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The Chinese Economy

THE CHINESE ECONOMY

Solomon Adler

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Preface

There have been many monographic studies of the specifically economic aspects of Chinese society and civilisation, but very few broad surveys. Indeed a competent introductory economic history of China is still badly needed. Of the general surveys of the modern scene Professor Tawney's *Land and Labour in China* is justly the most celebrated, but Tawney himself wrote a brilliant palinode in his Introduction to *Agrarian China* and, in any case, the crowded events of the last generation have rendered his work out of date.

This book attempts, however inadequately, to fill the gap. The story of China's economic development since 1949 is trebly instructive. First and not least for its own intrinsic significance; in a world which can be bounded in a nutshell the path on which nearly a quarter of its inhabitants have irrevocably entered cannot be ignored, or, worse still, dismissed as a bad dream.

China has combined evolutionary with revolutionary changes and methods in nice proportions. While the pace of economic growth is gradual, it is nonetheless swift — indeed probably swifter than that achieved by any country other than Russia. The annual rates of growth in national income, gross output and the crucial sector of heavy industry since 1952, i.e., after the initial period of reconstruction in which the rates of growth were almost inevitably very high, are most impressive.

Second, the Chinese experience is instructive for the light it throws on the problems of industrialisation in under-developed and backward countries. The lessons to be learned are admittedly complex in character and in no way imply that Chinese institutions and practices are exportable *in toto* and without modification. On the contrary, it has been one of China's main sources of strength that she has insistently taken her own historical and social background into account and that she has eschewed doctrinaire prescriptions which Mao Tse-tung once compared to "the foot-bandages of a slut, long as well as smelly."

Nevertheless, the relevance of Chinese economic growth to countries embarking on or still in the early stages of industrialisation can hardly be over-estimated, especially as it is arguable that the transition to capitalism has now become at least as difficult as the transition to socialism for such countries. To adapt Pope's misleading couplet,

> For forms of government let fools contest,
> Whate'er is best industrialised is best.

There is a real danger that the peoples of Western Europe and North America will lose their ability to communicate with the peoples of Asia and Africa through their failure to appreciate the latter's determination to catch up. India has so far been an admirable bridge between East and West. But if India is to maintain this function, the West must understand why, for example, Chinese achievements in agriculture have elicited the kind of response manifested in the Indian Ministry of Food and Agriculture's *Report of the Indian Delegation to China on Agricultural Planning and Techniques*.[1]

Finally, the record of China's economic growth is instructive for its points of convergence with and divergence from Russia's. The points of similarity are obvious enough. Perhaps the most striking point of difference is that despite the rapid pace of Chinese industrialisation it is less rapid and headlong than was the Russian. There are many historical reasons for this difference, not the least of which is the fact that Russia was the first country to industrialise on the Communist pattern.

A number of the other points of difference stem from the less headlong pace of Chinese industrialisation. The peaceful step-by-step abolition of capitalism in industry and commerce should not be so surprising, although the fact that there were 69 millionaires at the beginning of 1957 is striking enough.[2] Undoubtedly of far greater historical significance is the collectivisation of agriculture, the achievement of which has three noteworthy characteristics. First, it was carried through on a voluntary basis; second, it has not as yet entailed mechanisation on any sizeable scale; and, third, far from disrupting agricultural production in the immediate short run, collectivisation from its very inception appears to have fostered the expansion of farm output.[3]

Chinese success in this field raises entirely new questions with respect to Asian — and perhaps African — farming, with which few writers have yet grappled. It is, however, already clear that the equa-

[1] New Delhi, Government of India Press, 1956. See especially pp. 141-145, 188-189 and 194-195 for its evaluation of the role and rapid diffusion of Technique Popularisation Stations and its conclusion that "The prospect for future development of China's agriculture has indeed become bright as a result of the organisation of these Technique Popularisation Stations" (p. 145).

[2] *The Times* (London), January 24, 1957. These millionaires each had an annual income, earned mostly from interest, of 1 million yuan (nearly £150,000) or more.

[3] See *Report of the Indian Delegation to China on Agricultural Planning and Techniques* and René Dumont, *Révolution dans les Campagnes Chinoises* (Paris, Éditions du Seuil, 1957).

tion of the Asian with the European peasant is as invalid economically as it is politically. Previous dogmas with respect to the peasant's fanatical attachment to his parcel or parcels of land and to the impossibility of collectivisation without immediate mechanisation need to be drastically re-examined in the light of the already rich Chinese experience.

The flexibility of Chinese planning may also be connected with the gradual pace of industrialisation. This flexibility was already apparent in the socialist transformation of industry and agriculture. It is also apparent in the restoration of the "controlled" free market in 1956 and in the growing emphasis on decentralisation with its concomitants of greater reliance on regional and local initiative and of increasing resort to planning within the less rigid limits of reference targets. Not least, it is manifest in the tentative approach to the crucial relationship between accumulation and consumption in the proposals for the Second Five Year Plan as well as in the delicate handling of the nationality problem, particularly in regions such as Tibet.

More than thirty years ago Stalin prescribed two dimensions for Communist construction, Russian enthusiasm and American efficiency. To these it is already safe to add Chinese patience as a third. This dimension becomes more relevant to the Communist countries of Eastern Europe, including Yugoslavia, since the Old World has been called in to redress the balance of the New.

Of the books which have become available since my manuscript was completed mention should be made of the English translations, published in Peking by the Foreign Languages Press in 1956, of the *First Five-Year Plan for Development of the National Economy of the People's Republic of China in 1953-1957* and of the *Eighth National Congress of the Communist Party of China, Volume I, Documents,* and *Volume II, Speeches.* These works are indispensable sources for the First and Second Five Year Plans. To the *Report of the Indian Delegation to China on Agricultural Planning and Techniques* and Professor Dumont's *Révolution dans les Campagnes Chinoises* it is a pleasure to be able to add Theodore Shabad's *China's Changing Map* (New York, Praeger, and London, Methuen, 1956). On the whole, the latter is a refreshingly reliable guide to China's economic geography. Paul A. Baran's *Political Economy of Growth* (New York, Monthly Review Press, 1957) boldly tackles those basic theoretical problems of economic growth which I have either

only briefly discussed or entirely passed over. His analysis of the economic surplus is especially rewarding and it is a source of some personal satisfaction that my embryonic analysis converges so closely with his finished product.

I am grateful to many friends in four continents for their never-failing encouragement and assistance and particularly to John Rackliffe for his editorial help. I am indebted to my American and British publishers for making the appearance of this work possible.

Cambridge, England S. A.
May 1957

I

The Background

1 AREA AND POPULATION

THE AREA OF CHINA is roughly 3,860,000 square miles. This huge land mass embraces a wide variety of climates ranging from the tropical in the extreme Southeast to the continental in the Northeast and the Northwest. Over 90 per cent of the country is in the north temperate zone, but the high summer temperatures combined with the heavy summer rainfall in the North and Northeast, amounting to 50 per cent of the annual total, make the widespread cultivation of rice and cotton practicable. The country is extremely mountainous with about three-fifths of the land lying more than 6000 feet above sea level, over a quarter consisting of valleys and the remainder of steppes, desert and oasis.

The population of China is approximately 600 million. The 1953 Census, which was the first modern enumerative census ever taken in China, clearly established that previous less comprehensive censuses and estimates based on them erred heavily on the side of conservatism.

China contains nearly one quarter of the inhabitants of the globe. Sinkiang (Chinese Turkestan) and Tibet, which together constitute about three-tenths of the total land area, are extremely

sparsely populated. Population densities are also relatively low in the Northwest and the Northeast outside the Liao valley but very high in the Great Plain of North China, the Szechwan Red Earth basin, the Yangtze and Pearl River valleys and the plains towards the Eastern coastal area generally.

