . . .	3,000	1½	3	3¾	4½	6
Brother, sister, descendant of brother or sister; wife or widow of a son, or husband of a daughter of decedent . . . . .	1,000	3	6	7½	9	12
Brother or sister of father or mother, or descendant of either . . . . .	250	4	8	10	12	16
All others . . . . .	100	5	10	12½	15	20
Charitable, public, scientific, educational, and similar bequests . . . . .	All					

Proceeds: 90 percent to the state, 10 percent to the county.

\* Blakey, Roy G., *Taxation in Minnesota*, p. 579, Univ. of Minn. Press, 1932.

by a general property tax, but by various other taxes as shown in Fig. 47. Income taxes, sales taxes on certain specific commodities such as cigarettes and gasoline, and duties on imported merchandise constitute the main sources of federal funds.

The general property taxes are related to "ability to pay" to the extent that ownership of property results in income.

Some distinction might be made in tax policy, perhaps, between income-producing property such as farms, mines, and factories, on the one hand, and consumer property such as homes, on the other hand. This distinction has been recognized by the taxing authorities in some states, and homesteads have been taxed at a lower rate than other real property or, in some cases, they have been exempt from all taxation.

Property taxes usually are not progressive—that is, the

<i>Net Estate</i>	<i>Percent of Tax</i>	<i>Accumulated Tax at Upper Limit of Estate</i>
\$10,000- 20,000 .....	4	\$600
20,000- 30,000 .....	6	1,200
30,000- 40,000 .....	8	2,000
40,000- 50,000 .....	10	3,000
50,000- 70,000 .....	12	5,400
70,000-100,000 .....	14	9,600
100,000-200,000 .....	17	26,600
and continuing increases to estates of \$1,000,000 .....		222,600
“ “ 5,000,000 .....		1,922,600
“ “ 10,000,000 .....		4,962,600

rate of tax on valuation is the same regardless of the amount of property owned by any one person, in which particular they differ from income taxes in their effect on the redistribution of income. Similarly, customs duties and specific sales taxes are not progressive except as people with large incomes use more of the taxed commodities: in fact such taxes frequently bear more heavily upon people with low incomes than upon those with high incomes, for which reason it often is urged that they be used only with so-called luxury goods. Since cigarettes and gasoline are two of the important sources of internal revenue and since they are consumed quite generally by all classes, taxes on them do little to level the income of the different economic classes in the community.

If it is desired that the power of taxation be used to level incomes, more dependence should be placed upon the progressive features of income and inheritance taxes and less upon a single-rate property tax or upon sales taxes. The “if” in the

above sentence must be emphasized, for it is by no means clear how far a program of "soak the rich" can be carried with wisdom or even with impunity. Too great a leveling of individual income might force the giving up of some of the finest things in our cultural environment and might be injurious

FEDERAL TAX COLLECTIONS BY PRINCIPAL SOURCES  
FISCAL YEARS 1931-1936

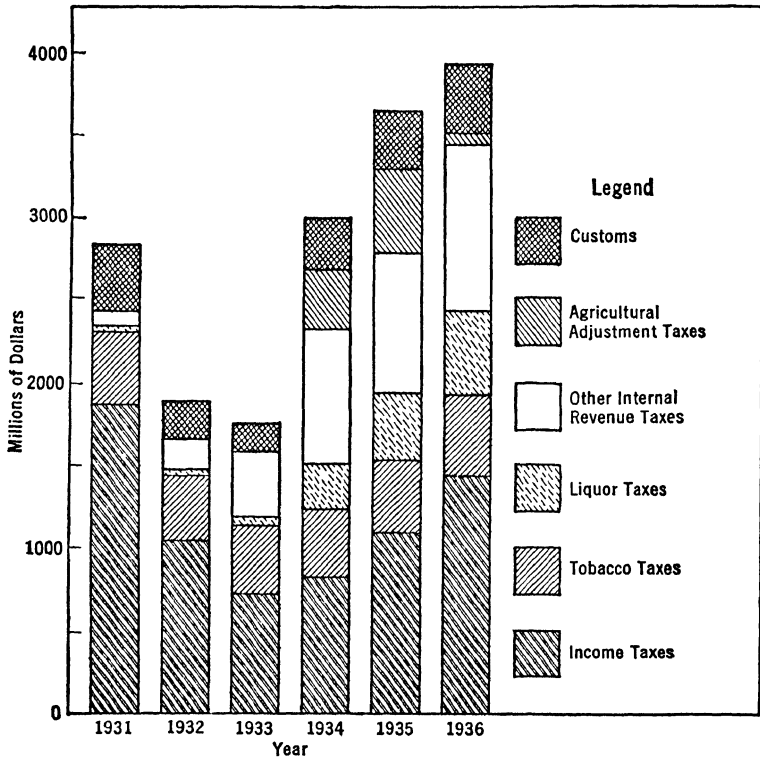


FIG. 47. Tax revenues by source in the fiscal years 1931 to 1936 are shown by the cross-hatched vertical bars. For each year the entire bar represents the total federal tax revenues collected. Each bar is broken into its component parts representing the respective sources (see legend for explanation) from which the tax revenues were obtained.

Income taxes which reached a low point during 1933, increased in 1936 to a high of 89 percent over 1933 and 28.5 percent over 1935. They represented 36 percent of the total of federal tax revenues in 1936, which was the largest proportion for any year since 1933. (Source: *Cost of Government in the United States, 1934-1936*, p. 43, National Industrial Conference Board, Inc., 1937.)

both to the morale and to the morality of those it was designed to aid. As has been suggested earlier, many things are supported by voluntary contributions of people with comparatively large incomes. Art museums, symphony orchestras, little theaters, hospitals, social-welfare centers, colleges, and churches often receive much of the money necessary for their operation either from endowment gifts or annual contributions of well-to-do people who have a special interest in some particular activity or organization. Eighty-seven percent of the operating funds of a large metropolitan church, for example, were furnished in 1937 by 10 percent of the member families, and this ratio is probably typical of many such organizations. If personal and family incomes should be markedly equalized by a further forced reduction of large incomes, no one can say for certain what would happen to the funds in support of such enterprises, but it is likely that they would be reduced materially.

The funds collected through taxation are variously used. In some instances, at least, they are used to provide certain types of consumer goods and services such, for example, as schools, highways, parks and other recreational facilities and the like. These things are then to be used by any consumers who desire to use them, without direct payment or with payment that covers only a portion of the cost involved. To the extent of this use by people of moderate or low income, their welfare has been increased and their personal money income has been used for other purposes.

Whether the principle of progressive taxation can wisely be applied even more drastically in the interests of low-income groups is a matter of dispute. Recent suggestions of a "strike of capital" need careful consideration in this regard; that is, people with money to invest may refuse to use it in new and risky undertakings if they cannot keep the money gained by successful operation. Perhaps the experiments in redistribution of income during the past 20 years have been more rapid than those to be expected in the next similar period, but further changes will doubtless be tried. In the final analysis, however, there must come a point in this process of taxation beyond which those with large income-getting abil-

ity will refuse to exert themselves—and the result then may be a serious interruption of production. It has been pointed out in another connection that a lack of bold and wise leadership may be the main factor that prevents an increase of total production. Perhaps the rarest economic ability is that of the successful business executive whose large income is most

TABLE 56  
TAX COLLECTIONS AND NATIONAL INCOME \*  
(Computed by National Industrial Conference Board)

YEAR	TAX COLLECTIONS PERCENT OF NATIONAL INCOME			
	<i>All Tax Collections</i>	<i>Federal</i>	<i>State</i>	<i>Local</i>
1922 .....	13.1	6.1	1.5	5.5
1923 .....	11.0	4.6	1.4	5.0
1924 .....	11.7	4.8	1.5	5.4
1925 .....	11.2	4.2	1.6	5.4
1926 .....	11.7	4.5	1.7	5.6
1927 .....	12.3	4.5	1.8	5.9
1928 .....	12.3	4.2	2.0	6.1
1929 .....	12.3	4.2	2.0	6.1
1930 .....	14.2	4.8	2.5	7.0
1931 .....	15.5	4.5	3.0	8.0
1932 .....	17.5	3.8	3.5	10.1
1933 .....	16.9	4.0	3.4	9.5
1934 .....	17.4	5.7	3.4	8.2
1935 .....	17.7	6.5	3.4	7.8

\* *Cost of Government in the United States, 1934-1936*, p. 39.

likely to be affected by progressive taxation. Moreover, it probably is true that potential leadership in the discovery and organization of new industries will develop even less frequently if the opportunity for large financial gain is taken away. Consequently it would seem unwise to carry the leveling of income to such a point that the incentive to riskful economic living is removed, at least until we find some other way of developing leadership for our productive enterprises.

#### GROUP VERSUS INDIVIDUAL DECISIONS ON CONSUMPTION

Whether consumers will be benefited by whatever changes may occur in the distribution of income depends upon the use that is made of the purchasing power taken from those with

large incomes. In general, the funds that are redistributed are collected by governmental agencies and usually they are expended for some public purpose. Under emergency conditions, to be sure, a considerable part of the tax funds have been given directly to individuals in relief benefits of various sorts, but this is an unusual circumstance.

TABLE 57

FUNCTIONAL DISTRIBUTION OF FEDERAL EXPENDITURES\*  
FISCAL YEARS 1934-1936 †

Purpose of Expenditure	1934		1935		1936	
	Percent of Total Exclusive of Debt Service	Percent of Gross Total	Percent of Total Exclusive of Debt Service	Percent of Gross Total	Percent of Total Exclusive of Debt Service	Percent of Gross Total
General government ..	5.2	4.4	5.4	4.4	5.4	4.7
Protection .....	20.4	17.2	24.7	20.0	41.8 ‡	36.4 ‡
Education .....	0.2	0.2	0.3	0.2	0.2	0.2
Highways .....	4.1	3.5	5.1	4.1	3.2	2.8
Economic development.	10.4	8.7	8.5	6.9	6.0	5.3
Social welfare .....	41.2	34.7	45.1	36.6	36.1	31.5
Miscellaneous .....	17.7	14.9	9.6	7.8	5.6	4.9
Public utilities .....	0.9	0.7	1.3	1.1	1.7	1.5
Total exclusive of debt service .....	100.0	84.3	100.0	81.1	100.0	87.1
Debt redemption .....		5.1		7.8		4.5
Interest .....		10.7		11.1		8.4
Gross total .....		100.0		100.0		100.0

\* *Annual Reports of the Secretary of the Treasury.* Computed by National Industrial Conference Board.

† On the basis of checks issued.

‡ The increase in these proportions over the preceding year resulted from the soldiers' bonus payments under the Adjusted Compensation Payment Act of 1936.

The funds that are collected and expended by the various branches of government have already reached a considerable proportion of the total produced income in the United States. Estimates of this proportion in recent years, made by the National Industrial Conference Board, are shown in Table 56.

It will be noted that local governments—cities, counties, villages, and townships—handle somewhat the largest share of total taxes. The federal share is next in size and that of the state is the smallest. It will also be noted that tax collections increased in proportion to total national income during the period shown. In other words, governmental group decisions

concerning the production and use of income are becoming more important, but a considerable part of these group decisions are still made locally.

The tax funds have been spent for many things. The fed-

TABLE 58

FUNCTIONAL DISTRIBUTION OF EXPENDITURES OF CITIES  
OVER 100,000—FISCAL YEAR 1934 \*

<i>Purpose of Expenditure</i>	<i>All Cities Over 100,000 Population</i>	<i>Cities Over 500,000 Population</i>	<i>Cities with 300,000 to 500,000 Population</i>	<i>Cities with 100,000 to 300,000 Population</i>
Total governmental—cost payments . . . . .	100.0	100.0	100.0	100.0
Operation and maintenance—general departments:				
General government . .	5.4	5.7	6.1	3.9
Protection to person and property . . . . .	11.8	11.6	11.1	13.1
Conservation of health.	1.7	1.6	2.0	1.6
Sanitation . . . . .	3.6	3.7	3.2	3.7
Highways . . . . .	4.4	4.1	5.3	5.2
Charities, hospitals, and corrections . . . . .	13.7	15.6	12.0	7.8
Education . . . . .	21.7	19.6	22.0	29.0
Recreation . . . . .	1.9	1.9	1.9	2.1
Miscellaneous . . . . .	4.9	5.4	4.1	3.6
Operation and maintenance—public service enterprises . . . . .	4.8	4.3	5.5	5.9
Interest . . . . .	14.0	13.5	15.8	14.8
Outlays . . . . .	12.1	13.0	10.9	9.4

\* United States Bureau of the Census, *Financial Statistics of the Cities*.

eral share has been used in recent years as shown in Table 57.

The years shown in Table 57 came at the end of a long and severe business depression. Consequently the federal expenditures for "social welfare" were unusually high. Also, as noted in the table, the payment of the soldiers' bonus in 1936 represented an unusual distribution. When allowance is made for these circumstances, "protection" is found to be the most costly federal function; this is especially evident when it is recalled that "debt redemption" and "interest" are both

largely the remnant of "protection" during the World War.

A somewhat similar classification of the expenditures of large cities is shown in Table 58 for the year 1934.

Education is the largest item in this list of city expenditures in all three size groups. Interest on indebtedness is second, and then follow "charities," "protection," and "outlays." The last of these items includes such things as government buildings, streets, sewer systems, water mains, and the like.

A summary of the major governmental expenditures in Minnesota for 1935 is shown in Table 59.

TABLE 59  
DISTRIBUTION OF GOVERNMENTAL EXPENDITURES—1935 \*  
(Total for federal, state and local)

	<i>Percent</i>
Education .....	23.2
Highways .....	18.4
Social welfare .....	38.2
Other <i>state</i> expenditures .....	5.7
Other <i>local</i> expenditures .....	14.5
	100.0

\* *Report of the Minnesota State Planning Board—Part I, December, 1936, p. 34.*

In this year the emergency expenditures on social welfare were a large part of the total in Minnesota. Education and highways were next in importance.

The data in these tables show that government expenditures in this country have been confined to a few major lines of activity. During the depression years, emergency relief of individuals who could not find commercial employment has been, perhaps, the most important single activity. It is to be hoped that the necessity for this particular form of redistribution of income will be less in the majority of years than it has been in the past five or six, although it doubtless will never disappear. Protection to persons and to property has been another large item. This, too, may be reduced if we keep out of future wars (which, of course, we shall find difficult to

do no matter how sincerely we may try), or if we are able to cut crime and fire hazards. Education and highways are the other two major lines of government activity when measured by cost.

If we are to consider seriously the possibility of further redistribution of income through the mechanism of taxation and government expenditure we must face squarely the question: What would we have government do with the additional funds which it collects? Specifically, do we want more education for young people than is provided now and, if so, what form should it take? Do we want better houses, better streets, better sanitation, and, if so, of what should the improvements consist? Do we want more radio programs, more municipal bathing beaches and golf courses, more national parks? Do we want more effort spent on crime prevention and control, or on adult education and retraining, or on the search for new materials and processes? Perhaps we should like the proper government agency to keep our sidewalks and streets free from ice in the winter, or air-condition our schoolrooms in hot weather, or eliminate mosquitoes from our summer resorts, or give us free medical and hospital care when we are sick. Surely there are many things we want done provided we can afford them, but we cannot be sure that any of these things can be done at lower cost in human energy by government than by private industry. After we decide which things we want the most, we must determine whether to do them ourselves, or to organize a company, or to instruct government to do them for us, and the choice should be made on the grounds of probable efficiency of the different methods.

Certain suggestions for additional governmental enterprises are being made currently. One that is receiving much attention at present is housing, especially for low-income families. The suggestion that government enter the housing field has received support in some quarters because, as already pointed out, it is the belief of experts that many families in the United States now are inadequately housed.

An outline of housing costs at the lower income levels in Minneapolis is given in Table 60. It has been suggested that

if governmental agencies enter the housing field directly several opportunities for lower rents would appear, namely: (1) interest charges could be lowered because the government can borrow money at lower rates than can individuals; (2) taxes could be raised in some other way than as a levy on homes; (3) direct annual grants could be given to needy and deserving families to permit them to live in better houses than they can or will pay for. The Federal Housing Administration and the Federal Home Loan Administration are both working towards these ends at present. How far their activities are to be carried during the next decade is difficult to predict. The experience so far does not suggest that the government agencies will supply housing at a lower total cost to society, but that they will find a way to make the recipients of large incomes pay part of the rent of some low-income families.

Housing is, perhaps, but one of the new fields of activity in which governmental agencies some day may play an important part; medical care may be another; recreational facilities is still another. If the fields are chosen with care, if government enterprises can be operated with increasing efficiency as the result of special training for civil service, and if the new tax levies do not result in a curtailment of initiative in the fields that are left to private operation, the welfare of consumers may be improved by these ventures. There is some danger, however, that bureaucratic organizations may be overly enthusiastic for a particular line of consumption for a time; that they may, for example, start more housing projects and at a more expensive level than reasoned judgment in the future finds justified. There is danger later on, moreover, that the employees of a bureaucracy will lose their enthusiasm in the security of their jobs and that further developments of interest to consumers will be slow in coming. Centralized political authority does not assure freedom from the human frailties of emotional enthusiasm, on the one hand, and of self-satisfied laziness, on the other.

Decisions made by groups of people rather than by individuals are not new in American economic life. While governmental agencies have confined their activities to a fairly narrow range, privately organized groups have not. Nearly

all production is carried on at present by corporations some of which are very large and quasi-public. In many instances

TABLE 60  
AN OUTLINE OF HOUSING COSTS

I. Rentals actually paid in Minneapolis (1933)	
A. Rent paid on leased one-family dwellings:	
1. Average	\$28.80 per month
2.	3% of families paid \$10.00 or less
3.	12% " " " 15.00 " "
4.	50% " " " 25.00 " "
B. Modal value of owner-occupied homes, \$4,000; "cost" of living in which would be about \$35.00 per month. Therefore, low-rent housing should rent for less than \$25.00 per month.	
II. "Costs" that must be covered in commercial rent	
A. Assumed capital costs:	
Land	\$ 500.00
Improvements	3,000.00
	\$3,500.00
B. Estimated annual cost to private owner of leased dwelling:	
1. Depreciation (actual annual consumption)—2% of \$3,000	\$60
2. Maintenance—2% of \$3,000	60
3. Taxes: 100 mills on 40% of \$3,500	140
4. Interest: 6% on 1/2 of \$3,000	90
5. Interest: 6% on \$500	30
Total per year	\$380
Total per month	31.60
C. If used as "homestead":	
Same as B except for taxes, which would be: 80 mills on 25% of \$3,500 is \$70, a saving of \$70 Therefore, total cost	
	\$310.00
Total cost per month	25.80
D. Proposals for additional reductions in costs:	
1.	Lower cost of depreciation and maintenance
2.	Lower interest rates
3.	Lower taxes
4.	Annual grants

trade unions have been organized to include a great many classes of employees. These several types of groupings have been operated to make many centrally determined decisions

without more than a hollow acquiescence on the part of the individual. The small shareholder in a corporation has no real voice, for example, in a decision to expand or to close down a factory; a single laborer must strike when the union tells him to; in some cases a single firm is bound by the decision of an association. As one looks around at the structure of economic society one is impressed by the hemming-in of opportunity for individual action that has occurred in many fields. And one is inclined to wonder whether groups organized politically will do any better by the man-on-the-street in his role as a consumer than have the groups that are organized for personal commercial advantages of their members. These latter are subjected to the test of the market place and must please consumers enough to get their dollars, while the former are subjected to the less objective and less direct test of the polls or, in many cases, they serve under civil service rules and can hold their jobs until gross incompetency is proven against them.

It ought to be possible to make wiser choices of what to make and what to do than we have so far, for we are continuously adding to our knowledge of both resources and methods. Thus we should continue to increase total income and have more to consume at all levels. Our experience with group decisions does not lead us, however, to support with enthusiasm a further concentration of authority as a means to this end. Perhaps before any change in the organization of economic institutions can be really successful it will be necessary to unleash the forces of propaganda and persuasion, that we so well know how to use, in an effort to reduce the influence of personal selfishness and to increase the influence of personal industriousness and integrity upon the complicated problems of production and distribution of income.

#### SUMMARY

Consumption wastes are very large and various attempts are being made to overcome them. In the last analysis such wastes are due, of course, to individual carelessness, dishonesty, and incompetence. Organizations and institutions, either governmental or private, can do a good deal, however,

to guide, cajole, and force people to follow less wasteful methods of consumption. For example, the possibilities connected with minimum standards for commodities enforced by government agencies are discussed in the next chapter; so are private testing bureaus established by consumer groups.

In this chapter attention has been directed mainly to the possible results of changes in two matters. First, what would be the effect of changing the personal distribution of income, especially by use of the power of taxation? Second, what advantages and disadvantages are there in giving to government agencies the right and responsibility to determine what shall be made available for consumption on an ever-widening front? These are questions that cannot be answered categorically. If, however, there is to be further redistribution of income through taxation and government expenditure it will be necessary to choose with care the new fields in which government will supply goods and services to consumers.

## CHAPTER 14

### CONSUMERS' CHOICES

#### FAMILY BUDGETS

**I**NTELLIGENCE in the use of money income may be increased greatly if individuals plan their consumption programs and allot certain limited amounts to specific expenditures. A plan made out in advance to regulate or control the distribution of expenditures among the many family uses is known as a budget. (In Chapters 9 and 10 there was considerable discussion of family expenditures under differing conditions.) These observations and experiences make it possible to set up approximate or "typical" budgets of expenditures for families under widely different conditions of income, location, age, and so on. Each family may want some personal adjustment in its budget because of some special circumstances, but general experience provides a starting point.

One very simple procedure in the use of budgets might be merely to have the weekly pay check converted into cash and then place the amount previously determined into separate envelopes marked "food," "clothing," "housekeeping," and so on. This is a system that might be used by families with low income and without a checking account in a bank. Small balances in any of the envelopes at the end of a payroll period could be used for larger purchases in the next period, or they could be transferred either to a savings account or to one of the other envelopes. "Borrowing" between envelopes might be carried out occasionally, with memoranda of the transaction entered on the envelopes. A few months' use of this system should be sufficient to determine whether 40 percent or 50 percent of the income was needed for food; whether 20 percent was used for rent; whether 10 percent or 20 percent could be used for clothing, and so on. Then the amount in

each envelope would make the housewife and other members of the family consider each item in each general line of expenditure in the light of the total allowance for that line.

When income is larger and checking accounts are used, some form of simple bookkeeping is necessary to the use of a controlled family budget. There are numerous household account books that can be purchased at low price and that are easy to use. Generally they provide separate columns for each major division of the household budget in which expenditures may be entered daily.

Perhaps the principal economic problem of wise use of income from the individual or family point of view is the proper administration of income; that is, the proper distribution or budgeting of the income among its general uses. Budget making appears to be especially helpful for a new family without experience to guide its expenditures, or for a family which moves to a new place, or for a family having had an appreciable increase or decrease in income. A plan of expenditures, or budget, does not necessarily have to be written although most people find it easier to follow a written than a mental guide.

There is no "right" or "wrong" budget. One can be made only roughly for, as we have pointed out earlier, the classification of items in a budget as well as the distribution of expenditure among those items necessarily varies with the precise situation in which the individual or family finds itself. There are, however, suggested classifications which may be used from which the individual or family may develop his or its particular budget. In Figs. 48 to 51 inclusive sample budget classifications and forms are presented. These are not suggested as the most desirable for any particular case, but rather as examples of forms that have been found useful by others.

Budgeting has been tried by many people who have not continued it. "The pages of abandoned budget books in this country, if gathered in one pile, would make a fire big enough to warm the cold feet of all who tried it." Why? Because, for one important reason, the budgets as originally planned did not fit the individual case. This lack of fit may have occurred either because the requirements of the particular

family were different from the "average" or "ideal" from which the budget was originally adopted (see Chapter 9), or because of some unexpected emergency expenditure.

To guard against disappointment in the use of budgeting it will be helpful to include an item to act specifically as a shock absorber. Much consumer buying is impulsive, resulting in unwise purchases, and uncertainty affects consumption

CLASSIFICATION USED AT PRESENT BY U. S. DEPARTMENT OF AGRICULTURE

- |                               |                               |
|-------------------------------|-------------------------------|
| (1) Food                      | (7) Developmental             |
| (2) Housing                   | Formal education              |
| Rent                          | Reading matter                |
| Taxes                         | Public welfare                |
| Fire insurance, etc.          | Gifts outside of family       |
| (3) Operating                 | Recreation                    |
| Fuel                          | Vacation and trips            |
| Light and power               | Vocation                      |
| Telephone                     | (8) Personal                  |
| Laundry done out              | Candy, tobacco, beauty parlor |
| Rent of safety-deposit box    | Barber shop, cosmetics        |
| Fare on street car, etc.      | (9) Automobile                |
| (4) Furnishings and Equipment | (10) Savings                  |
| Furniture                     | Emergency fund                |
| Bedding                       | Savings account               |
| Flowers (cut and potted)      | Insurance, life               |
| Stoves                        | Payments on house             |
| (5) Clothing                  | Investments                   |
| (6) Health                    |                               |

FIG. 48. (Source: Farmers Bulletin No. 1553.)

programs in many ways. Consequently in any workable budget there must be a fund that permits adjustments and that will take care, for example, of a \$15 Christmas gift which was planned to be only \$10, or will allow for money lent and never repaid, and so on.

By planning expenditures a more intelligent use of income will surely result because:

1. The necessities will be provided since they will no doubt be considered first. With their consideration may come a consciousness of expenditure habits which will result in a deliberation as to preferences.
2. Purchases will be made more wisely since, having been planned

**SUMMARY OF MONTHLY EXPENDITURES**

**Savings and Investment**

Bank Account \_\_\_\_\_

Investments \_\_\_\_\_

Life Insurance \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

**Food**

Meat and Fish \_\_\_\_\_

Fresh Fruit and Veg. \_\_\_\_\_

Groceries \_\_\_\_\_

Milk \_\_\_\_\_

Meat Out \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

**Shelter**

Rent \_\_\_\_\_

Taxes \_\_\_\_\_

Fire Insurance \_\_\_\_\_

Upkeep and Repair \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

**Clothing**

Wearing Apparel \_\_\_\_\_

Sewing Material \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

**Operating**

Fuel, Light, Tel. \_\_\_\_\_

Renewal of Equipment and \_\_\_\_\_

House Incidentals \_\_\_\_\_

Service \_\_\_\_\_

Ice \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

**Advancement and Recreation**

Music \_\_\_\_\_

Dentist and Doctor \_\_\_\_\_

Car Fare \_\_\_\_\_

Personal Allowance \_\_\_\_\_

Clubs \_\_\_\_\_

Gifts \_\_\_\_\_

Total \_\_\_\_\_

Budget Suggested \_\_\_\_\_

	SAVINGS				FOOD				SHELTER				CLOTHING				OPERATING				ADVANCEMENT AND RECREATION			
	Bank Account	Life Insurance	Meat and Fish	Fresh Fruit and Veg.	Groceries	Milk	Meat Out	Rent	Taxes	Fire Insurance	Upkeep and Repair	Wearing Apparel	Sewing Material	Fuel, Light, Tel.	Renewal Equip. Inoid.	Service	Ice	Education	Dentist and Doctor	Car Fare	Personal Allowance	Clubs	Gifts	
1																								
2																								
3																								
4																								
5																								
6																								
7																								
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23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Total																								

FIG. 49. (Source: Savings Banks Association of the State of New York.)

## THE WANAMAKER BUDGET GUIDE

Annual Income \$..... Income Tax \$..... Net Income \$.....  
 Estimated Expenditures

	Annual	Monthly	Weekly		Annual	Monthly	Weekly
<b>SHELTER</b>				<b>MAINTENANCE, Cont.</b>			
Rent or taxes				Gas			
Water				Electricity			
Insurance *				Telephone			
Repairs				Service			
Commutation				Laundry			
<b>FOOD</b>				Fees			
Milk				Insurance †			
Ice				Supplies			
Meat & Fish				Replacements			
Fruit & Veg.				<b>SAVINGS</b>			
Groceries				Pay'ts on Home			
Meals out				Savings Bank			
Kitchen Garden (credit supplies rec.)				Bldg. & Loan			
Entertainment (where not else- where provided)				Life Insurance			
<b>CLOTHING</b>				Securities			
Clothes †				New Equipment			
Cleaning				Thrift Clubs			
Repairs				Other Savings			
Accessories				<b>EXTENSION</b>			
<b>GENERAL</b>				Advancement & Recreation			
Automobile				Benevolences			
Gardening				Gifts			
Traveling				Clubs, etc.			
Personal				Educational			
Carfare				Reading matter			
Postage				Entertainment			
Stationery				Diversion			
Casual reading matter				<b>HEALTH</b>			
Incidentals				Health Fund or Doctor			
Man's lunches				Dentist			
<b>MAINTENANCE</b> (Running exp.)				Oculist			
Fuel				Hospital			
Oil				Nurse			
				Drug Store			
				Vacation Fund			
				Insurance §			
				Fwd. from first column			
<b>TOTAL</b>				<b>TOTAL</b>			

\* On house.

† Each member of family separately.

‡ On household goods.

§ Health and accident.

FIG. 50.

## SAMPLE WEEKLY FOOD ORDER \*

Adequate Diet at Minimum Cost for Family of 5—Parents and 3 Children

<i>Item</i>	<i>Quantity</i>	<i>Price</i>	<i>Amount</i>	<i>Item</i>	<i>Quantity</i>	<i>Price</i>	<i>Amount</i>
<b>MILK</b>				<b>VEG., FRUITS, Cont.</b>			
Equiv. of 28 qts. whole milk:				Lentils			
Pasteurized whole				Peas			
Evaporated				Peanut butter			
Pasteurized skim				1½ lbs. dried fruits:			
Butter (in addition to fat allowance)				Prunes			
American cheese				Raisins			
<b>BREAD, FLOUR, CEREALS</b>				Peaches, Apricots			
9 lbs. bread and				7 lbs. other veg. & fruits:			
10 lbs. flour or cereal				Onions			
OR				Turnips			
17 lbs. flour & cereals:				Beets			
Bread:				Canned corn			
Whole wheat				Apples			
White				Bananas			
Rye				<b>FATS</b>			
Flour, etc.				3 lbs.:			
Wheat flour				Butter			
Cornmeal				Margarine			
Hominy				Cooking fats			
Rolled oats				Salt pork			
Wheat cereal				Vegetable oil			
Macaroni, etc.				<b>SUGAR</b>			
Barley				3 lbs.:			
<b>VEGETABLES, FRUITS</b>				Sugar			
(canned may be used if necessary)				Molasses or syrup			
13 lbs. potatoes				<b>LEAN MEAT, EGGS, ETC.</b>			
6 lbs. tomatoes				Eggs			
7 lbs. leafy, yellow or green vegetables:				Lean meat			
Cabbage				Fish			
Carrots				Cheese, American			
Greens, spinach, etc.				<b>ACCESSORIES</b>			
Rutabaga				Cocoa			
Squash				Coffee (1½ lbs. limit)			
String beans				Tea (⅛ lb. limit)			
2 lbs. dried legumes:				Salt			
Beans				Baking powder			
				Condiments			
				<b>TOTAL COST</b>			
<b>TOTAL</b>							

\* FIG. 51. (Source: U. S. Dept. of Labor and U. S. Dept. of Agri., *Family Food Budgets for the Use of Relief Agencies*, 1933.)

for, advantage can be taken of seasonal reduction in price, and time may be allowed for finding the particular article wanted.

3. Purchases will fit together better because they have been planned together.

4. Leaks will be uncovered and can be stopped.

5. Often an evaluation will be made by the person or family of its standards of consumption. By tying all parts of the spending together, a recognition of their relation is forced to the fore.

6. More "provision for the future" may be made in accordance with a definite plan.<sup>1</sup>

It is well to remember that a wise use of individual income is not only desirable from the standpoint of the consumer but also is it imperative for the well-being of the producer. Our modern economic system of industry is geared up for large-volume mass production and dependent for its functioning on a *continuous* large volume of consumption—not a *spasmodic* one. It is therefore important for both groups that everything be done to make possible a more efficient use of the consumer's dollar.

#### THE RATIONALE OF CONSUMERS' CHOICES

"In the domain of commerce, every human being has a vote every time he makes a purchase—every day is election day. The buyer casts his vote wherever he goes. The votes are counted at once and with few errors; the cash register is as dependable as the ballot box. With his dollars the buyer votes for his representatives in production. He votes to continue in office those, and only those, who make the articles he buys."<sup>2</sup> If this is so, it is worth our while to observe and consider the ways in which consumers go about their task of buying; what forces motivate and influence their choices.

Someone has said that "people in the mass are like a handful of confetti, and this is the day of the advertising man's carnival." Doubtless this is somewhat of an exaggeration, but it contains an element of truth. A recent popular magazine carries the story of a man—Elmer Wheeler by name—who devotes his time at high salary to testing sentences that

<sup>1</sup> See Donham, S. Agnes, *Spending the Family Income*, p. 22, Little, Brown, 1936, for some of above suggestions.