The Han people accounts for 94 per cent of the total population, the most important minority groups, numbering 35 million in all, being the Mongols, Koreans, Manchus, Uighurs (Turkis) and Huis in the Northeast and Northwest, and the Tibetans, Chuangs and Yis in the West and South. So little had China been systematically investigated demographically that a number of previously entirely unknown tribal groups have been discovered since 1949.

The Chinese people have been distinguished throughout their recorded history by their diligence, their fortitude, their skilled craftsmanship and their ingenuity and capacity for improvisation. Foreign observers from the time of Marco Polo have universally attested to "the industrious and patient character of [China's] people . . . their will to live and their ability to overcome adversity."[1] The general level of skill in Chinese handicrafts exceeded that in the West until at least the sixteenth century.[2] China has the longest recorded continuous intellectual and cultural tradition, and unlike most other economically under-developed countries has an able and relatively large intelligentsia.

2 AGRICULTURE

China is, of course, a predominantly agricultural country, the rural population constituting about 500 million. In the 1930's the area under cultivation was generally estimated to be around 225 million acres, of which one-third was irrigated. Cultivation was intensive — according to Richthofen, "the most intensive we know" — and partook of the nature of "garden" agriculture. Thus, a cultivated area about two-thirds that of the United States was worked by around fifteen times as many farm households and supported a total population well over three times as large. The average culti-

[1] Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948, hereinafter referred to as *Board of Trade Report*), p. 171. This Mission visited China in 1946-1947.

[2] See J. Needham, *Science and Civilisation in China,* Vol. I (Cambridge, 1954), pp. 240-243.

vated acreage per farm was under 2½ acres, but this crude global average concealed wide disparities as between different types of agriculture and still wider disparities as between rural classes. Wheat, millet and kaoliang farms in the North and Northeast were somewhat larger than the national average and rice farms in Central and South China markedly lower. The distribution of land ownership was extremely unequal. On a very rough basis landlords and rich peasants (i.e., farmers regularly employing hired labour), constituting with their dependents about 10 per cent of the rural population, owned 70 per cent of the cultivated land; middle peasants, forming about 20 per cent of the population, owned roughly the same proportion of the land; and poor peasants — many of them landless labourers — formed 70 per cent of the village population but owned only 10 per cent of the land.

Landlordism was pre-capitalistic in character. While large estates in the form of latifundia were uncommon, the universal landlord domination of the countryside was oppressive economically, politically and socially, and perpetuated a general backwardness from which no escape was possible without a decisive break with the old forms of land tenure. The land problem was fundamental. Without its solution no regime could achieve stability and no meaningful programme of economic development and modernisation could be adopted. It was not merely a technical question but one which went to the very roots of Chinese society. Just as the realisation of this fact in all its ramifications was one of the greatest assets of the Chinese Communists on their road to power, so the Kuomintang's inability to come to grips with this problem was the basic cause of its failure. In the countryside the Kuomintang Government apparatus and party machine were essentially adjuncts of landlord rule. The Kuomintang land law restricting the payment of rent to a maximum of 37.5 per cent of the main crop was a paper law only, and rents generally ran to between 50 and 60 per cent or even more. Moreover, the land tax, a primary source of Government revenue, fell almost entirely on the peasantry. In addition the peasant was the victim of a corrupt village administration, of landlord exactions in the form of usury, middleman huckstering and semi-feudal levies, and of a barbaric system of conscription into an army enrolment in which was often tantamount to a death sentence.

In these circumstances, rural poverty was chronic and deep-seated. Tawney, writing in 1939, concluded:

> The improvement of agricultural methods is, no doubt, indispensable, but it is idle to preach that doctrine to cultivators so impoverished by the exactions of parasitic interests that they do not possess the resources needed to apply it. . . . A government which permits the exploitation of the mass of its fellow citizens on the scale depicted in the pages which follow may make a brave show, but it is digging its own grave. A government which grapples boldly with the land question will have little to fear either from foreign imperialism or from domestic disorder. It will have as its ally the confidence and goodwill of half-a-million villages.[3]

Subsequent events have vindicated Professor Tawney's remarkably prescient judgment.

In view of its slender technical basis, Chinese agricultural practice was relatively efficient.[4] According to statistics for years prior to 1949 given in the United Nations *Statistical Yearbooks* and in Food and Agriculture Organisation publications, the yield per acre of rice was at least double that of India; of wheat, barley and cotton at least 50 per cent greater, and of millet, kaoliang, peanuts and sesame seed two to three times as great. But that there was very wide scope for elementary technical progress is revealed by the contrast between Chinese and Japanese yields in the same period, the latter exceeding the former by around 50 per cent in rice, wheat, sweet potatoes and yams. Starting from more or less the same level as the Chinese, the Japanese succeeded in sharply raising productivity per acre in a comparatively short time by four fairly simple measures: more and better irrigation, selection and standardisation of seed, increasing and systematic use of pesticides and the application of artificial fertilisers, none involving mechanisation and only the last requiring a fairly high degree of industrialisation (see p. 126 below).

China before 1949 was the world's largest producer of rice, millet, kaoliang, sweet potatoes and yams, broad beans, soya beans and rape and sesame seeds; the second largest producer of barley, maize, peanuts and tobacco; the third largest of wheat; and probably the fourth largest of cotton. In addition she was the major producer or

[3] Institute of Pacific Relations, editors, *Agrarian China: Selected Source Materials* (London, 1939), p. xviii.

[4] "Compared with that of most parts of Europe, in any period before the nineteenth century, it is a prodigy of efficiency and as a triumph of individual skill unaided by organised knowledge, its reputation is deserved." R. H. Tawney, *Land and Labour in China* (London, 1932), p. 46.

one of the major producers of a wide variety of other agricultural products such as tea, eggs, tung oil, perilla seed oil, essential oils and bristles.

Despite her leading position as an agricultural producer China frequently imported as much as 2 per cent of her net rice and wheat consumption; this import deficit was primarily due to maldistribution both within and between surplus and deficit areas resulting from the backward system of land tenure and from transportation difficulties. Traditionally an overwhelming proportion of Chinese exports consisted of agricultural products and by-products.

3 NATURAL RESOURCES

China's natural resources were still largely unexplored before 1949. Consequently, there has been a general tendency to underestimate China's mineral wealth with respect both to its magnitude and to its exploitability. She was known to have huge and quite conveniently located coal deposits, including coking and anthracite coal; substantial deposits of iron ore which many foreign experts believed to be for the most part badly sited and of low grade; and significant amounts of tin, tungsten, antimony, manganese, lead, zinc, magnesite, bauxite, mercury and other minerals. Preliminary geological surveys since 1949 have already revealed more extensive deposits of minerals previously known to be present and also the existence in workable quantities of many minerals previously believed to be absent. (The endpaper map inside the front cover shows the natural resources of China.)

Coal and hydroelectric power. The *Board of Trade Report* cites an estimate of 272 thousand million tons for China's coal reserves. A later estimate made in 1947, cited by the United Nations Economic Commission for Asia and the Far East in 1953 in its *Coal and Iron Resources of Asia and the Far East,* placed them at 444 thousand million tons. Even this figure is tentative, as explorations since 1949 indicate that the Northeast's coal reserves, for example, were several times higher than the best-informed previous estimates. China is clearly one of the three or four richest countries in the world in coal, and the *Board of Trade Report's* conclusion cannot be questioned, that "China's total known coal reserves are ample to meet the needs of any amount of industrialisation that she may

eventually accomplish."[5] She is also rich in anthracite, having a ratio of hard to soft coal of one to four, as compared with the world average of one to eight, and North China has an abundant supply of high-grade coking coal.[6]

China is potentially well endowed with hydroelectric power, the estimate of the United Nations Economic Commission for Asia and the Far East in 1949 amounting to 109 million kilowatts.[7] This estimate excludes the Northeast which has two of the largest functioning hydroelectric stations in the Far East; Tibet, which is the world's highest land mass and contains the sources of many large rivers including the Yangtze and the Brahmaputra; and Sinkiang. More recently, the total Chinese potential has been put at over 300 million kilowatts, which places it ahead even of the United States. While "China possesses ample hydroelectric potentialities . . . her use of water power resources in the past has been infinitesimal."[8] Their exploitation will, of course, demand enormous investments over a considerable period of time.