<sup>2</sup> Foster and Catchings, *Money*, pp. 190-192, Houghton, Mifflin, 1924.

will sell merchandise.<sup>3</sup> Wheeler and his staff when they set out to work, do not immediately fill the clerks' mouths with polished, ready-made slogans. For a long time they test, keep score, eliminate. Often the selling sentence comes from one of the clerks who was saying it without quite knowing why. "Don't ask *if*," says Wheeler, "ask *which*." Don't ever give a customer a choice between something and nothing, but lead him to the answer you want. People who ordered Coca-cola at a certain fountain were being asked by the attendants whether they wanted a large one or a small one. Few ordered the large. When Elmer Wheeler finished his tests the clerks merely said, "Large one?" and a large one it was for two out of five.

For many years people with things to sell have been bombarding consumers with reasons for buying certain very specific merchandise. One of the early advertising experts, Mr. Claude Hopkins, tells of many interesting instances that illustrate some of the ways in which consumers are persuaded to buy. The case of Palmolive shaving cream will serve as an example.

I sent out some research men to interview men by the hundreds. I asked them what they most desired in a shaving cream. Then I took those answers to V. C. Cassidy, chief chemist. I said: "These are the factors men want. They may get them in other shaving creams, but nobody yet has told them. Give me actual data on these results as applied to Palmolive shaving cream."

Men wanted abundant lather. Cassidy proved that Palmolive multiplied itself 250 times. Men wanted quick action. The Palmolive chemists proved by tests that within one minute the beard absorbed 15 percent of water, and that made the hairs wax-like for cutting. Men wanted enduring lather. Chemists proved that Palmolive maintained its creaminess for ten minutes on the face. . . . So we claimed for Palmolive, and rightly, bubbles that meet the requirements. Probably other shaving creams could meet the specifications. I have no idea that one brand far excels some others in this line. But we were the first to give figures on results. . . . I am told that in 18 months Palmolive shaving cream dominated the field it entered.<sup>4</sup>

<sup>3</sup> *Literary Digest*, "Selling the Sizzle," January 22, 1938, pp. 12-13.

<sup>4</sup> Hopkins, Claude C., *My Life in Advertising*, pp. 140-141, Harper, 1927.

In other words, many men were persuaded to change their brand of shaving cream for no better reason than that they had been told certain things about the new brand, which things were probably equally true of the brands they had previously been using. To the extent that this example is typical it appears that as consumers we cannot qualify as expert buyers, but merely as chance purchasers who are swayed by the most vivid or the most recent claims of superiority.

This example from the experiences of Claude Hopkins is a generation old, but the same forces of persuasion are still in use.

In a long string of newspapers all over the United States last fortnight the American Tobacco Company started a new campaign (through Lord and Thomas) using the theme they adopted last fall—testimonials from tobacco experts, auctioneers, inspectors, etc., that they all smoked Lucky Strikes.

In almost the same list of newspapers was a new series the R. J. Reynolds Tobacco Company was running (via William Esty & Company) for Camels. Especially newsworthy for its copy theme, the Camel campaign played up a stable of tobacco planters, agent Esty had collected, who asserted that each year the Reynolds people paid them the highest prices for the best part of their harvests, that they all smoked Camels.<sup>5</sup>

In 1937, Camels led the parade of cigarette sales with \$47,000,000,000 and Lucky Strikes were second with about \$35,000,000,000. Apparently the managers of these companies are convinced that the measures they have adopted to encourage consumption of their particular brands are successful and if we are to judge by total sales, they appear to be right. And so we must conclude that most of us fail to see anything odd or out-of-the-way in the competing claims of superiority made by the two producers; if we take the testimony of the two groups of "experts" we must conclude that there are no important differences between the two brands, and yet many of us are persuaded by the testimony of these "experts" to buy one brand in preference to the other.

While it is true that as consumers we "vote with our dollars," it appears to be equally true that we are persuaded to "keep in office" some producers not entirely because of the

<sup>5</sup> *Tide*, January 15, 1938, p. 13.

excellence of their products, but because of the excellence of their propaganda. If, in our capacity as our own purchasing agents, we could become more expert and "hard-boiled," we might make our meager incomes furnish us with a much larger total of consumption satisfactions.

The psychology of consumer purchasing may be classified in many ways. One interesting and useful division is into "rational" and "emotional" response to the various stimuli that urge us to buy. Emotional buying motives include such things as emulation, satisfaction of appetites, pride in personal appearance, securing of pleasure or comfort. Rational buying motives, in contrast, are aroused by such appeals to reason as economy in purchase or use, durability, dependability, and so on. Emotional buying is likely to be done on the spur of the moment as the direct result of some suggestion or stimulus, while rational buying is likely to occur only after reflection and a weighing of advantages against disadvantages. In rational buying the individual is likely to consider, for example, what he must go without in case he makes the particular purchase under consideration. In emotional buying, on the other hand, one is more likely to "act in haste and repent at leisure."

Some years ago an analysis was made of the advertisements appearing in general and women's magazines. Of some 750 advertisements that were classified, 67 percent appealed to emotional motives, 26 percent appealed to rational motives, and 7 percent seemed to appeal to no buying motives at all.<sup>6</sup> Casual observation suggests that these percentages have not changed very much in recent years, which leads to the conclusion that people with things to sell still consider it profitable to appeal to the emotions of their prospective buyers. And this leads to another conclusion: *if* consumers wish to resist the bombardments of salesmanship, they must watch their emotions.

In our complex system of division of tasks, consumer purchasing has fallen largely to the women. While men earn about 80 percent of the money income in the United States,

<sup>6</sup> Copeland, M. T., *Principles of Merchandising*, 1924, p. 185, McGraw-Hill, 1924.

women do about 85 percent of the consumer purchasing. When, as consumers, we "vote with our dollars" women's suffrage comes into its own. Thus it may be said that, in a sense, men's tasks in production are dictated by the whims, fancies, vagaries and other characteristics of women's choices of consumer goods, although the latter will argue that much of their buying actually is done at the behest of their menfolk.

Women as family purchasing agents exhibit certain interesting peculiarities which account, in part, for the high costs of marketing. It is only fair to say at the outset, however, that men might do the family shopping in much the same manner; and perhaps these very peculiarities—if such they really are—permit women to be better family purchasing agents than their husbands. Nevertheless, it can be pointed out that one of the ways to reduce the price of some articles of merchandise, and thus to stretch family income, is to modify or control these characteristics.

In the first place women are concerned with economy in their buying; they insist on quality at a price. This causes them to shop among many stores, to request a large range of styles, colors, materials, and prices among which to choose. Whenever stock in stores becomes low, women shoppers are inclined not to buy at all except at greatly reduced prices, quite regardless of the intrinsic quality of the goods. This habit of buying leads to heavy markdowns at the end of each season, which the merchant can grant without impairing his business only if he has obtained a large margin above cost on his earlier sales. It also leads to heavy inventories which are expensive to carry, and to high cost of clerk service in showing the goods and in keeping the stock in order. If a way could be found to reduce the amount of shopping, the cost of operating retail stores could be reduced and the price of consumer goods could be lowered accordingly. Moreover, because of their concern for economy, it is hard for most women to resist a "bargain," even though they may have no immediate or specific use for the particular commodity. A curbing of the practice of "picking up bargains" might result in fuller consumption programs for many families without any change in their money income.

In the second place, women have very acute sensory development. As a result, things must look, feel, and smell "right" if women are to purchase them. As an illustration we may cite the findings of a psychologist who recently asked 250 housewives to pick the one of best quality out of four pairs of silk stockings which were identical except that three of them were faintly perfumed. The perfume was so faint that it was not consciously recognized as a reason for choice by any of the women. Since the stockings were identical, each pair should have received the same number of votes as being the best quality unless the scent played a part in subconsciously influencing the choices. The findings, which are summarized in Table 61, show that scent apparently did play an important part and that some scents are more influential than others.<sup>7</sup>

TABLE 61  
EFFECT OF PERFUMERY ON CHOICE OF HOSIERY

<i>Scent</i>	<i>Percent Judged to Be Best Quality</i>
"Natural" .....	8
Sachet .....	18
Fruity .....	24
Narcissus .....	50

Thus it appears that women permit the acuteness of their senses to guide their choices even when the particular sensory impression is not directly connected with the use or with any important characteristic of the merchandise. Perhaps men would have reacted in the same way to the same stimulation, but the psychologist who performed this particular experiment doubted that they would. The extent to which merchants and manufacturers have taken advantage of their women customers and have raised the prices of their goods as the result of arousing an immaterial sensory reaction is not clear, but the illustration just given may serve to put shoppers on their guard.

<sup>7</sup> Laird, Donald A., *What Makes People Buy*, 1935, p. 29, McGraw-Hill, 1935.

In the third place, women generally are both ambitious and sensitive. These characteristics account in considerable measure for their continuous attempts to "keep up with the Joneses." If their dresses are not in the latest color and style they feel that other women will talk about them behind their backs. If they do not have some pieces of furniture in the newest mode, or if their car is not of the latest model, they are inclined to be uncomfortable or even jealous. Manufacturers and merchants long have realized this tendency and have flashed before their women customers a constantly changing style show in many lines of consumer goods. This has resulted in crowded attics and in other evidences of goods discarded before their time. Of course people—and particularly women—are interested in change *per se*; they become bored at seeing or doing the same things. Consequently it is not clear how much of the purchase of new styles is due to caring about what other people will say or think, how much is due to boredom with the old, and how much is due to real appreciation of the superior merits of the new. In any case if we could be more "hardboiled" about the first two matters—that is, about sensitiveness and boredom—we could, if we wished, extend our purchasing into other areas instead of merely replacing present goods that are somewhat out of style.

In the fourth place, women are inclined to be both impulsive and credulous. These characteristics result in purchases "to help a poor boy work his way through college" and the like, which may not add directly to the consumption satisfactions of the purchaser's family. They lead, also, to purchases based on inexact and unimportant claims to quality. Patent medicines and mining stock sometimes are sold to women—and to men as well—on the most fanciful of claims.

It is not quite clear which of these peculiarities of women the Chrysler copy writer had in mind when he prepared the advertisement in the *Woman's Home Companion* for February, 1938; perhaps he was aiming at a combination of several of them. Certainly appeal is directed to the desire for economy, ambition, sensitiveness, credulity, and all in a grandly emotional manner. We quote part of the copy:

I've simply got to be smart . . . and approved. And with my limited income, I have to be an expert shopper.

You'll notice I drive a Chrysler Royal. It's a social asset. Not because it's expensive . . . but because it's the smartest car in the low-priced field. Simply stunning inside and out.

I get a tremendous kick out of seeing doormen spring into energetic solicitude when I drive up.

Call me a show-off if you must, but who doesn't like smart clothes and an impressive car? And I've found that one small woman in a big Chrysler is always noticed and approved. That's meat and drink to any woman, isn't it?

Perhaps this is not a good way to sell automobiles, even to women, but at least one advertising manager in 1938 believed it to be.

Of course carelessness in buying is limited neither to women nor to the particular characteristics we have mentioned. Perhaps it is more in evidence with women than with men merely because they do a major part of all consumer buying which is notoriously impulsive and whimsical, while men do a majority of industrial buying which is more nearly rational and objective. In any case, however, more careful selection of merchandise on the basis of its ability to satisfy specific wants unquestionably would increase the real income of many families. Moreover, many women—although by no means all—have spare time that they might use to their own advantage and that of their families in becoming more expert as purchasing agents. To become truly expert in this field would require close attention to the ways in which members of a family want to obtain their satisfactions, on the one hand, and to the want-satisfying qualities of specific goods, on the other. This is no simple task; its proper performance would require continuing adult training of a high order.

Other escapes from the bombardment of salesmanship might be found either in the standardization of merchandise or in the use of professional buyers. In connection with the first of these possibilities it seems certain that we do not want complete standardization of consumer goods in the sense of regimentation; we do not want, that is, everyone to wear uniforms, or to eat the same sequence of meals, or to drive ex-

actly the same car. We might, on the other hand, welcome standardization in the sense of a guarantee of certain specific qualities attaching to every item of merchandise. The present status of standards for consumer goods and the possibility of further development of such standards are discussed later.

Professional buyers for a community already exist in a sense, for retailers maintain that they perform exactly that function—and they do to a degree. One difficulty with our present system of retailing, however, is that the urge for profits leads to a certain advantage being taken of the ignorance of consumers; perhaps we should better say an *uncertain* advantage, for no one knows how much there is of misrepresentation and appeal to gullibility in the retail trade. Perhaps there is not very much, but there is enough, at least, to lead some people to suggest that consumers should combine and hire their own professional experts to test and purchase goods for them.

Consumer co-operative societies are one logical way, perhaps, through which consumers might get the services of better and more disinterested experts to select the retail stocks of merchandise. The use of such organizations to perform the retailing tasks would benefit consumers and enlarge their real incomes provided they employed more disinterested and/or more competent buyers and salespeople than do the present retailers. In this connection it is interesting to note that many retail stores long have conducted training courses for their employees, and that some of them have co-operated with universities in this matter in the attempt to improve the service offered to customers. Moreover, recently the government has made available, through the provision of the George Dean act, vocational training in the field of marketing as an extension of public education. This training may be available both to young people still in the regular public school system and to people already employed in the field of marketing. Perhaps this new emphasis on training will be a direct aid to consumers by supplying more expert advice in stores; at least, it may set a standard for employees that must be improved by any new form of retailing if consumers are to be benefited.

Even though consumer co-operative societies, or some other form of organization, could furnish better judgment in the selection and greater honesty in the representation of merchandise, it is not certain that the real income of the masses of people would increase more rapidly than under the present system of retailing. This is so because, as someone has truly said, "the progress of civilization consists primarily in the multiplication of human wants. If you want a stagnant civilization you have only to destroy the influences that cause these wants to multiply." And intensive salesmanship in the effort to make individual profits for the seller certainly has been a strong force in the multiplication of human wants. Remove it, and you are not quite sure what the result will be. Perhaps consumer co-operatives can *lead* people to better living more effectively than the profit-seeking retailers can *drive* them. The results of such a movement will depend in large measure, however, upon the type of people to whom specific jobs in retailing are given. Consequently, if consumer co-operative societies should become common, the selection of personnel would be the matter of first concern to the consumer rather than, as at present, the selection of goods.

There is another way, however, in which many people feel that the present retailers give inadequate service. Consumers generally are not well-informed concerning the quality of competing brands of merchandise, and it is felt that retailers sometimes mislead consumers rather than inform them correctly about quality. In the first place, many goods are so complex that the ordinary person does not even know what criterion to use in judging quality. Hosiery, for example, may be either sheer or durable. A particular retailer may emphasize the sheerness without informing the prospective buyers of lack of durability. Perhaps the consumers' own representatives in a consumer co-operative society may advise consumers more completely about the many different characteristics of their goods.

Some of the present retail stores have recognized the possibility of gaining and holding the good-will of their customers by giving full information concerning goods. Macy's store in

New York, for example, has established a Bureau of Standards which in co-operation with the publicity department of the store is issuing a large amount of factual information on all sorts of merchandise. Some of this material is being broadcast by radio and is also being distributed to a wide mailing list in mimeographed form. Recent releases from this store have covered a wide range of articles including velocipedes, artificial flowers, knives, bedspreads, furniture polish, moth preventives, paints, carpets, canaries, children's shoes, and a host of other things. The information is given in the question and answer form. Two typical illustrations are given to show the type of information that this particular retailer is attempting to give to consumers.

### THE CONSUMER QUIZ CLUB

April 26, 1938 . . . WOR . . . 12:45 to 1:00 P.M.

#### A. MEN'S SWEATERS

**QUESTION:** *What is the advantage of a full-fashioned sweater?*

**ANSWER:** A full-fashioned sweater is shaped to fit the body and shoulders as a full-fashioned stocking is shaped to fit the leg. Full-fashioned sweaters are machine knitted according to definite measurements. Tubular-knit sweaters are knit by machine and do not follow detailed measurements.

**QUESTION:** *Which is better for knockabout wear, a soft woolen sweater or a hard-finished worsted sweater?*

**ANSWER:** A hard-finished worsted sweater, because it is made from yarns which are spun from combed long staple fibers and tightly twisted. When worsted yarns are knitted very closely together, the result is a durable sweater. Woolen yarn, on the other hand, may be loosely spun, have a fuzzy appearance and in addition be softer to touch. It does not, however, wear as well as the worsted yarn.

**QUESTION:** *How should a wool sweater be mended?*

**ANSWER:** A wool sweater should be darned with wool yarn. Many women mend wool sweaters with threads. This is very unsatisfactory because even though the thread matches the wool, it will show up because of the difference in texture, and it usually does not hold as well as wool yarn. Many stores have a mending service in their sweater departments which do expert mending for a reasonable charge. It will pay in the long run to take advantage of this service.

**QUESTION:** *How should an all-wool sweater be washed?*

**ANSWER:** Dissolve neutral soap in water of wrist temperature. Use enough soap to produce rich suds. Wash, then rinse in clear

water. Place the sweater between two towels and wring free of excess moisture. The sweater should then be shaped to the original size and dried flat. Do not dry it directly in the sun.

## B. BEDSPREADS

**QUESTION:** *Does the fact that candlewicking is done by hand make a candlewick bedspread more expensive than a chenille?*

**ANSWER:** No. The price is not determined by the process but by the quality of the work. You will find low-priced candlewick bedspreads and low-priced chenille bedspreads as well as expensive candlewicks and expensive chenilles.

**QUESTION:** *Why do punchwork bedspreads cost more than chenille bedspreads?*

**ANSWER:** Punchwork is much more difficult to produce than chenille. Chenille looks as if a great deal more work was put into it because it is usually in all-over patterns, while punchwork designs are usually scattered over the surface. The intricate designs and raised effects of punchwork require greater skill and more time and consequently you must expect to pay more for a punchwork bedspread than a chenille.

**QUESTION:** *Do chenille bedspreads shed?*

**ANSWER:** Yes. All chenille bedspreads shed slightly. When the tufts are laundered for the first few times, the yarns are fluffed up and lint results. The lint is bound to fall off when the spread is shaken. When a white spread sheds lint, it is usually more noticeable. In any case, shedding usually stops after the first three or four tubbings.

**QUESTION:** *What is the best way to wash a chenille or candlewick bedspread?*

**ANSWER:** Wash with any good grade of soap, soap granules, or soap flakes. Rinse thoroughly and hang to dry. No ironing is required. If you wash a bedspread in a large washing machine, put it inside a net to keep the tufts from being pulled out because of the friction developed in large washers.

THESE FACTS HAVE BEEN VERIFIED BY MACY'S BUREAU OF STANDARDS<sup>8</sup>

There are other cases of the same sort of effort to give sound buying information to consumers. As one other illustration, the Grocery Trade Publishing House has issued a book entitled *Food Buying Today*, which gives a great deal of information concerning the things to look for in purchasing food commodities. It undertakes to answer such questions as

<sup>8</sup> Many other items have been discussed similarly by Macy's. The Consumer Quiz Club material will be sent to anyone on request.

the following: What are "milk-fed" chickens? Is it to the advantage of the consumer to buy large-sized or small-sized prunes? What is the difference between canned tuna labeled "white meat" and tuna labeled "light meat"? Why are some shrimps canned in brine and some canned dry? How do cold storage eggs compare with fresh eggs? These are samples of the many questions asked and answered. The use of such materials as these may well make people much more competent in their personal buying.

There are still other ways in which individual consumers can improve the efficiency of their purchasing without waiting for any fundamental change in marketing institutions. To a growing extent, for example, we buy in very small quantities and this practice raises the cost of retail service. We insist on elaborate store furnishings, on attractive packages, on liberal return-goods privileges, on free delivery and delayed payment, each of which adds something to the price we pay for goods.

If a customer orders a 2-pound paper bag of sugar delivered and charged, the retailing costs are almost as much as though the order had been for a 100-pound sack. Consequently, as a percentage of the unit price these costs on small-unit purchases are very much more than on large units, and the total costs of retailing 100 pounds of sugar in 2-pound lots is almost fifty times as great as in the single sale of a full sack. Perhaps this is an extreme case, but every merchant performs many transactions daily that approach it in wastefulness.

Another illustration, when a woman phones a department store that she wants to return some merchandise sent out previously on approval, at least a dozen entries must be made in the store's records. These entries include a pick-up order issued to the delivery department, a change in the customer's charge account, adjustment of the clerk's sales record and in the inventory record of the department. Moreover, the commodity requires considerable rehandling, including the pick-up itself, return of the article to the department, frequently re-marking, and occasionally cleaning or repairing. Each of these things requires time and costs money. The total of costs

so incurred by a store is included, of course, in the total of prices charged for the merchandise that stays sold. If more accurate original selections could be made, the prices of goods could be lowered in accordance with the lessening of cost, and consumers' real income could thus be increased.

The savings that are possible to consumers through attention to details of the sort just illustrated appear to be very large in total. Each individual case involves a balancing of money cost that might be saved against the trouble of buying in a different way. Perhaps it may even be suggested that it might be wise to spend more time and pains in buying instead of in golf and contract bridge.

#### CARRYING OUT CONSUMERS' CHOICES

That old slogan, "Caveat Emptor," or "Let the Buyers Beware," is still important in the buying of goods in our country, and in late years it has taken on a new significance. "The buyer may still beware, but he no longer knows of what he must beware." For example, as the processing of foods developed with increasing use of containers, the opportunity to adulterate such products became greater. Now it is comparatively easy to cover up defects in commodities and even to misrepresent the actual contents of packages. At present there is little chance to know the contents of canned goods except through sampling, which is expensive and which requires both care and a knowledge of quality beyond that possessed by the average consumer. One is no longer able to judge either quality or quantity by the five senses of touch, taste, smell, sight, and sound, particularly if these have been dulled by "the ballyhoo of the market place."

Moreover, with new developments in science and technology, the number of different commodities offered for sale has increased rapidly. Adding to the maze confronting the consumer is the pressure of present-day business methods which requires that new items and articles must appear constantly on the market.

What guarantees have we, then, as to quantity and quality and their relation to price? What guarantees may we reasonably expect? What information is available to the con-

sumer, how reliable is it, and how should he take advantage of it?

If consumers could rely upon what we have called "the ballyhoo of the market place," purchasing would be simple and the lot of the consumer would be both easy and pleasant. Current advertisements tell us, for example, how to stay beautiful—or even how to become beautiful if we are not so naturally—how to eat, dress, drive, run a furnace, furnish a home, improve one's mind, take the tedium out of dishwashing, all with a minimum of demand on one's pocketbook. Certainly, if one believes the advertisements, there is no excuse for any woman having other than a perfect skin, regardless of age; in the *Woman's Home Companion* for February, 1938, the manufacturers of six soaps and of twelve creams admit that the use of their products will insure this result. What makes us somewhat skeptical about these advertisements, however, is the thinly veiled implication that appears in most of them that there is only *one* product capable of insuring eternal youth to the skin. Since they cannot all be right in this implied superiority, one wonders whether any of them actually can turn the trick.

To be sure, many manufacturers and merchants have combined in a long and somewhat successful campaign for truth in advertising. This effort has been supported by many publishers who refuse to accept false advertising. Some publishers have gone further to establish testing bureaus which issue labels of approval and recommendation for tested merchandise; the Good Housekeeping Bureau and the Jean Abbey seal of recommendation (*Woman's Home Companion*) are cases in point. "Whenever you see this distinguishing label on merchandise offered, in advertising or sales literature, you may be sure that both the product and the claims made for it have been carefully examined and fully approved." And yet the fact that the interests of the manufacturer and the publisher are so similar perhaps justifies the persistence of a wee bit of skepticism of these "guarantees."

Perhaps the oldest form of consumer protection is word-of-mouth advertising. People rarely converse long before the discussion turns to the merits of favorite brands of golf clubs,

or whiskey, or face creams, or radios, or washing machines, or canned tomatoes, or curtain material, or something equally homely. Both the good and the bad points are paraded in these free-for-all debates and the results of use under home conditions are made known. Merchants as well as merchandise are evaluated. Certainly this informal sharing of experience is a powerful force in consumer education, on the one hand, and in the direction of industry on the other.

In addition to the special pleadings of manufacturers and merchants, and to the informal exchange of experiences among consumers, we have some formal organizations of consumers in their own interests. Consumer co-operative societies have already been mentioned; they perform all of the marketing functions, and they are very important in England and some parts of Europe. In the United States they still have not passed the "healthy infant" stage, but they may have an important future.

This movement had its modern beginning in 1844 when a group of cloth weavers in Rochdale, England, formed a consumer co-operative association. Since then it has had a wide and substantial growth in Europe, especially in Great Britain and the Scandinavian countries. In the United States co-operative societies still do but little more than one percent of the retail business.

A report has recently been made by three of England's leading professors which throws considerable light on the movement in Great Britain.<sup>9</sup> Their report suggests that the consumers' co-operative movement seems to have its limitations. In Great Britain after more than 90 years the co-operatives do less than 11 percent of the total retail trade. Despite the fact that co-operative capital is now over \$1,500,000,000 and its annual sales are even greater, the movement is not entirely sound either in underlying philosophy or in management. The criticism is made that it does not know where it is going. It has not been able to work out a new philosophy. It is following a political policy that is not in-

<sup>9</sup> Carr-Saunders, Florence, and Peers, *Consumer Co-operation in Great Britain*; George Allen and Unwin Ltd., 1938. Cf. Bader and Wernette's "Consumer Movements and Business" in the *Journal of Marketing*, July, 1938, p. 6.

fluent; its educational work is conventional and without imagination; its press is dull and hard to read; it does not attract and keep the best brains and it is unwilling to spend money for the best technical and professional services. The co-operatives both in wholesaling and retailing do not lead, they simply follow, which may result from the decentralized democracy which characterizes the movement in Great Britain. This criticism would suggest that the high hopes entertained recently of the part this movement would play in economic redemption of mankind are not going to be fulfilled in the immediate future.

Equally important, perhaps, and more distinctly American are the several consumer groups that have been organized to test commodities, establish grades, and advise their members concerning the quality of various articles. These organizations generally limit their activities to research and recommendation, leaving the actual buying and selling to others. Oldest of the group is Consumer's Research, Inc., for which Stuart Chase gave the early publicity through his books, *The Tragedy of Waste*, *Your Money's Worth*, and so on. Consumers' Union of the United States, Inc., is a similar organization, with 50,000 members and a recently opened Pacific Coast branch in San Francisco. Among the aims of these organizations may be listed: a stronger food and drug law, better merchandise, established standards, grade labeling, lower prices, and truthful advertising. To these aims, Consumers' Foundation has attempted to add harmonious action with labor, agriculture, and industry, but it is not clear whether the Foundation can serve as an over-all organization to increase money incomes of producers and to improve the position of consumers at the same time. All of these consumer organizations are relatively young. The depression of the 1930s gave them considerable impetus, and they merit careful attention in the future.

The government has supplemented these efforts of private groups of consumers with various noteworthy attempts at organized protection. We have, for example, national standardization of weights and measures and a National Bureau of Standards. A glance at the table of contents of a pamphlet

issued by the Department of Commerce outlining the services and the extent of the Bureau of Standards' work shows the tremendous field it covers and the assistance which it might offer the buyer. Such diverse products as garden hose and automobiles, timepieces and heating appliances, shoes and refrigerators, tableware and motor fuels, are covered. In the section devoted to textiles alone, information on carpets, cotton textiles, dress fabrics, drycleaning solvents, gloves, hosiery, laundry, "winter damage," silk textiles, underwear, water-proofed fabrics, window sash cord, and wool textiles, is given. Unfortunately, however, most of the information on specific brands is not available to private purchasers.

There is also the Federal Standard Container Law, which establishes official sizes for many merchandise containers used in interstate trade, but it is the states' problem to regulate the degree to which these standards are actually enforced in intrastate commerce. The State of California, for example, does have a law regulating quantity, but many states do not provide such a consumer aid and a *basket* of apples sold in a state in which the basket is packed may be a very small basket indeed. Young people as present consumers and future buyers may do much toward spreading interest in the passing of such laws in their respective states.

On April 13, 1937, the United States attorney for the District of Massachusetts, acting upon a report by the Secretary of Agriculture, filed in the district court a libel praying seizure and condemnation of 44 cartons of raisins at Pittsfield, Massachusetts, alleging that they had been shipped in interstate commerce on or about March 20, 1937.

"On May 10, 1937, no claimant having appeared, a decree of forfeiture was entered and it was ordered that the product be destroyed."

Behind this technical language of the court is the story of the Food and Drug Administration at work.

In an eastern city, someone became ill from eating raisins. The case was reported. Food and Drug men got on the job. They analyzed raisins taken from the same box as those which had caused the illness, and also raisins from an unopened box bearing the same identification marks and purchased at the

same time. The fruit in each box had an alarmingly high hydrocyanic acid content.

Job number one was to find out where these raisins came from; second, to what places they had been shipped in the country; third, to remove all products which contained the acid from the market; and fourth, if possible, to remove all possibilities of this type of "accident" happening again.

Food and Drug men traced the fruit from eastern sources across country to the port of San Francisco, and discovered that these particular boxes of raisins were a part of a large shipment of dried fruit that had been tied up on the docks during a maritime strike. When released, as a precaution against insect infestation, the entire shipment had been treated with hydrocyanic acid, and had remained in contact with it for varying periods. As a health measure, hydrocyanic acid is often used as a fumigant on incoming vessels. It is also effective in destroying insect infestation. Federal agents tracked down all shipments of this fumigated fruit, examined some 850 samples of it and seized approximately 280,000 pounds of raisins.

Then came the follow-up work. Officials visited individual packing houses and drying yards to investigate their fumigating practices. Fifteen out of one hundred and four concerns admitted using hydrocyanic acid on fruit which was held in storage before shipping. The Food and Drug Administration has long maintained that "the use of a highly toxic fumigant on foods is always hazardous because of the possibility of human carelessness and the many unexplored possibilities of retention of the gas by the food under some conditions." As a result of the investigation, the use of hydrocyanic acid as a fumigant has been discontinued by the dried-fruit packing industry.

This raisin story is only one of the high spots of the work which engaged the Food and Drug Administration in the past year.

The Federal Government brought 1700 cases bearing on adulteration and misbranding of food and drugs to court this year. Of these, 1355 dealt with foods, 345 with drugs. "Fines varied from sums as low as \$1, \$2, and \$5 to a maximum actu-

ally paid of \$1500. Much higher fines were imposed in several cases but were remitted in large part by the courts. Three jail sentences imposed in connection with second offenses were also suspended and the defendants placed on probation.”<sup>10</sup>

These are but a few of the activities of the Food and Drug Administration in the past year—activities which have increasingly provided the consumer not only with protection but also with valuable information as well since its birth with the passage of the Federal Food and Drug Act.

However, many people feel that the powers of the Food and Drug Administration are too limited, for they extend only to cases when foods and drugs are misbranded or adulterated. Many different brands of canned fruits and vegetables, in the same size cans, for example, sell at different prices. One size can of peas will sell at 15¢, another at 17¢ while a third can of the same size will sell at 19¢. Why the difference of two cents for the same size can? How do the labels read? The 15¢ can is labeled standard, or Grade C, which is the United States certification, meaning that the peas are large, mature, and starchy. The 17¢ can is labeled choice, or Grade B, meaning that the peas are medium in size and second in quality. The 19¢ can is labeled Fancy, or Grade A, which means that the peas are tiny, tender, and succulent. The labels also give the net weight of the contents of each can *but* no idea is given as to how much of the weight will be peas and how much will be liquid. For intelligent buying this information should be available and the powers of the Administration might be broadened to include supervision over the reporting of these matters.

Furthermore, the act (including the McNary-Mapes Amendment) covers only certain commodities. For example, at present the manufacturer of woolen blankets is required to put at least 5 percent wool in a blanket marked part wool. But the question is, How much warmth is there in that 5 percent wool? The “whole truth and nothing but the truth” should be required on the label.

<sup>10</sup> Data for these paragraphs taken from the *Consumer Guide*, November 29, 1937, pp. 3 and 5.

Again, the act does not regulate the adoption of misleading standards. For example: olives are graded as Medium, Large, Extra Large, Mammoth, Giant, Jumbo, Colossal, and Supercolossal; mirrors are graded AA, A, 1, 2, 3, in decreasing order of excellence, grade 1 being actually third grade; and U. S. No. 1 cheese, which would naturally be assumed by the consumer to be top quality, is actually third grade.

Another limitation to the effectiveness of the Food and Drug Act is that under the Constitution of the United States the federal government has power to regulate only in cases of interstate and foreign commerce. And although practically every state has a food and drug law, they differ in efficiency. Few states have even minimum standards for several kinds of food products. The result is that a consumer going from one state to another is confronted with changing standards and requirements, which fact tends to hamper the wise use of income.