Iron. The United Nations *Coal and Iron Resources of Asia and the Far East* cites an estimate placing China's iron ore reserves at over 4 thousand million tons. But again recent preliminary surveys have established a wider and richer diffusion of iron ore, and this estimate needs to be revised upwards. "Already claims are made that China possesses the largest known deposits of iron-ore in the world."[9] According to pre-1949 surveys the Anshan deposits have a 30 per cent Fe content, and the Chahar-Suiyuan, Tayeh and Hainan deposits a 50-60 per cent Fe content.[10] Nor is the problem of location anywhere near so difficult as was previously supposed. China is thus more than adequately endowed with the two basic raw materials needed for modern large-scale industry.

Non-ferrous Metals and Other Minerals. In the '30s China was the world's largest producer of tungsten and antimony and is still the largest producer of tungsten, her output in 1952 totalling 20,000

[5] P. 89.

[6] Vei Chow Juan, "Mineral Resources of China," *Economic Geology* (June-July 1946), p. 415.

[7] U.N., *Economic Survey of Asia and the Far East 1949,* p. 372.

[8] *Board of Trade Report,* p. 94.

[9] *The Financial Times,* December 6, 1954.

[10] C. H. Behre, Jr., and Wang Kung-ping, "China's Mineral Wealth," *Foreign Affairs* (October 1944), p. 132; Vei Chow Juan, "Mineral Resources of China," p. 428; and U.N., *Coal and Iron Ore Resources of Asia and the Far East* (Bangkok, 1953), p. 51.

tons.[11] The biggest antimony mine extant, located at Hsikuanshan in Hunan, is credited with the production of 300,000 tons in forty years and can easily produce 12,000 tons per annum.[12] In the light of the then available knowledge, the *Board of Trade Report* estimated China's reserves of tungsten at 2,035,000 tons; of tin, which was already in substantial production before 1937, at 652,000 tons; of bauxite, aluminium shale and clay at 150 million tons[13] and of pure alunite at roughly 200 million tons; of manganese at 12 million tons (pure manganese content); of magnesite at well over 5 thousand million tons, the main belt extending for 22 miles and having a maximum thickness of nearly a thousand yards; the Report mentioned substantial reserves of lead, zinc, mercury, nickel, gold and silver, without giving specific figures, and referred to the "mining of such non-ferrous metals as zinc, gold, copper, lead, vanadium and molybdenum" in the Northeast "particularly towards the Korean border."[14] The *Economic Survey of Asia and the Far East 1949* gives a figure of 8 million tons of ore containing 184,000 tons of metal for China's molybdenum reserves.[15]

Recent Chinese explorations, which make no claim to exhaustiveness, have established the existence of significant reserves of copper in Shensi, where it is in current production, and in Kansu; of additional reserves of manganese, tungsten, zinc, beryllium and bismuth in the Northwest; and of asbestos, copper, aluminium, zinc and mercury in the Southwest. China's established copper reserves apparently equal those of Chile. Phosphorus, chromium, nickel, cadmium, cerium, tantalum and platinum are known to be available, and there was a considerable production of rock salt and gypsum in the '30s.

Oil. Oil has been produced on a relatively small scale for some time in Kansu (Yumen) and Sinkiang. Production in already opened fields is being expanded and new strikes of oil in these provinces and in Chinghai and Shensi have been reported. Already in 1954 the *proved* reserves in the Northwest were sixteen times greater than

[11] *The Times* (London), September 28, 1953.
[12] U.N., *Economic Survey of Asia and the Far East 1949*, p. 348.
[13] E. W. Zimmerman rated the Chinese estimated bauxite reserves of 150 million tons as one of the two highest in the world; see his *World Resources and Industries* (revised edition, New York, 1951), p. 719. Vei Chow Juan's estimate, "Mineral Resources of China," pp. 405 and 462, is nearly six times bigger.
[14] Chapter XIII *passim*, and p. 59.
[15] P. 348.

previously estimated and exceeded those of Iran. Since then, some very promising finds have been made in the Tsaidam Basin in Chinghai and in Karamai, north of Urumchi, the capital of Sinkiang, the latter apparently being the richest oil field so far discovered. Oil is also to be found in the Southwest, natural gas is already being produced in Szechwan, and the oil shale deposits of Fushun have been estimated to possess an oil content of at least 500 million tons.[16] It is still premature to judge the magnitude of China's oil reserves in relation to its needs, but the prospects for further finds are not unfavourable.

As the geological survey of China is extended with the increase in the supply of trained geologists, further discoveries of a wide variety of minerals are constantly being made. One need only compare her *known* resources with those of Japan, India, and for that matter Great Britain, to see that she is relatively well situated with regard to the crucial natural resources required for industrialisation, and that in this respect she ranks only after the United States and Russia, and possibly Canada. The contrary view so often expressed is due partly to lack of information, partly to misinformation and partly to wishful thinking. A typical example is the assertion by Robert Guillain, who was *Le Monde* correspondent in China, that "China is badly endowed with raw materials to build up a heavy industry. Its iron ore is small in quantity and badly sited in relation to coal deposits. Large scale industry would exhaust the known supplies within the century."[17] This statement recalls Agassiz'

[16] U.N., *Economic Survey of Asia and the Far East 1949*, p. 341.

[17] O. B. van der Sprenkel, editor, *New China, Three Views* (London, 1950), p. 119. Guillain was reflecting the current views of foreign geographers. Thus Cressey, the leading American geographer on China, stated in *China's Geographic Foundations* (New York, 1934, pp. 110 and 132): "It is now clearly evident that China is not highly mineralized, and her world rank is that of a minor nation. . . . In petroleum, copper, sulphur, timber, and probably iron . . . China is seriously deficient and the shortage of these essentials is her greatest industrial problem." In his later *Asia's Lands and Peoples* (New York, 1944, p. 75) he concludes that "China has the mineral basis for a modest industrialization." Cressey slightly modifies but does not essentially revise these conclusions in his most recent work, *Land of the 500 Million* (New York, 1955). Thus, ". . . there is no suggestion that China as a whole is a well-mineralized country" and "All present indications are that China is poorly endowed with oil" (pp. 130, 138). In the second edition of *The Changing Map of Asia* (London, 1953, p. 261) W. G. East and O. K. Spate repeat the view that "the mineral wealth of China in the past has been overestimated." According to H. Foster Bain, the leading American geological authority on the Far East, "Her iron-ore resources must be termed very modest, or even very scant, when her potentialities for industrial development are taken into con-

comment on a student's definition of the crab as a red mammal that walks backwards. "Perfectly right, perfectly right, except that the crab is not red, is not a mammal, and does not walk backwards."

4 INDUSTRY

Before 1949, modern heavy industry existed only embryonically outside the Northeast, where the Japanese under the pressure of war forced up the production of pig iron and ingot steel to over 1,800,000 and over 900,000 tons respectively in the peak year 1943.[18] Sizeable-scale production of pig iron and steel in the rest of China was negligible and demand was met by small domestic foundries and engineering shops and, of course, by imports. This position was duplicated in most major branches of heavy industry. But light industry was much more developed, particularly in textiles and food processing. The cotton industry was equipped with 5.2 million spindles and 70,000 looms. Even so, modern industry, mining and transport — in Tawney's fine phrase, "a modern fringe stitched along the hem of the ancient garment" — contributed only 10 per cent of the national product, and handicraft production still predominated in industry. According to a private and very rough estimate, in 1933 ten million workers engaged in handicrafts accounted for 75 per cent of all the manufacturing output of China, excluding the Northeast. In this territory there were only 650,000 workers in modern factories, 200,000 in modernised mines and 100,000 in ports and railways, constituting a total labour force employed in modern-style production of about one million out of a total population of around 500 million.[19] Factory production out-

sideration" (*The Ores and Industries of the Far East,* New York, 1933, p. 84). And a decade later, Behre and Wang Kung-ping ("China's Mineral Wealth," p. 133), after granting the possibility of a moderate iron and steel industry, added that shortages of higher grade iron ore would ultimately force the Chinese to look for a supplementary supply abroad. And still more recently, the U.N. *Coal and Iron Resources of Asia and the Far East* (p. 50) asserted that "the Chinese iron ore deposits . . . occur in widely spaced areas making cost of transportation high."