The Federal Meat Inspection Act likewise protects the consumer from meat which has failed to pass federal inspection only if it has entered into interstate commerce. Over the radio and in magazines and newspapers the consumer is warned to buy meat according to government grades. What about the meat from local packers not subject to federal inspection?

There is in addition to the federal aids some private regulation of quality. The American Standards Association, for example, establishes standards and publishes them, but acceptance of them is entirely voluntary, which of course limits their effectiveness to the consumer. Other private organizations which are interested in the consumers' problems and which will aid him include the National Better Business Bureau and local bureaus, the American Medical Association, the various co-operatives, the American Home Economics Association, the Household Science Institute, the American Dental Association, the American Standards Association and Underwriters' Laboratories.

Trade practices which are unfair *to the consumer* are regulated to some degree, although much more might be done. There is a certain small amount of federal and state regulation as well as private group regulation of misleading adver-

tising. Over 20 states have passed the bill sponsored unofficially by *Printers Ink Magazine* against misleading advertisements. Gratifying to consumers and to honest business is the decision of the Supreme Court in 1937 confirming the Federal Trade Commission's viewpoint on advertising. The decision indicates that advertisers will be held to more rigid adherence to fact than ever before. The case in which the court backed the commission was that of the Standard Educational Society of Chicago, which had offered "free" a set of encyclopedias with the purchase of a loose-leaf supplementary service which kept the information in the encyclopedia up-to-date. The commission, in a cease and desist order against the company, had contended that the price of the encyclopedia was included in the cost of the service and therefore was not "free."

The company then took the case before a circuit court of appeals which ruled that it could not "take seriously" the fact that purchasers would be misled by the advertisement into believing that only the supplementary service would be paid for, and stated, "Such trivial niceties are too impalpable for practical affairs; they are will-o'-the-wisps which divert attention from substantial evils."

The Supreme Court in upholding the trade commission rebuked the lower court as follows:

The fact that a false statement may be obviously false to those who are trained and experienced, does not change its character, or take away its power to deceive others less experienced. . . . Laws are made to protect the trusting as well as the suspicious. The best element of business has long since decided that honesty should govern competitive enterprises. . . . To fail to prevent such evil practices would be to elevate deception in business and give it the standing of dignity and truth.<sup>11</sup>

Also most cities have ordinances against unscrupulous and fraudulent selling methods. Better Business Bureaus investigate new sales units and warn the buying public against fakes and quacks. In at least one city in Minnesota a splendid service to consumers is provided by the Better Business Bureau. Every house-to-house canvasser, be he a research worker or

<sup>11</sup> *National Consumer News*, January, 1938, p. 19.

a Fuller Brush Man, must apply to the Bureau, presenting his credentials, in order to get a small card which authorizes him to "work the town" for a certain limited period of time. Every person is warned not to listen to any solicitor who has not such a card. Many fly-by-night schemes are thus prevented from being born and both time and money are saved for many consumers.

The most recent legislation designed to protect the consumer is the Lea-Wheeler Act, passed by Congress and signed by the President in March, 1938. This act gives to the Federal Trade Commission certain new powers to control false or misleading advertising. Under it the FTC is empowered: (1) to proceed against any unfair trade practice without first having to establish that the practice is injurious to competition; (2) to back up its hitherto anemic "cease & desist" orders with a \$5000 fine on violators; (3) specifically, to guard over the false advertising of food, drugs and cosmetics by the same cease and desist order procedure it follows in any unfair trade practice. Where the commodity advertised may be injurious to health, the FTC can issue a temporary injunction restraining the dissemination of the advertisements, and can exact criminal penalties beginning at \$5000 for the first offense.

It is too early to determine how the new law will work and there is lack of agreement in the forecasts. Consumers' Union said to its members just before the passage of the bill:

It should be amply clear that the enactment of the Lea-Wheeler Bill will not provide the consumer with the protection against false advertising which he needs. CU strongly urges consumers and consumer organizations to wire the President, recommending that he veto the bill.

On the other hand, the FTC says that its procedure will be, if anything, both easier and more drastic. Previously it has been necessary to prove injury to competition. Now, in contrast, all that is necessary is to show injury to the public (meaning consumers). In any case, the first result of the new law is that many advertisers are going voluntarily to the FTC with their advertising before it is run in order to hasten the establishment of policies.

Because of the present lack of information and guarantee of quantity, quality, and trade practices, the consumer tends to buy the most expensive brands, believing that the commodity which costs the most must be the best. Actually, however, price may be a poor indication of quality. Advertising manufacturers and merchants often try to make people believe their brand is worth more than those of their competitors. As already suggested, for example, Camel cigarettes are sold in huge volume at a higher price than Wings and some others in spite of the fact that many who smoke them cannot distinguish between the brands. Not only do brands of similar quality sell at differing prices, but even the prices of identical brands vary greatly. For example, a brand of cooking oil was priced by one neighborhood store at 39¢ a quart and by another, one block away, for 65¢ on the same day. A shopper in a large city recently priced an identical chair, in three different stores in the city, at \$48, \$63, and \$78. To be sure, in this case there were some differences in "services," such as credit arrangements, but in the main this difference in prices can be accounted for only by the differences in reputation and prestige of the stores. These things could have no effect on price, of course, if buying were done on a rational basis and if consumers could judge the quality of merchandise. An even clearer case in which price failed to be a guide to quality is that of a recent purchaser who found an identical polo shirt priced differently in the basement, the men's department, and the boy's department of the same store. Moreover, the consumer has no information concerning "sale prices," and has little recourse when she buys a dress in one store "marked down" to \$29.75 only to find that the dress actually retailed before the sale in that store and in other stores on the avenue at \$26.50. Such price variations and discrepancies are major causes of "shopping"—the comparing of commodities—which we pointed out above contributes greatly to the cost of retailing; and with such price variations, all the shopping in the world will not assure the consumer that she is getting the best value. Certainly, a wiser use of the consumer's income would result from more uniform and dependable retail prices.

Quality in merchandise is difficult to measure; so difficult,

in fact, that it is not certain that any organization, governmental or private, can ever make a good job of it. Take so simple a thing as a can of peaches, for example. The highest commercial grade of canned peaches contains a heavy sugar syrup, which adds little to the food value of the peach and may make it less well suited for use in salads. Moreover, color, flavor, firmness, and texture are all elements of quality in peaches, but there is no *scientific* way to combine these separate things into a single measurement of quality. If you believe it easy, just try to compare several brands of canned peaches, see if you can rank them in the same order on second taste, and then tell *why* you like one better than another! Then try to say how much difference in price is justified by the differences in quality; how much more, that is, you would be willing to pay for the one ranked first than for the ones ranked second, third, or fourth. The money value of quality differences is hard for a single individual to set, but when many people "vote with their dollars" in an open market, they may hit the true value to society as closely as would any other method.<sup>12</sup>

#### THE RISE OF A CONSUMER MOVEMENT <sup>13</sup>

When consumers become convinced that prices are being held unduly high by manufacturers or merchants, they may take direct action. Consumer boycotts are of recent origin, but they can be very effective and may grow in importance. Labor unions have used them for a long time by boycotting goods offered for sale not bearing the union label. An attempt at boycott by consumers, poorly organized, was made in 1920 when the price level reached a high point. Among other activities, New York City saw an overall parade down Broadway early in the year. In England in 1922 a middle-class union was formed to fight high prices. Since then sporadic efforts at organized boycotts have been made and where determination has been strong they have accomplished their

<sup>12</sup> For a discussion of determining quality of canned foods see Vaile and Child, *Grocery Qualities and Prices*, Univ. of Minn. Press, 1934.

<sup>13</sup> Much of the material in this section is adapted from an article on "Consumer Movements and Business" by Bader and Wernette appearing in the *Journal of Marketing*, July, 1938, pp. 3-15.

purpose. Among recent examples are: The Amarillo, Texas, case of proposed boycott of telephones for lower rates; bread and rolls boycott in New York City, 1934; the famous meat strike in Detroit, 1935; and the Kosher meat strike in New York City in 1937. Well-organized boycotts are highly effective, but are not used greatly because of the difficulty of effective organization and because the results attained may be at too great a cost for those participating.

In recent years many women's and other organizations that were formed originally for other purposes, have joined their efforts in behalf of people as consumers. A recent estimate of the Crowell Publishing Company suggests that more than 5,000,000 women are being reached by consumer educational material and are more or less active in efforts to secure legislation favorable to consumers.<sup>14</sup> Many of the groups interested in legislation have united forces in the Women's Joint Congressional Committee consisting of:

	<i>Approximate Membership</i>
American Association of University Women.....	55,000
American Dietetic Association.....	.....
American Federation of Teachers.....	.....
American Home Economics Association.....	12,000
American Nurses' Association.....	131,000
Council of Women for Home Missions.....	.....
Girls' Friendly Society of the U. S. A.....	.....
Medical Women's National Association.....	.....
National Board of the Y.W.C.A.....	.....
National Congress of Parents and Teachers.....	1,877,073
National Consumers' League.....	3,000
National Council of Jewish Women.....	48,000
National Education Association.....	(several hundred thousand)
National Federation of Business and Professional Women's Clubs.....	62,000
National League of Women Voters.....	48,000
National Service Star Legion.....	.....
National Women's Trade Union League.....	.....
Women's Homeopathic Medical Fraternity.....	.....

<sup>14</sup> *Advertising and the Consumer*, The Crowell Publishing Co., 1937.

In addition to these there are the following who may be moved to aid in securing action:

	<i>Approximate Membership</i>
American Association for Adult Education.....	1,100
Consumers' National Federation .....	.....
Federal Council of the Churches of Christ in America	20,000,000
General Federation of Women's Clubs.....	2,000,000
League of Women Shoppers .....	25,000
National Council of Catholic Women.....	1,000,000
National Women's Relief Society .....	69,700
International Garment Workers' Union .....	250,000

It will be noticed some of these groups contain men, and, if full strength is given to all of them, the number affected may reach nearly a third of the total population.

This group of women may well become a strong force in obtaining support for legislation of interest to women and to consumers generally.

These groups are not yet as closely organized as they could be and therefore their effectiveness is not what it may possibly become, but even at the moment the movement must not be treated lightly. Members of many of these organizations are leaders in other organizations and as such may be powerful factors in crystallizing consumers' thoughts along specific lines.

Consumer co-operative societies, consumer-organized testing bureaus, and the over-all type of organization that the Consumers' Foundation hopes to become, have all been mentioned earlier. They are important parts of the consumer movement. There are two other over-all groups that are somewhat similar to the Consumers' Foundation in aims. These are: (1) The Consumer-Retailer Relations Council—a forum in which consumers and retailers can consider their mutual problems in accordance with the best interests of both. It grew out of the work of the Advisory Committee of Ultimate Consumer Goods of the American Standards Association and a consumer relations program of the National Retail Dry Goods Association. The present members are the American Home Economics Association, American Association of University Women, General Federation of Women's Clubs, National Re-

tail Dry Goods Association, American Retail Federation, National Association of Better Business Bureaus, Inc., as well as certain individuals who have made significant contributions to the work of the Council. (2) Consumers' National Federation, headed by Helen Hall of Henry Street Settlement. This organization is apparently aiming to be a catalytic agent to fuse all organizations interested in the consumer for united action at least with respect to consumer relations. At the moment, apparently, it is primarily interested in securing the establishment of bureaus or departments of consumers both in state and federal governments.

The purposes of each of these over-all organizations are much the same. Perhaps some day the three will pool their efforts and finally accomplish their aims which may be summarized as follows:

To promote the use of informative labeling.

To promote the use of informative advertising.

To promote informative salesmanship.

To encourage practices which will tend to reduce abuses of such privileges as customer accounts, returns, deliveries, and similar services.

To foster local co-operation between stores or groups of stores and local consumer groups.

To promote the use of adequate standards for consumer goods.

To promote the use of uniform terminology in describing consumer goods and services.

To develop and promote the use of suggested codes of ethics for both retailers and consumers.

Organizations with aims such as these seem to offer a sane approach to the solution of many problems of consumers. They merit the attention and, perhaps, the support of thoughtful people.

Another phase of the consumer movement is apparent in the growth of formal education in this field. Home economics courses with emphasis on "buymanship" are being offered in an increasing number of secondary schools and colleges, and courses in the economics of consumption are now offered by many colleges and universities. The present apex of this movement is, perhaps, the Institute for Consumer Education recently endowed by the Sloane Foundation at Stephens Col-

lege, Columbia, Missouri. The aim is to make this Institute a national center for research and education in consumer problems.

The federal government has joined in the general movement for consumer education. Both research and publicity are undertaken by various departments and bureaus, including the National Resources Committee, the Bureau of Labor Statistics, and the Department of Agriculture. The work of the latter department is, perhaps, both of longer standing and greater present importance than the others. Some of its most important features may be summarized as follows:

1. Consumers' Council of the Agricultural Adjustment Administration, which publishes *Consumers' Guide*. This periodical has a circulation of about 100,000 and is furnished free. The reader gets 20 well-written pages of information on products, prices, and consumer co-operative movements, and a bibliography of current consumer publications. It is of wide influence since it is used for teaching purposes both in schools and among consumer groups.

2. Home Economics Bureau which conducts many studies on diets, textiles, budgets, and so on. These studies are reported in pamphlets which are available at little or no cost. The services of the Bureau are widely used, more than 150,000 inquiries being received annually.

3. Agricultural Extension Service, the women agents of which carry on consumer education work in small towns and rural communities.

4. Food and Drug Administration which enforces the Act of 1906 and amendments thereto. Some of its work is to educate producers to conform to the act and to show consumers how to read the labels which inform as to the contents of packaged foods and drugs.

Until quite recently, at least, protection and education of the consumer has been a minor incident of government. Even today little by way of permanent and constructive work has been done. Is it, perhaps, too soon to suggest a Federal Department of the Consumer to correspond to the Department of Commerce and the Department of Labor? It would be the work of this department, for example, to regulate, control,

and investigate merchandise qualities, trade practices, and price policies affecting the ultimate consumer. This department would also be responsible for the periodic report concerning employment conditions which was suggested in Chapter 12. The ramifications of such a department would fill another book the size of this one and we can do no more than suggest it as a possible means for centralizing all present efforts in the interest of consumers and for developing much-needed consumer protection and education.

The establishment of official Consumers' Bureaus under government support and direction is already a reality. Michigan established such a bureau in 1937 and the New York legislature has considered one for that state. It is proposed that the New York bureau would be given power to regulate qualities and conditions of trade in consumer goods, and that it would also propose state food and drug laws. It would be given power to prevent false advertising and misleading labeling; establish minimum standards of identity for goods and prescribe weights, measures and standards; prevent fraud and misrepresentation; investigate matters affecting the standard of living and the high cost of living of the people; educate the consumer; attack the problem of consumer credit and eliminate usury by setting up maximum interest rates; constitute itself the Consumers' Counsel before rate-making and regulating bodies; represent consumer interests before legislative and administrative bodies; and stimulate non-profit consumer co-operatives.

If these various parts of the consumer movement continue to grow and to gain importance, business methods will have to be modified somewhat to meet consumers' demands. The combined force of consumer co-operatives, consumer testing bureaus, consumer departments in state and federal governments, consumer lobbies, consumer education, and consumer attempts to show laborers and employers the mutuality of their several interests, must lead eventually to a clearer understanding of the proposition that consumption is the purpose of all economic activity and that production is but a means to that end.

Income must be produced; but income, after all, lacks sub-

stance except in consumption. Perhaps the consumer movement, in the combination of its phases, can so clearly express the desires of people for specific goods and services that the wheels of industry will be built and turned more nearly in accord with consumer demand. Whether the movement expresses itself through the police power, or government operation, or consumer co-operation, or testing bureaus, or consumer education, or boycotts is, perhaps, of little moment. Maybe it will continue to use all the tools that it can put its hand to. As a result of continued consumer pressure in many forms, however, it may well develop that total consumption income is increased; that less people are in want of bacon, orange juice, shoes, tennis rackets, gasoline, medical care, electric ranges, or whatever it is that people want their consumption to consist of; and that the quality of the wants themselves will have risen to a new high level.



## APPENDIX A

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- Consumer Purchasing*—Suggestions for Club Programs—Prepared by Evelyn H. Roberts, College of Home Economics, State College of Washington, Pullman, Washington, 1934.
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- The Marketing System and the Consumer*—Radio Talks by Hazel Kyrk, Department of Home Economics, University of Chicago, 1934.
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- Readers' Guide to Periodical Literature*—Consult your public libraries for current magazine articles.
- Bulletins on Buymanship and Household Management*, prepared by the Household Finance Corporation, 919 N. Michigan Avenue, Chicago, Illinois.