It is not only historians who repeat one another's errors.

[18] Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 33.

[19] The inclusion of the Northeast and the extension of the definition of a "factory" to breaking point would have probably brought the number of modern industrial workers to over two million in 1937; see Nym Wales, *The Chinese Labor Movement* (New York, 1945), p. 153. Mao Tse-tung, writing in 1926, estimated that "The modern industrial proletariat in China numbers about two million," but in 1939 he placed it at 2½ to 3 million (*Selected Works,* London, 1954, Vol. 1,

side the Northeast was concentrated in Shanghai, which accounted for over half of factory output, and a few treaty ports on the coast and along the Yangtze. A high proportion of these factories was foreign-owned, and Chinese industrialists formed a small and relatively uninfluential element in the life of the country. Economically and politically, they were overshadowed by the landlord, military, financial and commercial groups which constituted the backbone of the Kuomintang.

Modern industry had started on a significant scale in China in the last decade of the nineteenth century but, outside the production and processing of textiles and food, had barely scratched the surface of her economic structure except indirectly, and even in these spheres it was excessively concentrated in the treaty ports, which were half inside and half outside the national economy. The growth of heavy industry in the Northeast, inaugurated under Japanese auspices in the early '30s, was geared entirely to the Japanese economy and specifically to its war machine. Many sectors of the Chinese economy were still at a level of development pre-dating the Industrial Revolution in the West, and in 1949 China had a far smaller industrial base, both absolutely and relatively, than did Russia in 1914. It was a predominantly pre-capitalistic agrarian economy with handicraft production as the main source of supply of "manufactured" goods — i.e., largely goods made literally by hand. Even in textiles, where factory production was most advanced, handicraftsmen still accounted for a very considerable part of total output, four-fifths of the cotton cloth consumed internally in the early '30s being produced on handlooms. At the same time, the competition of factory products, whether foreign or domestic, not only promoted the further pauperisation of the countryside by reducing the peasants' badly needed income from side-occupations but also upset the structure of the traditional urban handicrafts.

China had not yet become a unitary economy with an effective national market but was still regionalist and particularistic; large amounts of products never even entered local or regional markets, let alone the wider national market; and the extent of integration

p. 19, and Vol. 3, p. 93). If the precise measurement of the size of the work force in countries such as the United Kingdom and the United States raises awkward statistical and definitional problems, the delimitation of the *modern* industrial work force in a country such as China in the 1930's must necessarily remain vague and blurred. Any attempt to refine the above estimates must, therefore, be an exercise in spurious accuracy.

between the local and regional markets and between these and the national market was extremely uneven. It was China's misfortune that the more highly evolved branches of her economy were tied to the world market before a genuine national market existed or could be created and that the preconditions for a healthy and balanced economic development were consequently absent. In retrospect it is clear that the Kuomintang put the cart before the horse by attempting political unification without taking the essential steps for achieving economic unification.

5 TRANSPORT

"China is probably one of the best watered countries in the world. . . . The great waterways are of particular importance because her immense population is spread most densely in the valleys and plains where the irrigating water flows, and along the coast."[20] Water transportation is thus of great significance, and here again China is a museum of economic history where every kind of vessel ranging from the sampan through the junk to the modern 10,000-ton steamer is to be found. The ultimate availability of cheap water transport along the 7500 miles of extensive and continuous coastline and along the big river systems in the interior and to some extent in the Northeast may turn out to be a key factor in the speed of China's economic transformation. However, both the Northwest and Southwest, which are rich in natural resources, are poor in water systems, and the Yellow River complex presents formidable problems from the point of view of navigability. In the main, the inland waterways run west-east with the outstanding exceptions of the Grand Canal and the north-south and south-north tributaries of the major river systems. In contrast the key railways run north-south with the exception of the Lunghai. (The endpaper map inside the back cover shows the waterways and the existing railways of China.)

There were 13,500 miles of railway track in China in 1949, of which less than half was in operation and much of the remainder in various states of disorganisation and disrepair. In addition, the rolling stock and railway shops desperately needed overhauling and the provision of elementary maintenance. Outside the Northeast, the main lines were the Peking-Hankow, the Tientsin-Pukow, the Canton-Hankow, the Lunghai running from Haichow on the coast

[20] *Board of Trade Report*, p. 34.

to Sian and Paochi in Shensi, and various shorter lines such as the Peking-Shansi, the Peking-Suiyuan, the Tsinan-Tsingtao, the Shanghai-Nanking, Shanghai-Hangchow and the Chekiang-Kiangsu and Hengyang-Kweilin railways. Railways had not touched the West, North or South; and while the big lines in the East and Northeast were well situated as the skeleton of a comprehensive railway system for the eastern half of the country, they obviously needed supplementing with double tracks, feeders, further lines linking the main arteries, and additional branches to the most populous areas and cities. Sun Yat-sen adumbrated a celebrated plan for the construction of a railway network much of which may appear visionary, but many details of which are still relevant.[21] In addition, there were under 50,000 miles of main highway, of which perhaps more than a third was open to traffic and much of the remainder in an inadequately maintained state. With the economic development of the country, existing highway facilities will obviously have to be rapidly expanded.

6 THE ECONOMIC SITUATION IN 1949

The economic progress achieved since 1949 is reviewed in detail in subsequent chapters. But some account is necessary, however brief, of the social and economic disintegration confronting the new Government when it took power. China had been racked by warlordism and war, foreign and domestic, for over a generation. By the end of 1948, if not earlier, the old regime was bankrupt, morally, politically and economically. In the traditional Chinese phrase, it had lost the mandate of Heaven. Never having acquired the consent of the governed, the government had forfeited their respect, and was in its death throes. It had ceased to be a going concern, both *de facto* and *de jure*. Law and order were almost non-existent. The army and the bureaucratic apparatus, especially in their higher echelons, were primarily concerned to get whatever they could as fast as they could from the underlying population. The corruption to which the *Board of Trade Report* referred as a large-scale phenomenon in 1946 had rapidly permeated the machinery of government. American aid, amounting in twelve years to over $4.5 thousand million,[22] had served to enrich and aggrandise the reigning dynasties

[21] Sun Yat-sen, *The International Development of China* (2nd edition, London, 1928).

[22] U.S. Department of State, *United States Relations with China* (Washington, 1949), pp. 1042-1044.

and to prolong and intensify a civil war whose outcome was a foregone conclusion. What the Four Families[23] could not pocket or use militarily was allowed to rot.[24]

The process of production, distribution and exchange in agriculture, industry, commerce and finance was violently disrupted, and the tendency to the fragmentation of the economy, already apparent during the Sino-Japanese War, sharply accentuated. Agricultural production had fallen in all spheres, central water conservancy and irrigation works had not been maintained and vulnerability to floods and droughts was consequently heightened, the countryside was increasingly severed from its markets, and cash crops were more and more replaced by food crops for farm consumption. Industry was thoroughly disorganised, heavy industrial production and mining output having dropped to a trickle. The Shanghai Power Company, the largest public utility outside the Northeast, substituted imported oil for domestically produced coal as its main source of power. Far from any net investment in basic production being made to augment China's woefully inadequate supply of means of production, existing capital was not even maintained and disinvestment occurred on a massive scale.[25] The emphasis everywhere in

[23] Chiang Kai-shek, H. H. Kung, T. V. Soong and the two Chen brothers, Chen Li-fu and Chen Kuo-fu, headed the four ruling Kuomintang families. Much of the American military equipment and supplies furnished to the Kuomintang ended up in the hands of the Communists. See *ibid.*, p. xv.

[24] One rationalisation of this state of affairs was the theory that economically under-developed countries have only limited powers of absorption which more developed countries must not overtax; see J. Franklin Ray, Jr., "UNRRA in China" (mimeographed, Institute of Pacific Relations, Stratford-on-Avon Conference, 1947, p. 12): "UNRRA taxed the resources and capacity of China for absorption and utilisation." Whatever the absorptive capacities of under-developed countries, they cannot be accurately gauged when aid is channelled down ratholes.

[25] U.S. Department of State, *United States Relations with China,* pp. 781-782. "This disinvestment has taken principally the forms of living off capital, and capital flight to the United States, Hong Kong and South America. Disinvestment is also occurring through the deterioration of physical assets, abuse of capital equipment, neglect of maintenance, and over-loading of power facilities." The same process also occurred in agriculture, where water conservancy work, indispensable for the satisfactory functioning of production, was both neglected and sabotaged, as in the case of the UNRRA Yellow River Project. One startling example of disinvestment was the diminution of official foreign exchange reserves, which fell from nearly U.S. $1000 million in 1945 to a little over U.S. $200 million early in 1948. The following year Chiang Kai-shek appropriated what little was left together with over U.S. $150 million in gold, silver, U.S. currency, etc., which he had been able to extract by blackmail and duress in the so-called currency reform of August 1948, amounting all told to over U.S. $250 million, as his war-chest prior to his departure to Taiwan (*ibid.*, pp. 403-404).

the leading urban centres was on frantic speculation for immediate profits, realisable in gold and foreign exchange and therefore easily transferable abroad. The transportation system was breaking down at more and more points and the natural channels of domestic and foreign trade were disastrously obstructed. Foreign trade, which through these years served to facilitate a substantial flight of capital of the order of U.S. $200 million annually, fell from nearly U.S. $900 million in 1946 to under U.S. $500 million in 1948.[26]

The incoming Government found itself faced with financial chaos in 1949. For twelve years the Kuomintang had covered an annual deficit of well over half and sometimes as much as 80 per cent of its total expenditures by indiscriminate resort to the printing press. The inexorable result was a catastrophic paper currency hyper-inflation with all the classical text-book symptoms. The tempo of deterioration was accelerated after V-J Day. The note issue multiplied ten times between the beginning of 1946 and the middle of 1947, the rate of increase subsequently mounting much more sharply. But with the declining confidence in the currency and the heavy rise in its velocity of circulation prices rose much more rapidly than the note issue so that the purchasing power of currency outstanding fell at an increasing rate. The so-called currency reform of August 1948 robbed the impoverished middle classes of what little savings they had left without any abatement of the fires of inflation,[27] and further disrupted economic intercourse between town and country.

In the six months after currency reform wholesale prices in Shanghai rose 85,000 times and in the subsequent two months at a rate of 10 per cent per day.[28] Interest rates reached 14 per cent *per diem,* workers were frequently paid their wages in the goods they produced and there was a wide reversion to barter forms both in town and country. The official currency unit was failing to serve not merely as a store of value — it had long since lost this function to gold, silver, United States and Hong Kong dollars and almost any commodity which could be hoarded — but even as a medium of circulation and a unit of account. While the *fapi,* the legal tender established in the currency reform of 1935, had lasted thirteen years, including

[26] Foreign trade here includes Maritime Customs Returns, adjustment for under-valuation of exports and smuggling, and barter, but excludes non-commercial UNRRA and U.S. Aid Imports. See Appendix III, Table 5, below.

[27] U.S. Department of State, *United States Relations with China,* pp. 783 and 879, and van der Sprenkel, *New China, Three Views,* p. 30.

[28] U.N., *Economic Survey of Asia and the Far East 1949,* pp. 99-100 and 180-182.

the eight years of the War of Resistance, the currency introduced in August 1948 lasted only eight months and the succeeding official substitutes were even shorter lived.

The gap between China's economic potentialities and the ugly mess left by the Kuomintang could hardly have been greater.

II

Economic Progress from 1949 to 1952

1 PROBLEMS OF REHABILITATION

DURING THE YEAR 1949, the new Government was preoccupied with taking over the reins of power and consolidating its rule. The decisive battle of Hsuchow in North Kiangsu had been fought in November 1948. Peking and Tientsin were taken over at the end of January and the beginning of February and Nanking and Shanghai in April and May, but it was not until the end of the year that stable government was established in the Southeast and Southwest. The People's Government was formally instituted on an all-China basis on October 1, 1949.

Conditions were necessarily abnormal in most of the country and the major problem was to restore order and put China on its feet again as a going concern after years of misrule. The economic programme of the period of rehabilitation was formulated in Article 26 of the Common Programme, which was adopted as a provisional constitution by the People's Political Consultative Conference in September 1949:

> The basic principle for the economic construction of the People's Republic of China is to develop production and bring about a prosperous economy through the policies of taking into account both public

> and private interests, of benefiting both labour and capital, of mutual aid between the city and countryside, and circulation of goods between China and abroad. The state shall co-ordinate and regulate state-owned economy, co-operative economy, the individual economy of peasants and handicraftsmen, private capitalist economy and state capitalist economy, in their spheres of operations, supply of raw materials, marketing, labour conditions, technical equipment, policies of public and general finance, etc. In this way all components of the social economy can, under the leadership of the state-owned economy, carry out division and co-ordination of labour and play their respective parts in promoting the development of the social economy as a whole.[1]

Despite the difficulties encountered during 1949 in the shift from a predominantly rural to a mixed base where the centre of gravity was urban,[2] in the re-establishment of normal conditions and in the initiation of elementary reconstruction, the process of economic contraction was halted and generally reversed, the 1948 level of production in many cases being surpassed. In the face of severe natural calamities, output in agriculture, the sector which because of its relative self-sufficiency is best fitted to withstand the ravages of hyper-inflation, was just over three-quarters of its previous peak. (The previous peak year used as a basis of comparison in official Chinese statistics is usually 1936 for Chinese production outside the Northeast, where the Japanese attained record production in coal, iron and steel in 1942-1944.) Wheat production was 71 per cent, rice 75 per cent, and tobacco 65 per cent of 1936 levels. In the case of tea, which like other cash crops had been especially hard hit by economic disintegration and the restoration of production in which is a time-consuming business, output was only a quarter of the pre-war maximum. Raw cotton production was likewise only 52 per cent of 1936, but here rehabilitation was much simpler and quicker.

In the same year the output of light industry was two-thirds and of heavy industry only 30 per cent of their best prior performance. Coal production reached over 31 million tons, a substantial increase

[1] The official text of the Common Programme was published in *The Important Documents of the First Plenary Session of the Chinese People's Political Consultative Conference* (Peking, 1949). Articles of special relevance to the present book are given in Appendix I, pp. 239-243 below.

[2] In March 1949, the Central Committee of the Communist Party declared that "the period has now begun of working from the cities to the countryside and of giving leadership to the countryside from the cities." See O. B. van der Sprenkel, editor, *New China, Three Views* (London, 1950), p. 176.

on the 1948 level of 13.8 million tons.[3] This recovery is to be explained by the fact that the change-over in most of the principal mining areas had occurred in 1948, as in the case of the Northeast, or early in 1949, as in the case of North China; even so, given the lack of elementary maintenance provisions and the generally disorganised state of the coal mines under the Kuomintang, it was no mean feat to get production going on a reasonable and regular basis. The iron and steel industry was at least restarted, Northeastern production of pig iron, steel ingots and finished steel being respectively over eight times, virtually double and more than treble the 1948 level.[4]

Many branches of industry suffered from the Kuomintang blockade of the coast and from the sporadic "spite" bombing of Shanghai. Cotton yarn production, heavily concentrated in Shanghai as it was, was vulnerable to the blockade which for a time cut off the leading light industrial centre of China from its supply of coal on the north Hopei coast.