*Series of Pamphlets Dealing with the Economic and Social Organization of America*—Prepared by the Public Affairs Committee, National Press Bldg., Washington, D. C.

*Series of Booklets Edited by the Consumer Division of the Crowell Pub. Co., 250 Park Avenue, New York City:*

1. Source of Information Available for Consumers from Government Bureaus, Educational Groups and Advertisers in *Woman's Home Companion*, Consumer Division, Anna Steese Richardson, Director.
2. Consumer Relations, a study course compiled for the Consumer Division of the Crowell Publishing Company by Anna Steese Richardson, Director.
3. The Consumers' Debt to Advertising, written for *Woman's Home Companion* Program on Consumer Relations, by Ernest E. Calkins.
4. The Consumer in the Retail World, by Lois B. Hunter.
5. Do Consumers Get What They Pay for in Foods?, by Paul S. Willis, Pres. of Asso. Grocery Manufacturers of America, Inc.
6. What Business Wants to Tell Mrs. Consumer, by Lois B. Hunter.
7. Serving the Consumer, by Lewis W. Waters, Vice Pres. in Charge of Research, General Foods Corporation.
8. The Canned Food Label and What It Represents, compiled by National Canners Ass'n, Washington, D. C.
9. What About Finish of Fabrics—Cleaning and Laundering?, by Constance Talbot.
10. Staple Fabrics and How to Know Them, by Constance Talbot.
11. A Primer on Rayon, by Nelle E. Nordstrom.
12. Accessories Which Are Necessities, by Gladys C. Barnard.
13. Buying Facts About Furs and Jewelry, Gladys C. Barnard.
14. Wheat and Its Flours; Milling, the Oldest Food Process, Donald D. Davis, President, General Mills, Inc.
15. Milk for the Millions, by Mabel G. Flanley, Director, Consumer Information Service, The Borden Company.
16. The Costs the Consumer Carries, by Nelle E. Nordstrom.
17. Romance of a Lamp Bulb, by Mercedes J. Hurst.

## APPENDIX B

### AN OUTLINE OF THE FIELD OF CONSUMPTION

“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 for promoting that of the consumer.” Adam Smith.

If we accept this statement of the dean of early economists, the field of consumption must comprise all of economic activity. Consequently, any complete survey of the field must be broad in its outline and detailed in its analysis. It is obviously impossible for any one book or course to cover the entire field and, certainly, the authors of the present book make no pretense to have done so. Perhaps it will be helpful, therefore, to give some general schema for the entire field.

One possible series of major headings for the entire field is given below. The present book touches only lightly on sections I, II, III, and V of this series, with more nearly complete treatment of sections IV and VI. Since consumption is intimately related to production, and since little is said about the economics of production in this book, it is, in this sense, incomplete. Consequently the reader is urged, after finishing this preliminary excursion, to study critically the laws and principles of production economics. This would also involve more complete consideration of Section I than is undertaken here, and it might well be followed by further consideration of Sections II and III.

#### THE FIELD OF CONSUMPTION

- I. The Existing Economic Order—and Some Possible Alternatives.
- II. The Position of the Consumer in the Present Economic Order.
- III. The Different Basic Aspects of Human Life:  
Material, Esthetic, Psychological, Spiritual.
- IV. Existing Economic Income: Definition, Origins, Distribution.

- V. Production Economics: Influencing Total Income.
- VI. Converting Production into Consumption:
  - Salesmanship, Buymanship, and Budgeting.
  - Personal Finance, Investment, and Durable Consumer Goods.
  - Insurance and other ways of dealing with Personal Risk.

Many outlines have been prepared for partial consideration of these six major subjects. We quote below two typical ones that deal particularly with consumption narrowly defined. Each is as incomplete in its way as our own, but each stresses in considerable detail some parts of the general schema. The first deals especially with Sections II and VI and slightly with section IV of our general schema; the second provides a detailed treatment of part of Section VI.

Doubtless many variations will be played on the general themes of "consumer education," "education for consumption," and "economics of consumption" during the next few years. This is well, for out of the different treatments the important problems will appear in proper perspective and their solutions will become more nearly certain.

*A. An Outline for a Course in Consumer Education*<sup>1</sup>

- I. The position of the consumer in the present economic order:
  - A. Transition from a domestic economy to an industrial economy:
    - 1. Domestic economy:
      - a. Production simple.
      - b. Production, distribution, and consumption carried on within small family unit.
      - c. Creation of a surplus and gradual development of trade.
    - 2. Industrial revolution:
      - a. Invention of machines.
      - b. Harnessing of power.
      - c. Beginning of factory system.
      - d. Rapid development of trade, commerce, and communication.
      - e. Banks, credit, money.
      - f. Things produced primarily to *sell*.
    - 3. Changed position of the consumer in the industrial order:

<sup>1</sup> McQuire, Alice R., in *The Business Education World*, Feb., 1936.

- a. Early intimate contact between the maker and consumer gone.
  - b. Inability of the consumer to buy all the goods produced.
  - c. Intense competition for the consumer's dollar.
  - d. Factors contribution to costs of finished products.
- B. Analysis of the economic preferences of the consumer:**
1. Economic status:
    - a. Estimates of the total national income.
    - b. Concentration and distribution of income.
    - c. Varying standards of living.
  2. Social factors:
    - a. Folkways of group.
    - b. Family.
    - c. Philosophy of consumption.
  3. Merchandising practices:
    - a. Advertising.
    - b. Style factors.
    - c. Variety and availability of goods.
  4. Training the consumer.
- C. Present economic conditions of the consumer:**
1. Reduced purchasing power compared to 1929:
    - a. Unemployment.
    - b. Reduced wages and income.
  2. Increased cost of living.
  3. Increased taxation.
  4. General economic insecurity and political unrest.
  5. Occupational maladjustments.
  6. Gradual improvement in business.
- D. Growing recognition of the consumer:**
1. Government agencies at work for the consumer.
  2. The co-operative movement.
  3. Business recognizes that the consumer is an essential part of a successful business enterprise:
    - a. Realization that distribution of purchasing power is essential.
    - b. Buying campaigns.
  4. Private professional agencies at work for the consumer.
  5. Dissemination of information by public schools, universities, colleges, and clubs.
- II. Buymanship:**
- A. Marketing and organization:**
1. Kinds of markets.
  2. Factors in costs of marketing.
  3. Services performed by marketing organization.
  4. Labeling.

5. Branding.
  6. Standardization.
  - B. Advertising as a marketing device:
    1. Examination and evaluation of some current advertising practices.
    2. Mediums used in advertising.
    3. Purpose and scope of modern advertising.
    4. Non-legal efforts of reform and control:
      - a. Trade Association.
      - b. Better Business Bureaus.
      - c. Department stores.
      - d. Consumer Research.
      - e. "Institutes."
    5. Legal efforts of reform and control:
      - a. Federal Trade Commission.
      - b. Pure Food and Drug Act.
      - c. Printers' Ink Statute.
      - d. Rights of buyers and sellers.
  - C. Methods of Payment.
  - D. Suggested program for individual buyer:
    1. Analysis of needs and resources.
    2. Collective action on behalf of consumer.
    3. Utilization of scientific information.
    4. Legislative regulation needed.
- III. Application of Buying of Specific Products:
- A. Foods.
  - B. Clothing.
  - C. Shelter.
  - D. Automobiles.
  - E. Home furnishings.
  - F. Recreation.
- IV. Personal Finance:
- A. Planning of expenditures and income:
    1. Sources of income:
      - a. Wages and salaries.
      - b. Earnings from professions or business.
      - c. Interest on savings.
      - d. Dividends on investments.
      - e. Rent.
      - f. Allowances.
      - g. Inheritance.
    2. Sources of income other than money:
      - a. Labor income.

- b. Talent income.
  - c. "Wise expenditure or saving" income.
  - B. How planning is accomplished:
    - Individual and family budget:
      - a. Benefits of budget.
      - b. Preparation of family budget.
  - C. Planning and budget making not confined to individuals:
    - 1. Government planning.
    - 2. Business organization planning.
    - 3. School planning.
- V. Financial Institutions:
- A. Types and organization of banks:
    - 1. Savings:
      - a. Functions.
      - b. Types of savings banks.
    - 2. Commercial:
      - a. Functions.
      - b. *Organization.*
    - 3. Rights, protection, and duties of depositors.
    - 4. Clearing house.
  - B. Federal and state banking system:
    - 1. Banking reform under the NRA.
    - 2. Organization and control.
    - 3. Federal Reserve System.
  - C. Building and Loan Association:
    - 1. Function.
    - 2. Organization.
    - 3. Present status.
- VI. Investments:
- A. Qualities of a good investment:
    - 1. Safety of principle.
    - 2. Rate of income.
    - 3. Marketability.
  - B. Kinds of investment.
  - C. How to obtain information concerning securities:
    - 1. Investment manuals and rating books.
    - 2. Financial magazines.
    - 3. Investment advisors.
    - 4. Banks.
  - D. Purchase and sale of securities:
    - 1. Purpose and operation of the stock exchange.
    - 2. How to read the financial sheet of a newspaper.
    - 3. Brokerage agents' terms.
    - 4. Buying by the unit or broken lots.

**E. Cautions and safeguards:**

1. Diversification.
2. Gambling, speculation, and investing.

**F. Legal regulations of investments.****VII. Insurance:****A. Personal insurance:**

1. Reasons for insurance and amount to be carried.
2. Health and accident:
  - a. Sickness protection.
  - b. Accident protection.
  - c. Present status of this type of policy.
3. Old age or retirement insurance:
  - a. Endowment policy.
  - b. Limited payment policy.
  - c. Annuity contracts:
    - (1) Life annuity.
    - (2) Refund annuity.
4. Life insurance.

**B. Social insurance:**

1. Unemployment insurance.
2. Health and accident insurance.
3. Old age pension.

**C. Property insurance:**

1. Need for protection.
2. Fire insurance.
3. Burglary insurance.
4. Automobile insurance.
5. Marine insurance.
6. Earthquake, flood, tornado insurance.
7. Other types.

**D. Operation and organization of insurance companies:**

1. Stock and mutual companies.
2. Basis for rates.
3. How funds of company are invested.
4. Educational programs of public by companies.

**VIII. Real Estate and Home Ownership:****A. Advantages of home ownership.****B. Types of real estate.****C. Buying a home:**

1. Investigation of title.
2. Recording a deed.
3. Giving a mortgage.
4. Giving a trust deed.
5. Investigation of property rights, assessments, and improvements of land.

## D. Renting.

## E. Selling:

1. Placing property in the hands of real estate companies or brokers.
2. Advertising for sale.
3. Signing a deed.
4. Obtaining a mortgage.
5. Putting in escrow.

## F. Determining the value of property:

1. Location and type of neighborhood.
2. Size of lot.
3. Industries in community.
4. Rate of taxation.
5. Transportation available.
6. Improvements on lot.
7. Insurance available and rates.

## G. Financing the home:

1. Institutions or private individuals.
2. Cash.
3. First mortgage and cash down payment.
4. First and second mortgages and cash down payment.
5. Government aid.

*B. A Composite Course in Consumer Education*<sup>2</sup>

(Based on the majority of those at present available)

*Unit 1—The Material Aspects of Modern Life*

1. Why it is necessary to be familiar with Consumer Goods.
2. How Consumer Goods must be studied to make the knowledge useful.
3. The general methods of judging Consumer Goods.
4. Advertising and Consumer Goods.
5. The retailer and Consumer Goods.

*Unit 2—Fibers, Yarns and Cloth*

1. The properties and characteristics of the major fibers.
2. Spinning and weaving.
3. The plain weaves.
4. The twill weave.
5. The satin weave.
6. The figure weave.
7. The pile, double cloth, gauze, lappet and swivel weaves.
8. Knitting and knit goods (hosiery and underwear).
9. The identification of weaves from samples Fiber identification.

<sup>2</sup> Reich, Edward, in *Printer's Ink*, Feb. 10 and 17, 1938.

10. Finding the count of cloth by means of the pick glass or thread counter.
11. Testing the strength of materials.
12. What to look for in the advertising of the above characteristics.

#### *Unit 3—Cotton Goods*

1. The characteristics, properties and uses of cotton
2. From the seed to the cloth.
3. Bleaching and dyeing cotton fabrics.
4. Testing for the quality of the dye—Fade-o-Meter, Launder-o-Meter, colorimeter.
5. Printing cottons and other types of surface decorations.
6. Mercerizing, napping, calendering, sanforizing and the lisle finish.
7. Judging and testing cotton.
8. Sizing and laboratory tests for sizing.
9. The identification of cotton fabrics.
10. The identification of cotton fabrics.
11. The identification of cotton fabrics. } Three days generally given.
12. The laboratory comparisons and tests of commonly used cotton fabrics.
13. Judging shirts, sheets, pillowcases, house dresses, and other cotton products.
14. What to look for in the advertising of cotton goods.

#### *Unit 4—Linen Goods*

1. The characteristics, properties and uses of linen.
2. From the seed to the cloth.
3. Laboratory lesson, judging and testing linens.
4. The identification of linens commonly used.
5. Laboratory lesson—comparison of cotton and linen.
6. Laboratory lesson—judging linen tablecloths, handkerchiefs, dresses, and other linen products.
7. Laces.
8. What to look for in the advertising of linen goods.

#### *Unit 5—Wool Goods*

1. The characteristics, properties and uses of wool.
2. From the sheep to the cloth.
3. A comparison of woollens and worsteds.
4. Judging and testing woolen fabrics.
5. The identification of commonly used wool fabrics.
6. Laboratory lesson—judging, testing and comparing wool fabrics.
7. Felt, characteristics, properties, uses and identification.
8. Blankets—characteristics, methods of judging and care.
9. Rugs—identification and methods of judging.

10. Rugs—methods of making.
11. Clothes of wool—methods of judging. (Suits, coats, skirts and sweaters.)
12. What to look for in the advertising of wool goods.

*Unit 6—Silk Goods*

1. The characteristics, properties and uses of silk.
2. From the cocoon to the cloth.
3. Weighting—tests for and methods of detecting.
4. The identifications of silk fabrics.
5. Testing for silk.
6. Laboratory comparisons of silk, cotton, linen and wool.
7. Judging dresses, ties, underwear, hosiery and other commonly used silk goods.
8. What to look for in the advertising of silk goods.

*Unit 7—Man-Made Fibers*

1. The four methods of making the new fibers.
2. The characteristics and properties of the four fibers.
3. The care of the four fibers. (Laboratory lesson.)
4. Testing for the man-made fibers.
5. Testing for silk and the man-made fibers.
6. The identification of the common fabrics from man-made fibers. Advertising reading.
7. Judging commonly used goods made of man-made fibers (ties, dresses, etc.).
8. Laboratory lesson—burning tests for the major fibers.

*Unit 8—The Minor Fibers*

1. Characteristics, properties and identification of ramie, jute and coir.
2. Characteristics, properties and identification of kapok, hemp, straw, pineapple fiber.
3. Characteristics, properties and identification of llama, cashmere, horsehair, metallic fibers.
4. Characteristics, properties and identification of camelhair, alpaca, and vicuna.
5. Asbestos and rock wool from the point of view of insulation.

*Unit 9—The Care of All Types of Textiles*

1. The general care of all textiles.
2. Care of personal clothing of all types—suits, coats, dresses, ties, sheets, hosiery, and other commonly used textiles.
3. Care of upholstery fabrics, rugs, mattresses and household goods.
4. Stains and their removal.

5. Laboratory lesson on the effect of washing with various soaps and laundry concoctions on textile fabrics.
6. The examination of advertised cleaners.

*Unit 10—Furs*

1. An analysis of fur.
2. From the animal's back to the finished fur.
3. Identification of the weasels—ermine, mink, kolinsky, fitch, wol-verine and otter.
4. Identification of the weasels—skunk, badger, sable, fisher.
5. Identification of the dogs—wolf, red fox, silver fox.
6. Identification of the foxes, cont.—black, cross, white, blue, kit and gray.
7. Identification of the cats—leopard, ocelot, lynx, civet.
8. Identification of the water rats—beaver, muskrat, nutria.
9. Identification of the land rats—squirrel, marmot, burunduki, chinchilla, rabbit, hare.
10. Identification of the hoofed animals—Persian lamb, broadtail, krimmer, goat, kid, galyak.
11. Identification of the opossum, seal, mole, monkey, bear and raccoon.
12. Judging and testing furs.
13. The care of furs.
14. Fur imitations.
15. Buying a raccoon, a mink, a silver fox, lapin and other commonly used furs. Laboratory lesson.
16. Reading an advertisement for furs.