Outstanding success was achieved in the rehabilitation of the railways which were rapidly brought into active operation as the Government armies marched south. The ability of these armies to re-establish an adequate and efficient railway system had much to do with the extraordinary speed of their southward advance, which took most foreign military experts by surprise. The railway mileage in operation increased by nearly three-quarters from under 8000 to 13,500 miles; "by the end of the year, China was able to rehabilitate practically all its railways on the mainland and to establish railway connections from Manchuria to Hong Kong via Canton," and for the first time in over a decade it was possible to travel by train from Shanghai to Peking.[5]

The specific monetary problems facing the People's Government, in addition to the pandemic loss of confidence engendered by twelve years of inflation and hyper-inflation in the areas being taken over, were, firstly, the absence of a uniform medium of exchange until the People's Bank notes could attain wide circulation, as a result of which much of the urban-rural commerce was transacted on a barter basis; secondly, the existence of eight different People's Govern-

[3] See U.N., *Economic Survey of Asia and the Far East 1948*, p. 70.
[4] U.N., *Economic Survey of Asia and the Far East 1949*, p. 37.
[5] *Ibid.*, p. 57, and van der Sprenkel, *New China, Three Views*, p. 120.

ments' currencies in the main regions;[6] and, thirdly, the continued need for expanding the note issue until the cleaning-up phase could be terminated.[7] It was possible to establish the basic rules for the new currency in Peking as early as February 1949. With the occupation of Shanghai in May a unified currency was established for all the areas under Government control and the people gradually acquired confidence in and willingness to hold the new currency.[8] The People's Bank of China, founded in December 1948, became the sole bank of issue and exercised complete control over currency in circulation. In June, the use of foreign currency was effectively banned in Shanghai, thus ending the century-long state of affairs in which China had not been mistress of her own monetary house. By the end of the year, every detail of Article 39 of the Common Programme relating to currency and banking had been implemented. (See Appendix I, p. 242 below.)

The Chinese talent for improvisation showed itself at its best in the handling of the price situation. A unitary monetary system by itself was insufficient to reverse the expansion of currency and credit and rising prices or even bring them to a halt. The People's Government accordingly introduced a commodity unit system which guaranteed the stability of purchasing power of bank deposits and other contractual obligations in terms of specified quantities of four or five commodities, usually consisting of wheat or rice or millet, cotton cloth, peanut oil and coal, but varying from urban centre to urban centre in accordance with the local economic background.[9] This simple device succeeded brilliantly.

As peace and order were still being restored and military operations

[6] As the economic unification of the country was impossible before the process of change-over was completed, the People's Government had recognised the regional basis of the Chinese economy and polity by issuing regional currencies. This recognition was a source of strength not of weakness.

[7] Revenues constituted only one-third of expenditures in 1949. See Chen Yun, "The Financial and Food Situation" (Report to the Central People's Government Council, April 13, 1950), in China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 49.

[8] The three exceptions to unification were the Northeast, Inner Mongolia and Sinkiang, the currencies of which were assimilated in April, July and October 1951 respectively. The national currency was introduced in South and Southwest China with their liberation in the latter half of 1949. For details concerning currency conversion regulations and operations in the old and newly liberated areas, see R. Hsia, "Price Control in Communist China" (mimeographed, New York, Institute of Pacific Relations, 1953), pp. 73-80.

[9] See U.N., *Economic Survey of Asia and the Far East 1949*, pp. 126 and 159, and R. Hsia, "Price Control in Communist China," pp. 60-62 and 81.

continued throughout the year, an immediate stabilisation of the economy was out of the question. It was impossible to carry through a normal budget and further large emissions of paper currency were unavoidable, especially in newly liberated areas. Prices continued to rise until March 1950. The inflationary process was uneven both in space and time. The rise in prices was mildest in the Northeast and apparently worst in Shanghai, which was exposed to the Kuomintang blockade and bombing and where speculation was hardest to bring under control. While there were periods of relative steadiness, there were inflationary spurts in April, July and November 1949, and a last one in the first quarter of 1950. Nevertheless, the rate of increase was fractional as compared with the astronomic movements of the immediately preceding years. If inflation still continued, hyper-inflation had become a thing of the past. What mattered most was that money was again performing its normal functions with the increasing willingness to hold and build up cash and bank balances. The Government complemented the overall unification of the currency and the institution of a stable purchasing power parity unit by imposing brakes, which worked and were not ineffectual injunctions, on speculative activities, and by releasing large amounts of necessaries in the leading urban markets from stocks specially accumulated for this purpose.[10] Thus, by March 1950, while China was very far from total recuperation from all the consequences of twelve years of war, civil war and unprecedented misrule, the economy had been put on its feet again and the foundations had been laid for a steady recovery.

The achievements of the period of rehabilitation can be briefly summarized under three main headings: economic unification, completion of reconstruction and the land and other reforms.

2 ECONOMIC UNIFICATION

The country was economically integrated and unified on a reasonably modern pattern for the first time in its history. With increasingly effective regional division of labour and exchange on a much expanded scale both within and between regions, the unicellular particularism which was a primary feature of the traditional economic structure was finally undermined. China in the past was a series of

[10] U.N., *Economic Survey of Asia and the Far East 1949*, p. 197, and R. Hsia, "Price Control in Communist China," pp. 34-36.

loosely associated regions with varying degrees of political and economic autonomy. These regions in their turn consisted of a series of smaller but equally semi-independent areas, and so on, down to the basic socio-economic unit of the relatively self-sufficient village. Within the village 70 per cent or more of production never even entered the local market but was consumed at source by the farmer himself.[11] Now a genuine national market is developing for the first time. The country is no longer — in Sun Yat-sen's phrase — held together by "ropes of sand," and the old taunt that China is merely a geographic expression has become a pointless gibe. Naturally, an enormous amount remains to be done in extending commodity production in agriculture and in widening and deepening the national market. It would be idle to pass over the problem of transportation, for instance, in so huge a country with only the skeleton of a modern national transport system, or the difficulties of absorbing backward and previously isolated areas into the main stream of economic life.

There is now a competent Central Government endowed with and carrying out the customary attributes of unitary sovereignty. There is but one army and that army well disciplined and under the effective operational control of but one authority. So far from living off the land and preying off the people, like Chinese armies in the past, it is meticulously correct in its relations with the civilian population, and actively participates in combatting natural disasters, in the construction of public works and in the extension of production.[12] The People's Government's writ runs throughout the length and breadth of the country, and the members of its administrative apparatus, far from being expected to turn public service into private gain, as under the mandarinate and still more so under the Kuomintang, are encouraged to set examples of probity and patriotism to the citizenry.[13]

[11] "Peasants live largely in a self-sufficient economy. The amount they buy and sell is small. If their commercial activities are centralised in a fixed locality, it will take a big area with easy and inexpensive communications to support it." Fei Hsiao-tung, "Peasantry and Gentry: An Interpretation of Chinese Social Structure and Its Changes," *American Journal of Sociology* (July 1946), p. 6.

[12] See van der Sprenkel, *New China, Three Views*, p. 41.

[13] Many foreigners writing on China have been struck by the strong ethical note in official propaganda and practice; see Jack Belden, *China Shakes the World* (New York, 1949), pp. 509-510; van der Sprenkel, *New China, Three Views*, pp. 8-9 and 68-69; C. P. Fitzgerald, *Revolution in China* (London, 1952), p. 134; and Rhoads Murphey, *Shanghai, Key to Modern China* (Cambridge, Massachusetts, 1953), pp. 7-10.

A rational national minorities programme was inaugurated. Based on complete equality between all national and ethnic groups, it abolished the old-style feudal-imperialist exploitation of minorities by the Han Chinese governing class, which had been a prime cause of inter-racial antagonisms and tensions.[14]

A single uniform currency circulates throughout China, prices were stabilised for the first time within the memory of the younger generation, and the banking system is homogeneous and even intelligible.[15] The Government lays down and implements its own foreign commercial and exchange policies and regulations. Its budget is not a patchwork improvisation, balancing off the interests of conflicting jurisdictions and of diverse congeries of warring political cliques, but covers the unified national finances, and is implemented in accordance with sound fiscal canons, as required by Article 40 of the Common Programme (see Appendix I). The tax burden is regular and predictable, the tax structure being designed as much as possible to stimulate production in general and the crucial sectors of the economy in particular. The first working budget geared to the whole national economy was introduced in March 1950 and income and expenditures during the year approached a balance, the gap being more than covered by internal borrowing. In 1951 and 1952 there was a sizeable budgetary surplus.

When one remembers that even twenty-five years ago warlord armies flourished in many provinces, that the Kuomintang forces were largely a form of systematised and legalised brigandage, that the Government bureaucracy was creaky, ineffectual and infested with corruption and nepotism, that foreign or provincial currencies circulated in almost all the provinces of China and foreign currencies in all the treaty ports and their hinterlands, that the Central Government had no choice but to allow provincial autonomy in a wide range of expenditures and taxes in the very heart of the country, that China controlled neither its own tariffs nor the external value of its currencies, and that famines could occur in one province when its neighbour might be experiencing a glut, the inauguration

[14] Article 9 of the Common Programme states: "All nationalities in the People's Republic of China shall have equal rights and duties."

[15] For the complexities of Chinese currency twenty years ago, see J. B. Condliffe, *China Today: Economic* (Boston, 1932), pp. 149-154, and especially his quotation from the Kemmerer report: "Strictly speaking, there is no such thing as a Chinese currency system, in the sense that there is a currency system in France, Great Britain or the United States."

of a national economy within three years must on a purely technical level be deemed a truly remarkable accomplishment.

3 COMPLETION OF RECONSTRUCTION

By 1952 rehabilitation and reconstruction were substantially completed and previous peak levels of production were surpassed in virtually all branches of the national economy. On the whole, the Communist prediction turned out to be accurate, that "the tempo of economic reconstruction in China will not be slow but will possibly be comparatively fast."[16] Gross total output, industrial and agricultural, was 77.5 per cent higher in 1952 than in 1949. The rate of increase in agricultural production in 1950-1952 was 15 per cent per annum. The year by year increase is shown in Table 1.

Table 1

AGRICULTURAL OUTPUT 1950-1952

	1950	*1951*	*1952*
A. 1949 = 100			
Food crops	117	128	145
Cotton	160	235	291
B. Previous Peak = 100			
Total[a]	86	93	113
Food grains	87	96	109
Rice	97	99	110
Wheat	80	89	101
Raw cotton	83	131	156

[a] Including food grains, industrial crops, sericulture and livestock.

Source: A. State Statistical Bureau, *Communiqué,* Annual Economic Summary (hereinafter *SSBC*), 1952. *B.* U.N., *World Economic Report 1951-1952,* Table 31, p. 53.

Production of rice was 10 per cent and of raw cotton more than 50 per cent above the 1936 peak. There were striking increases in the production of other commercial crops, such as tea, sugar, tobacco and jute, that of tobacco, for instance, being four times 1949. In short, the People's Government's aim of "restoring the output of grain, industrial raw materials and export goods to the pre-war production

[16] van der Sprenkel, *New China, Three Views,* p. 179.

level and of surpassing it within the shortest possible time" (Common Programme, Article 34) was achieved with a margin to spare. According to the United Nations *World Economic Report 1951-1952,* "the increase in agricultural production was the result of an expansion in the acreage cultivated and of improvements in irrigation and methods of cultivation" (p. 53).

The industrial record is even more impressive, as is clearly brought out in Tables 2 and 3. The gross value of industrial production, excluding that of individual handicraftsmen, more than doubled between 1949 and 1952. The output of modern industry constituted only 17 per cent of gross industrial and agricultural output in 1949, but 26.7 per cent of the much higher gross output in 1952. The

Table 2

GENERAL INDEX OF INDUSTRIAL PRODUCTION
1949 AND 1952[a]

Previous peak = 100

YEAR	TOTAL	CONSUMER GOODS	INVESTMENT GOODS
1949	56	70	30
1952	126	132	116

[a] The index covers the production of 35 major industrial commodities.

Source: U.N., *World Economic Report 1951-1952,* p. 52.

output of consumer goods doubled and that of capital goods more than trebled during the same period. Although the higher rate of increase for capital goods is partly explained by the lower 1949 level of production, nevertheless 1952 production was well above the best previous performance. Total industrial output rose by 29 per cent in 1952 alone, the rise in State-owned industry amounting to 45 per cent. By the end of 1952, Chinese industry had left the pre-1949 peak production figures well behind.[17] The rate of increase of 36.9 per cent per annum in 1949-1952 "reflected recovery from war dislocation as well as rapid development during the early stages of industrialisation."[18] Again, the objective set forth in Article 35 of the Common Programme was fulfilled and over-fulfilled.

[17] Mao Tse-tung had claimed that the process of reconstruction would take around three years or more, probably more. But actually it took less. ("Report to the Third Plenum of the Central Committee, June 6, 1950," *China Wins Economic Battles,* Peking, 1950, p. 6.)

[18] U.N., *World Economic Report 1951-1952,* p. 52. See also Appendix III, Tables 1 and 2, pp. 248, 249 below.

Progress in the various sectors is reviewed in more detail later. Suffice to say that pig iron production doubled and crude steel production more than doubled between 1950 and 1952, that by October of the latter year 82 per cent of the nation's cotton spindles were back in operation and that national salt production was nearly 60 per cent greater than pre-war. The output of State-owned industry, taking 1949 as the base year, was 195 in 1950, 242 in 1951 and 351

Table 3

OUTPUT OF CERTAIN INDUSTRIAL GOODS 1949-1952

	PRE-1949 PEAK	1949	1950	1951	1952
Electric power (million kilowatt-hours)	5,950	4,310	4,570	5,780	7,260
Coal (million tons)	61.9	31.0	40.9	50.8	63.5
Pig iron (thousand tons)	1,800	246	969	1,415	1,900
Crude steel (thousand tons)	923	158	605	894	1,349
Cement (thousand tons)	2,290	660	1,410	2,490	2,860
Cotton yarn (thousand bales of 400 pounds)	2,447	1,803	2,416	2,685	3,618
Cotton cloth (million bolts)	N.A.	36.5	56.2	71.9	111.6
Machine-made paper (thousand tons)	165	108	140	241	372

N.A. = not available

Source: The figures for the pre-1949 peak, 1949 (except for cotton cloth) and 1952 are from State Statistical Bureau, *Communiqué,* Annual Economic Summary, 1954 (Peking, 1956), p. 28. The figures for 1950-1951 and for cotton cloth in 1949 are computed from the indices in Appendix III, Table 1, below.

in 1952. Coal and pig iron are the two outstanding cases where the 1952 output only slightly exceeded their previous peak; Japanese production of coal in the North and Northeast during the war reached a record 49 million tons.[19]

The transportation system was restored and expanded. In absolute figures, the number of miles of railways in operation increased from under 8000 in 1948 to 13,500 in 1949 (of which 2200 had to be virtually rebuilt and 3400 restored, and for which 2715 bridges had

[19] Jerome B. Cohen, *Japan's Economy in War and Reconstruction* (Minneapolis, 1949), Table 23, p. 163.

to be constructed) and over 15,000 miles in 1952. Guillain gives a vivid picture of the state of disorganisation of the railway system in 1949: "Rolling stock is in a lamentable state: there is no steel for making the lines; there are few spare parts; as often as not, it is impossible to repair boilers; and above all, it will be difficult to rebuild the locomotive workshops."[20] These difficulties were successfully surmounted. The Chengtu-Chungking line, which had been talked of for over forty years and which even contributed to the 1911 Revolution in Szechwan, was finally completed in 1952, as was the Laiping-Munankuan line in Kwangsi. The Lunghai railway was extended westward from Paochi through Tienshui to Lanchow, and work started on linking Lanchow with the Turksib at Alma Ata by a railway running through Sinkiang. Concomitantly there was a steady growth in railway freight tonnage carried and in ton-miles operated. Highways open to traffic totalled nearly 75,000 miles in 1952, of which over 20,000 miles had been added in the previous four years. For the first time all the big cities and many medium-sized cities were connected by long-distance telephone.