*Unit 11—Leather Goods*

1. The origin, characteristics and uses for leather.
2. From the animal's back to the finished leather.
3. The major tans.
4. The identification of cowhide, calfskin, goatskin and kidskin.
5. The identification of sheep, horse, kangaroo, elk and pig.
6. The identification of alligator, snake, lizard, shark, walrus.
7. The identification of suède and patent leather.
8. The structure of the shoe.
9. The common type of shoes—welt, McKay, turned, Littleway, stitchdown and cement.
10. Buying shoes and caring for them. Laboratory lesson. Abrasion testers.
11. Buying gloves.
12. Buying handbags.
13. Buying luggage.
14. Buying leather jackets.

15. Judging leather and imitations. Laboratory lesson.
16. Present-day and ideal leather goods advertising.

*Unit 12—Wood Products*

1. The characteristics and properties of woods.
2. The characteristics of good furniture.
3. Furniture styles, Renaissance, Tudor, Jacobean, William and Mary and Queen Anne.
4. Furniture styles, the Georgians.
5. Furniture styles, the French Louis types, Empire Directoire.
6. Furniture styles, the American.
7. Furniture styles, Modern.
8. Identification of the commonly used woods. Laboratory lesson.
9. The dangers in furniture advertising and buying. Retailing profits.
10. Judging commonly used articles of wood—parquet floors, kitchen articles, tool handles, etc.
11. Judging the structure of a frame house.

*Unit 13—Paper*

1. From tree or rag to paper.
2. Kinds of paper.
3. Judging stationery, wallpaper, paper toweling, etc. Laboratory lesson.

*Unit 14—Rubber*

1. The characteristics, properties and manufacture of rubber.
2. Judging a tire. Care of tires.
3. Judging rubber footwear.
4. Rubber clothing, its selection and hygiene.
5. Rubber goods commonly used in the home. Laboratory lesson.
6. What ought the ideal rubber goods "ad" contain?

*Unit 15—Glass*

1. From sand to glass.
2. Kinds of glass and the desired features in each.
3. The decoration of glass.
4. Buying and judging glassware.
5. Buying and judging other types of glass, windowpanes, mirrors, and commonly used household glass goods.

*Unit 16—China*

1. From clay to china or earthenware.
2. Decorating chinaware.
3. Buying and judging chinaware.

4. Table setting.
5. The care of glassware and chinaware, flower pots, and similar household articles.

*Unit 17—Metals*

1. From the earth to the finished steel.
2. From the earth to aluminum, tin, zinc, lead and alloys.
3. Buying, judging and caring for kitchen utensils.
4. Buying, judging and caring for house needs—plumbing, kitchen and bathroom fixtures, electric-lighting fixtures, hardware, and screening.
5. Buying and judging and caring for electric irons, ironers, ranges, washing machines, refrigerators, vacuum cleaners. Study of advertising.
6. Buying, judging and caring for radios. The advertising of radios.
7. Buying, judging and caring for automobiles. The advertising of autos.
8. Buying, judging and caring for commonly used metal gadgets—can openers, toys, egg-beaters.

*Unit 18—Gold, Silver and Platinum Goods*

1. From the earth to the finished metal.
2. Workmanship in the precious metals.
3. Buying, judging and caring for gold articles.
4. Buying, judging and caring for silverwear.
5. Platinum and pewter.

*Unit 19—Stones*

1. The identification of the precious and less precious stones.
2. The use of costume jewelry.

*Unit 20—Oils*

1. From the earth to the product of the refinery.
2. Oil and the automobile—a lesson in gasoline and lubrication.
3. Oil and the oil burner—Diesel engine, kerosene lamp, other oil-using apparatus.
4. Buying, using and caring for the vegetable and animal oils.
5. Buying and using the essential oils and perfumes.
6. The advertising of oil products.

*Unit 21—Paints and Varnishes*

1. What is in paint and what does each do for the surface to be painted.
2. Stains, varnishes, shellacs, enamels, and lacquers—their use.
3. The paint job—figuring, painting and brushes.

*Unit 22—Cosmetics and Drugs*

1. Powders, creams, lotions, nail polishes—their use and abuse.
2. Rouge, lipstick, hair preparations, beauty assistants—their use and dangers.
3. Hygiene and cosmetics—the use of toothbrush and soap and water.
4. The restrained use of cosmetics by boys and girls. Laboratory lesson.
5. Patent medicines.
6. Dangers in cosmetics and drugs.
7. Advertising and prices in cosmetics and drugs. (Usually several lessons.)

*Unit 23—Foods*

1. The requirements of the human body—a study of proteins, fats, carbohydrates, minerals, vitamins, water.
2. Food legislation.
3. The grains—barley, oats, rice, rye, wheat. Origin and food values of each.
4. Breakfast cereals, flours and baked goods—evaluating each.
5. Meat in the diet, cuts of meat, food values.
6. Buying and judging meat and poultry. Government standards.
7. Dairy products—their food value and place in the diet.
8. Buying butter, cheese, milk, cream, ice cream. Government standards.
9. Buying, judging and caring for eggs.
10. Buying, judging and caring for fresh fish. Food value of fish.
11. Buying, judging and caring for canned fish. Government standards.
12. Buying, judging and caring for fresh vegetables.
13. Buying and judging canned fruits and vegetables. Government standards.
14. Buying and judging fresh fruit and fruit juices.
15. Buying and judging beverages.
16. Buying foods wisely and economically.
17. Fads and dangers in foods.
18. Thrift in foods,—bulk and packaged goods: Seasons.
19. Safety in foods,—sprays, etc.
20. Fact, propaganda and falsehood in food advertising. Grade labeling, descriptive labeling, pseudo-scientific labeling. A label program.

*Unit 24—Investments*

1. Insurance—Life and related policies.
2. Insurance—Fire and similar policies.

3. Stocks and bonds, loan societies, interest, dividends.
4. Real Estate. Renting.

*Unit 25—The Budget*

1. How to make a budget—constituents, proportions, savings, insurance.
2. Consumer Organization.
3. The well-rounded material life—what is it?

## APPENDIX C

### SUPPLEMENTARY MATERIAL

#### INDUSTRIAL ACCIDENTS

Industrial accidents are referred to in Chapter 4 as one of the important effects of uncertainty. Not only is the occurrence of accidents uncertain, but when they do occur their effects may be serious both on the flow of income and on people's ability to enjoy consumer goods. The likelihood of industrial accidents differs among the various industries as shown in the following table.

#### NUMBER OF INJURIES PER MILLION HOURS WORKED \* †

<i>Industry</i>	<i>1936</i>	<i>1935</i>
30 manufacturing industries . . . . .	17.07	17.94
Electrical machinery, etc. . . . .	7.72	9.67
Boots and shoes . . . . .	8.91	9.95
Carpets and rugs . . . . .	9.38	12.71
Automobiles . . . . .	9.85	11.19
Petroleum refining . . . . .	10.42	11.86
Chemicals . . . . .	11.11	14.04
Cotton goods . . . . .	12.85	13.23
Woolen goods . . . . .	13.70	16.10
Automobile tires and rubber goods . . . . .	14.89	16.99
Pottery . . . . .	15.21	15.66
Machine tools . . . . .	15.24	19.15
Iron and steel . . . . .	15.77	14.89
Furniture . . . . .	17.49	20.31
Hardware . . . . .	17.63	23.07
Leather . . . . .	18.03	22.58
Glass . . . . .	18.75	21.81
Agricultural implements . . . . .	19.88	30.18
Shipbuilding, steel and wood . . . . .	20.07	16.03

\* Generally referred to as injury-frequency rate.

† *Labor Information Bulletin*, April, 1938, p. 15, Bureau of Labor Statistics.

<i>Industry</i>	<i>1936</i>	<i>1935</i>
Stamped and enameled ware .....	20.83	19.56
Steam fittings, etc. ....	21.02	21.00
Foundries and machine shops .....	24.10	28.45
Flour, feed and grain products .....	24.36	25.22
Paper and pulp .....	24.93	27.22
Slaughtering and meat packing .....	27.23	26.02
Stoves .....	28.92	29.68
Lumber—planing mills .....	34.29	37.19
Fertilizers .....	36.34	41.67
Brick, tile, and terra cotta .....	38.95	36.00
Lumber—sawmills .....	67.66	62.85
Logging .....	91.30	77.05

## INSTALLMENT CREDIT

(a) The application blank on page 379 is typical of those used in installment selling. Such forms are commonly used by dealers when they sell furniture, refrigerators, automobiles, and other durable consumer goods. They provide the seller with information that permits him to decide whether the applicant is a reasonable credit risk.

*b. Interest Rates on Installment Purchases.* Interest on unpaid balances of installment purchases are often quoted prospective buyers in a misleading way. For example, a furniture store might advertise a dining-room set for \$120 cash, or for \$6 down and \$10 a month for 12 months. The total carrying charges, the store might announce, would be only \$6, or 5% of the cash price. In other words, the store would offer to loan the customer the full price of the furniture, \$120, for a \$6 total charge. Actually, however, the customer would be paying back part of the loan each month and, therefore, would be paying *interest* only on the balance. On this assumption, the *rate* of interest would be higher than the 5 percent suggested above. When interest is figured only on unpaid balances, each payment on principal is subtracted from the amount owed, and the remaining balance is used to figure interest due when the next payment is made.

When payments on principal are equal, as is often considered to be the case, the monthly unpaid principals form a declining arithmetic progression. That is, if \$50 is to be paid back at the rate of \$10 per month plus interest, the unpaid balances would be:

\$50	for 1 month
40	“ “ “
30	“ “ “
20	“ “ “
10	“ “ “

or a total equal to . . . . .  $\overline{\$150}$

For any particular case, the total may be calculated by the formula:

$$S = \frac{n}{2}(A + L) \text{ when}$$

S = Sum of all the terms

A = First term

n = Number of terms

L = Last term

or, applied to the above case of the furniture dealer:

$$S = \frac{12}{2}(\$120 + \$10) = \$780 \text{ for 1 month} = \$65 \text{ for one year.}$$

In this case, therefore, the \$6 carrying charge would be  $9\frac{1}{4}$  percent of the principal *paid in advance*, or 10.15 percent at the end of the year.

Perhaps a more common way of considering installment payments is to assume that interest is paid as a *constant* amount in each installment. In the above case, for example, it might be assumed that the \$6 carrying charge was divided equally by the 12 payments, or 50 cents a month. Then \$9.50 would be paid each month on the principal, and the total of each installment would be 10. Interest figured in accordance with these assumptions would be calculated as follows:

$$r = \frac{2 m I}{B(n + 1)} \text{ when}$$

r = rate per year

B = Unpaid balance at beginning (cash price less down payment)

m = payments per year

n = total number of payments

I = total carrying charge

In the furniture case referred to above, the calculation would be:

$$r = \frac{2 \times 12 \times 6}{116 \times 12} = 10.33 \text{ percent a year}$$

For most practical situations it is sufficient to assume that the true rate of interest included in installment payments is

INSTALLMENT PURCHASE APPLICATION  
(AUTOMOBILE)

To .....  
(Name of Dealer)

Full Name .....  
(Please Print) (Nationality)

Married.....Single.....Number Dependents.....Date of Birth.....

Residence Address .....  
(Number) (Street) (City) (County)

How Long ..... Phone No..... Previous Address..... How Long.....  
Mos. Yrs.

Lived in that city how long..... Present Business Address..... Phone No.....

Employed now by..... How Long..... Badge No.....  
(Name of Firm) Week Mos. Yrs.

Occupation..... Income \$..... Month, Date Received.....  
How

Previously employed by..... Occupation..... Long.....  
(Name of Firm) (Address)

Trade Union ..... Lodge Affiliation.....

Total Monthly Expense \$..... Name other sources of income.....  
(Name and Number) (Name and Number) (City)

Savings Accounts with..... Branch..... On Deposit \$..... Pass Book No.....  
(Bank) (Address) (Name)

Checking Account with ..... Branch.....  
(Bank) (Street Address) (Name)

Purchased last car from.....  
(Name Dealer) (Address)

To what Finance Co., if any, were payments made thereunder?.....

Have you ever suffered an automobile insurance loss?.....

What kind of a loss?.....

Trade References with whom I (we) have had Credit Dealings:

1. Business Reference .....  
(Name) (Street) (City) (State) (Phone)

2. Business Reference .....  
(Name) (Street) (City) (State) (Phone)

3. Personal Reference .....  
(Name) (Street) (City) (State) (Phone)

Near Relative not living with you.....  
(Name) (Street) (City-State) (Relation)

I (we) own the following property:

Title in Name of	No. of Acres or Size of Lots	Improved Yes or No	Total Csh. Value	Amount of Encumbrance	County	State

Address of Property..... Car will be used for: Business and Pleasure..... Livery and Renting..... Will be kept in Private Garage..... Public Garage.....

IF A FARMER, supply following information: I own: \$..... worth of machinery, \$..... worth of livestock. Total amount owing on machinery and livestock \$..... My income this year will be \$..... from Grain, \$..... from Hay, \$..... from Fruit, \$..... from Dairy, \$..... from other. My net income last year was \$..... I owe to Banks and others \$..... The undersigned warrants the truth and accuracy of the foregoing information.

Dated this.....day of.....19....

Purchaser signs.....  
By .....  
(Official Title, if Company)

approximately double that found by dividing the original unpaid balance into the total carrying charge.

*c. Repossession Rate for Furniture Bought on Installment.* It is said sometimes that the privilege of buying on installments causes people to attempt to live beyond their incomes. If this occurred, it would be expected that people could not keep up their installment payments and that many goods would be repossessed by the sellers. The experience in the retail furniture trade for the years 1936 and 1937 is of interest in this connection. The average retail furniture sales per month for the 2 years, and the percentage of repossessions the following month, are given below.

	<i>Sales</i>	<i>Repossessions</i>
January .....	\$2.0 million	2.5 percent
February .....	3.5	8.0
March .....	3.7	3.4
April .....	4.0	5.4
May .....	5.6	3.5
June .....	4.4	2.5
July .....	4.0	3.0
August .....	5.1	3.7
September .....	4.7	2.4
October .....	5.3	3.4
November .....	4.5	2.4
December .....	6.0	2.7
<b>Total .....</b>	<b>\$52.8 million</b>	<b>3.3 percent</b>

#### CLOTHING BUDGETS

There is opportunity for great variation in the amount spent by people for clothing and it is difficult to establish objective standards that are convincing. The existing discrepancies in planes of consumption are emphasized by the standard budgets prepared by the Heller Committee of California for men and women under different income conditions. The following tables show the physical allowances and the costs in San Francisco in 1937 for the husband and wife of families with two children. The budgets for the children are not shown. The annual clothing cost for the man varies from \$235 for the executive to \$30 for the unemployed dependent;

the range for the wife is from \$385 to \$39. Evidently, clothing standards are both flexible and arbitrary.

a. BUDGET FOR EXECUTIVE

1. Clothing for Man

STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

Item	Stock	Annual Replace- ment	Unit Price	Annual Cost
Total cost .....				(235.12) \$229.13
Annual replacement cost....				(205.52) \$199.53
Hats—felt .....	2	1	\$5.83	\$5.83
straw .....	1	1	3.50	3.50
sport (crusher) .....	1	$\frac{1}{3}$	5.30	1.77
Overcoat .....	1	$\frac{1}{3}$	54.55	18.18
Sweater—pullover .....	1	$\frac{1}{3}$	5.88	1.96
Suits—tuxedo .....	1	$\frac{1}{10}$	56.29	5.63
business .....	3	1	55.63	55.63
Vest—black tuxedo .....	1	$\frac{1}{5}$	6.75	1.35
Slacks .....	1	$\frac{1}{3}$	7.91	2.64
Shoes—dress .....	1	$\frac{1}{3}$	10.33	3.44
business .....	2	2	10.79	21.58
sport .....	1	$\frac{1}{3}$	10.05	3.35
house slippers (leather). .....	1	$\frac{1}{4}$	4.11	1.03
Shirts—dress .....	3	$\frac{1}{2}$	3.50	1.75
neckband .....	3	2	2.67	5.34
collar attached .....	8	6	2.67	16.02
Socks—silk (black).....	3	2	1.00	2.00
lisle .....	8	6	.96	5.76
wool mixed .....	3	2	1.00	2.00
Underwear—shirts .....	6	4	1.00	4.00
shorts .....	6	4	.96	3.84
Bathrobe—flannel.....	1	$\frac{1}{6}$	11.07	1.84
Pajamas—cotton .....	3	2	2.56	5.12
Collars—dress .....	3	2	.35	.70
stiff .....	6	4	.35	1.40
Ties—black bow .....	1	$\frac{1}{2}$	1.00	.50
four-in-hand .....	9	6	1.50	9.00
Handkerchiefs—linen ....	14	9	.50	4.50
Gloves .....	2	1	3.82	3.82
Belt .....	1	$\frac{1}{2}$	1.00	.50
Suspenders .....	2	$1\frac{1}{2}$	1.00	1.50
Garters .....	1	2	.50	1.00

(Continued on Page 382)

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Muffler—dress .....	1	1/4	3.50	.88
Umbrella—mercerized....	1	1/3	3.50	1.17
Billfold .....	1	1/3	3.00	1.00
Annual upkeep cost .....				\$29.60
Cleaning suits..... ..	13		.95	12.35
Pressing suits..... ..	9		.55	4.95
Blocking hats .....	2		.78	1.56
Half soles and heels .....	2		1.62	3.24
Shoeshines .....	50		.15	7.50

## 2. Clothing for Wife

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost .....				(385.03) \$374.11
Annual replacement cost....				(374.79) \$363.87
Hats—dress .....	2	1	\$8.88	\$8.88
street .....	2	1	8.47	8.47
sport .....	1	1/2	6.71	3.36
Coats—winter (fur trimmed)	1	1/2	94.16	47.08
sport or summer.....	1	1/2	30.74	15.37
evening wrap .....	1	1/6	29.88	4.98
Sweater—coat .....	1	1/3	6.95	2.32
Dresses—evening .....	2	1/2	40.76	20.38
dinner .....	2	1/2	34.09	17.04
afternoon.....	2	1	29.92	29.92
street .....	2	1	30.76	30.76
sport .....	2	1/2	22.88	11.44
house (cotton .....	3	1 1/2	3.36	5.04
Shoes—dress .....	3	1	9.81	9.81
street .....	2	2	10.10	20.20
sport oxfords .....	1	1	8.88	8.88
bedroom slippers (leather)	1	1/3	3.69	1.23
galoshes .....	1	1/2	2.98	1.49
Stockings—chiffon (silk) ..	3	3	1.67	5.01
service weight (silk)....	4	4	1.38	5.52
Underwear—slips (silk) ..	2	1	4.74	4.74
slips (rayon) .....	2	1	2.44	2.44
foundation garment ....	2	2	8.58	17.16
vests (silk).....	2	1	1.97	1.97

(Continued on Page 383)

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
vests (rayon) . . . . .	3	3	1.00	3.00
panties (silk) . . . . .	2	1	3.40	3.40
panties (rayon) . . . . .	3	3	1.00	3.00
Bathrobe—flannel . . . . .	1	1/4	9.95	2.49
Kimono or robe—silk . . . . .	1	1/5	14.45	2.89
Nightgowns—silk . . . . .	4	2	4.33	8.66
Aprons—cotton . . . . .	3	1 1/2	.95	1.42
Gloves—kid . . . . .	2	1	4.05	4.05
fabric . . . . .	2	2	1.69	3.38
Bags—evening . . . . .	1	1/2	4.42	2.21
street . . . . .	2	1	5.58	5.58
Handkerchiefs—evening . . . . .	4	2	1.00	2.00
day (linen) . . . . .	12	8	.53	4.24
Fur—fox . . . . .	1	1/6	117.50	19.58
Scarf—sport . . . . .	1	1/2	2.44	1.22
Umbrella—silk . . . . .	1	1/3	3.78	1.26
Incidentals and sanitary supplies . . . . .	..	....	....	12.00
Annual upkeep cost . . . . .				\$10.24
Cleaning and pressing . . . . .	7		.93	6.51
Half soles and heels . . . . .	1		1.28	1.28
New heels . . . . .	2		.25	.50
Shoeshines . . . . .	13		.15	1.95

*b.* BUDGET FOR CLERK

1. Clothing for Man

STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost . . . . .				(104.76) \$101.97
Annual replacement cost . . . . .				( 95.76) \$92.97
Hats—felt . . . . .	2	1	\$4.08	\$4.08
Overcoat . . . . .	1	1/4	28.60	7.15
Sweater—pullover . . . . .	1	1/4	3.47	.87
Suits—tuxedo . . . . .	1	1/10	28.18	2.82
business . . . . .	3	1	29.55	29.55
Vest—black tuxedo . . . . .	1	1/6	5.00	.83
Flannel trousers . . . . .	1	1/5	5.49	1.10
Shoes—dress . . . . .	1	1/4	6.65	1.66

(Continued on Page 384)

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
business .....	2	2	6.40	12.80
house slippers (leather) .	1	$\frac{1}{5}$	2.74	.55
Shirts—dress .....	2	$\frac{1}{3}$	2.50	.83
collar attached .....	6	5	1.90	9.50
Socks—silk (black) .....	3	2	.51	1.02
lisle.....	6	5	.44	2.20
Underwear—shirts .....	4	3	.50	1.50
shorts .....	4	3	.50	1.50
Bathrobe—flannel .....	1	$\frac{1}{8}$	7.45	.93
Pajamas—cotton .....	3	2	1.98	3.96
Collars—dress .....	2	1	.32	.32
Ties—black bow.....	1	$\frac{1}{3}$	.70	.23
four-in-hand .....	6	4	1.00	4.00
Handkerchiefs—cotton ...	10	6	.11	.66
Gloves .....	1	$\frac{1}{2}$	2.49	1.24
Belt .....	1	$\frac{1}{2}$	1.00	.50
Suspenders .....	2	1	.97	.97
Garters .....	1	2	.50	1.00
Umbrella .....	1	$\frac{1}{4}$	2.80	.70
Billfold .....	1	$\frac{1}{4}$	1.99	.50
Annual upkeep cost .....				\$9.00
Cleaning suits .....	..	3	.76	2.28
Pressing suits .....	..	6	.48	2.88
Blocking hats .....	..	1	.60	.60
Half soles and heels .....	..	2	1.62	3.24

## 2. Clothing for Wife

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost .....				(128.07) \$124.46
Annual replacement cost....				(123.89) \$120.28
Hats—street .....	2	$\frac{2}{3}$	\$3.98	\$2.65
sport .....	1	$\frac{2}{3}$	3.49	2.33
Coats—winter (fur trimmed)	1	$\frac{1}{3}$	39.89	13.30
summer .....	1	$\frac{1}{3}$	19.01	6.34
Sweater—coat .....	1	$\frac{1}{4}$	4.96	1.24
Dresses *—dinner .....	1	$\frac{1}{3}$	17.92	5.97

\* The woman of this class may prefer to buy cheaper dresses, replacing them more often and thereby obtaining greater variety.

(Continued on Page 385)

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
afternoon or street (silk)	2	1	14.28	14.28
sport or street (wool)...	2	1	14.11	14.11
house (cotton) .....	4	2	1.98	3.96
Shoes—dress .....	1	1/2	5.06	2.53
street .....	2	2	5.88	11.76
bedroom slippers (leather)	1	1/4	2.18	.54
galoshes .....	1	1/3	1.66	.55
Stockings—chiffon (silk) ..	2	2	.96	1.92
service weight (silk)....	3	4	.92	3.68
Underwear—slip (silk) ...	1	1/2	2.77	1.38
slip (rayon) .....	2	1	1.25	1.25
foundation garment ....	2	2	5.00	10.00
vests (rayon) .....	5	4	.71	2.84
bloomers (rayon).....	5	4	.79	3.16
Bathrobe—flannel .....	1	1/6	6.61	1.10
Nightgowns—rayon .....	3	1 1/2	1.80	2.70
Aprons—cotton .....	4	2	.58	1.16
Gloves—kid .....	1	1/2	2.72	1.36
fabric .....	1	1	.95	.95
Bag—street .....	1	1/2	3.33	1.66
Handkerchiefs—evening ..	3	1	.66	.66
day (linen) .....	10	6	.24	1.44
Umbrella—mercerized ....	1	1/3	2.87	.96
Incidentals and sanitary supplies .....	..	....	....	4.50
Annual upkeep cost .....				\$4.18
Cleaning and pressing.... ..		3	.80	2.40
Half soles and heels .....		1	1.28	1.28
New heels .....		2	.25	.50

## C. BUDGET FOR WAGE EARNER

## 1. Clothing for Man

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost .....				(70.40) \$68.49
Annual replacement cost....				(65.64) \$63.73
Hat—felt .....	2	1/2	\$3.12	\$1.56
Cap .....	1	1	1.01	1.01

(Continued on Page 386)

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Overcoat .....	1	1/6	23.07	3.84
Half coat—woolen.....	1	2/3	5.21	3.47
Sweater—pullover .....	1	1/3	3.01	1.00
Suit .....	2	1/2	25.02	12.51
Corduroy trousers .....	2	1	4.04	4.04
Overalls .....	2	2	1.69	3.38
Shoes—street .....	1	1/2	4.65	2.32
work .....	2	2	3.81	7.62
house slippers (felt)....	1	1/4	1.18	.30
Shirt—collar attached....	3	1 1/2	1.62	2.43
cotton (work).....	4	4	1.01	4.04
flannel .....	2	1/2	3.24	1.62
Socks—rayon .....	3	2	.28	.56
cotton .....	12	8	.24	1.92
Underwear—shirts .....	4	4	.38	1.52
shorts .....	4	4	.38	1.52
Bathrobe—flannel .....	1	1/8	6.13	.77
Pajamas—cotton .....	2	1	1.68	1.68
Ties—four-in-hand .....	4	2	.94	1.88
Handkerchiefs—cotton ...	8	4	.10	.40
Gloves—work (cotton)....	2	10	.18	1.80
Belt .....	1	1/3	.96	.32
Suspenders .....	1	1	.71	.71
Garters .....	1	2	.50	1.00
Umbrella—cotton.....	1	1/5	1.57	.31
Billfold .....	1	1/5	1.00	.20
Annual upkeep cost .....				\$4.76
Cleaning suits .....	..	2	.76	1.52
Half soles and heels .....	..	2	1.62	3.24

## 2. Clothing for Wife

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost .....				(66.27) \$64.46
Annual replacement cost....				(62.23) \$60.42
Hats—street .....	1	1/2	\$2.98	\$1.49
sport .....	2	2/3	1.98	1.32
Coats—winter (fur trimmed)	1	1/4	26.06	6.52
summer .....	1	1/3	13.29	4.43
Sweater—coat .....	1	1/4	2.97	.74

(Continued on Page 387)

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Dresses—afternoon (silk) . .	1	1/3	9.07	3.02
street (wool) . . . . .	2	1	8.60	8.60
house (cotton) . . . . .	4	2	1.06	2.12
Shoes—dress . . . . .	1	1/2	4.08	2.04
street . . . . .	2	1 1/2	4.08	6.12
bedroom slippers (felt) . .	1	1/3	1.17	.39
galoshes . . . . .	1	1/3	1.00	.33
Stockings—service weight (silk) . . . . .	2	3	.89	2.67
everyday . . . . .	3	3	.43	1.29
Underwear—slips (rayon crepe) . . . . .	3	1 1/2	.99	1.48
foundation garment . . . .	2	1 1/2	3.22	4.83
vests (rayon) . . . . .	2	1	.59	.59
bloomers (rayon) . . . . .	2	1	.62	.62
unions (cotton) . . . . .	3	3	.69	2.07
Bathrobe—flannel . . . . .	1	1/6	5.30	.88
Nightgown—cotton . . . . .	3	1 1/2	.95	1.42
Aprons—cotton . . . . .	4	2	.46	.92
Gloves—fabric . . . . .	1	1	.76	.76
Bag—street . . . . .	1	1/2	1.01	.50
Handkerchiefs—cotton . . .	8	6	.10	.60
Umbrella—mercerized . . .	1	1/3	2.01	.67
Incidentals and sanitary supplies . . . . .	..	....	....	4.00
Annual upkeep cost . . . . .				\$4.04
Cleaning and pressing . . . .	..	2	.81	1.62
Half soles and heels . . . . .	..	1 1/2	1.28	1.92
New heels . . . . .	..	2	.25	.50

*d.* BUDGET FOR DEPENDENT FAMILIES

1. Clothing for Man (Employed)

STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost . . . . .				(46.79) \$45.52
Annual replacement cost . . . .				(43.55) \$42.28
Hat—felt . . . . .	1	1/4	\$3.06	\$ .76
Cap . . . . .	1	1	.91	.91
Overcoat . . . . .	1	1/6	16.35	2.72

(Continued on Page 388)

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Half coat—woolen.....	1	1/2	4.55	2.28
Sweater—pullover .....	1	1/3	2.52	.84
Suit .....	1	1/3	23.52	7.84
Corduroy trousers .....	2	1	3.24	3.24
Overalls .....	2	2	1.60	3.20
Shoes—street—oxfords ...	1	1/3	4.26	1.42
work.....	1	2	3.58	7.16
Shirts—collar attached ...	2	1	1.22	1.22
cotton (work) .....	4	4	.99	3.96
Socks—cotton .....	4	8	.19	1.52
Underwear—shirts .....	3	3	.32	.96
shorts .....	3	3	.33	.99
Pajamas—cotton .....	2	1	1.53	1.53
Ties—four-in-hand .....	3	1	.60	.60
Handkerchiefs—cotton ...	6	3	.08	.24
Belt .....	1	1/3	.80	.27
Suspenders .....	1	1/2	.60	.30
Garters .....	1	1	.32	.32
Annual upkeep cost .....				\$3.24
Half soles and heels .....	..	2	1.62	3.24

## 2. Clothing for Man (Unemployed)

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replace- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost .....				(30.20) \$29.37
Annual replacement cost....				(28.58) \$27.75
Hat—felt .....	1	1/4	\$3.06	\$ .76
Cap .....	1	1/2	.91	.46
Overcoat .....	1	1/6	16.35	2.72
Sweater—pullover .....	1	1/3	2.52	.84
Suit .....	1	1/3	23.52	7.84
Corduroy trousers .....	1	1/2	3.24	1.62
Shoes—street—oxfords ...	1	1/3	4.26	1.42
work.....	1	1	3.58	3.58
Shirts—collar attached ...	2	1	1.22	1.22
cotton (work) .....	4	2	.99	1.98
Socks—cotton.....	4	6	.19	1.14
Underwear—shorts .....	3	1 1/2	.33	.50
shirts .....	3	1 1/2	.32	.48
Pajamas—cotton .....	2	1	1.53	1.53

(Continued on Page 389)

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Ties—four-in-hand . . . . .	3	1	.60	.60
Handkerchiefs—cotton . . .	6	3	.08	.24
Belt . . . . .	1	1/4	.80	.20
Suspenders . . . . .	1	1/2	.60	.30
Garters . . . . .	1	1	.32	.32
Annual upkeep cost . . . . .				\$1.62
Half soles and heels . . . . .	..	1	1.62	1.62

## 3. Clothing for Wife

## STOCK AND ANNUAL COST OF REPLACEMENT AND UPKEEP

Figures in ( ) include state sales tax

<i>Item</i>	<i>Stock</i>	<i>Annual Replac- ment</i>	<i>Unit Price</i>	<i>Annual Cost</i>
Total cost . . . . .				(39.19) \$38.12
Annual replacement cost . . . . .				(36.89) \$35.82
Hat—street . . . . .	2	1	\$1.93	\$1.93
Coat—street (fur trimmed)	2	1/3	23.27	7.76
Sweater—coat . . . . .	1	1/3	2.98	.99
Dress—street (silk or wool)	2	1	6.46	6.46
house (cotton) . . . . .	4	1 1/2	1.06	1.59
Shoes—street . . . . .	2	1 1/2	3.36	5.04
bedroom slippers (felt) ..	1	1/4	1.00	.25
galoshes . . . . .	1	1/4	.99	.25
Stockings—silk . . . . .	1	1	.79	.79
everyday . . . . .	3	4	.28	1.12
Underwear—slips (rayon)	1	1/2	.99	.50
foundation garment . . . .	1	1	1.97	1.97
unions . . . . .	3	1 1/2	.69	1.04
Bathrobe—flannel . . . . .	1	1/8	4.30	.54
Nightgown—cotton . . . . .	2	1	.95	.95
Aprons—cotton . . . . .	2	1/2	.44	.22
Gloves—fabric . . . . .	1	1/2	.67	.34
Bag—street . . . . .	1	1/2	1.01	.50
Handkerchiefs—cotton . . .	6	3	.06	.18
Umbrella—mercerized . . . .	1	1/5	2.01	.40
Sanitary supplies and inci- dentals . . . . .	..	....	....	3.00
Annual upkeep cost . . . . .				\$2.30
Half soles and heels . . . . .	..	1 1/2	1.28	1.92
Heels . . . . .	..	1 1/2	.25	.38



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