"Recovery in industry and agriculture brought about a large increase in the supplies of consumer goods and thereby permitted an increase in personal consumption."[21] According to the same source, consumption in urban and rural areas rose at a rate of 20 per cent yearly from 1950 to 1952. "The increase in the supply of consumer goods was the basis for the increase in the real wages bill and the real income of the peasants," given the redistribution of income resulting from the partial nationalisation of industry and the land reform. "The rise in rural income was due to land reform, to the abolition of rents, and to the reduction in rural taxes."[22]

With the completion of economic unification and reconstruction, China was ready to launch her First Five Year Plan. Starting from a much less advanced stage of economic evolution, she reached this point within a span of three years, as compared with six in the case of Russia, which, it is true, was pioneering in unexplored territory. The speed of China's progress is the more striking in view of her involvement in the Korean War for more than half the period under review.

[20] van der Sprenkel, *New China, Three Views*, p. 119.
[21] U.N., *World Economic Report 1951-1952*, p. 53.
[22] *Ibid.*

4 THE LAND REFORM

Article 27 of the Common Programme stated: "Agrarian reform is the indispensable condition for the development of the productive forces and the industrialisation of the nation." This went to the heart of the main problem that had faced China for generations. The land question immediately affects the lives and fortunes of 80 per cent of the Chinese people. So long as land ownership was grossly unequal, so long as the vast majority of farmers paid 50 per cent and more of their main crop in rent to the landlords[23] — whose position enabled them to exploit the populace in every other sphere, whether in buying and selling, charging exorbitant rates of interest on the mounting mass of rural indebtedness, in shifting the burden of taxation and conscription onto the backs of the peasants and adding their own exactions in the process, or in exercising the *droit du seigneur* — so long was the Chinese countryside bound to be a volcano seething with unrest, erupting into agrarian riots, uprisings and revolts, and imperilling the stability of any regime based on the preservation of landlord rule. Sun Yat-sen's "Land to the tiller" was a simple and exact formulation of the peasants' demands and, in the last analysis, the Kuomintang's refusal to implement its founder's programme was its death warrant. It is generally agreed that the most important single factor responsible for the Chinese Communists' success was their handling of the land problem. At least since the period when Mao Tse-tung established his leadership, they have given top priority to the cause of the peasants, whose political, economic and military support could not otherwise have been enlisted and mobilised. Once mobilised, this elemental force was irresistible. Land reform was a most powerful engine of social change as well as of economic and technical progress. Mao's place in history will owe not a little to his stubborn recognition of this fact and his ability to draw the necessary consequences.[24]

[23] "A high proportion of the harvest appears to go to the landowners and tax collectors" (Board of Trade, *Report of the United Kingdom Trade Mission to China,* London, 1948, p. 69).

[24] As early as 1927, in his "Report of an Investigation into the Peasant Movement in Hunan" (*Selected Works,* London, 1954, Vol. 1, pp. 21-59), Mao predicted: "In a very short time, in China's central, southern and northern provinces, several hundred million peasants will rise like a tornado or tempest, a force so extraordinarily swift and violent that no power, however great, will be able to suppress it. They will break all trammels that now bind them and rush forward

The Communists had a long and varied experience of land reform going all the way back to 1928, the detailed chronicles of which remain to be written. The criteria for the classification of rural social strata were systematically revised and refined in the light of accumulating practical knowledge, and emphasis was laid on avoiding the application of inflexible formulae permitting of no exceptions.[25]

The assimilation of the experience of the regions where land reform was first introduced provided invaluable lessons as it was extended into new areas, and each step made the next easier. The adoption of the Agrarian Reform Law on June 30, 1950, gave an added impetus to the movement. By the end of 1952 the reform had been fundamentally carried through.[26] More than 300 million landless and land-poor peasants and dependents benefited directly. Over 115 million acres of land were redistributed. The landlords who formerly levied 35 million tons of grain from this vast area were not deprived of all their land but were left with as much, neither more nor less, as the rest of the farm population; thus, while they were abolished as a class, as individuals they acquired the status of working farmers.

As for the rich peasants, the mistakes made in handling them in the "ultra-left" period of 1931-1934 were largely avoided. According to Article 6 of the Agrarian Reform Law, "land owned by rich

along the road to liberation. . . . To march at their head and lead them? Or to follow at their rear, gesticulating at them and criticising them? Or to face them as opponents? Every Chinese is free to choose among the three alternatives, but circumstances demand that a quick choice be made" (pp. 21-22). See also *ibid.*, Vol. 3, p. 138, Vol. 4, pp. 294-295, and B. Schwartz, *Chinese Communism and the Rise of Mao* (Cambridge, Massachusetts, 1951), pp. 73-78.

[25] For the two documents, "How to Analyse Class Status in the Countryside" and "Decisions Concerning Some Class Problems Arising from Agrarian Reform," originally published by the Communists in Kiangsi in 1933, re-issued by them in May 1948 and adopted with revisions and additions by the Government Administration Council on August 4, 1950, see the "Decisions Concerning the Differentiation of Class Status in the Countryside," in *The Agrarian Reform Law of the People's Republic of China, and Other Relevant Documents* (Peking, 1950), pp. 17-57. For an analysis of the land reform movement in the "old" liberated areas up to the first quarter of 1948, see Jen Pi-shih's "Report on Agrarian Reform" in the *New China News Agency Bulletin* (hereinafter *NCNA*), April 13, 1948.

[26] According to the "Decisions on Agricultural Co-operation" adopted at the sixth plenary session of the Seventh Central Committee of the Chinese Communist Party, October 11, 1955, in 5 per cent of the villages land reform had not been carried out in a thoroughgoing way, and vestiges of landlordism, overt or concealed, still survived. Similarly, the level of social development in certain minority areas still rendered it advisable to adhere to a go-slow policy (*People's China*, December 1, 1955, Supplement, pp. 13-14).

peasants and cultivated by themselves or by hired labour and their other properties shall be protected from infringement." The "land" mentioned excludes land rented out, though with certain exceptions rich peasants were allowed to retain possession of small tracts of such land.

Great attention was paid to the middle peasants who are composed roughly of those farmers who, owning land, animals and implements, do all or almost all the work on their land and do not, or only to a limited extent, employ others. Those having more than the average land in their locality were left untouched and those having less were allotted additional fields. Article 7 of the Agrarian Reform Law stipulated that "the land and other property of the middle peasants (including well-to-do middle peasants) shall be protected from infringement." While the main drive and initiative for the land reform inevitably sprang from the poor peasants and farm labourers, the middle peasants were systematically mobilised as far as possible and they generally furnished not less than a third of the leading personnel of the Peasant Associations which were the prime instruments for its implementation.

It has long been a cardinal principle of Communist agrarian policy "to rely on the poor peasants and solidly unite with the middle peasants."[27] The latter constituted 20 per cent of the village population under the old regime and as much as 50 per cent in the "old" liberated areas after the land reform had been carried through; they provided 30 to 40 per cent of the manpower of the People's Liberation Army and a large part of the grain to feed it.[28] Their support was thus indispensable, and as their lot was greatly improved by the land reform, it was not difficult to win provided that the older blunders perpetrated in classifying well-to-do middle peasants as rich peasants were avoided. It was the more important to deal with them correctly because as a direct result of the land reform their relative weight substantially increased and the centre of gravity of Chinese rural society correspondingly shifted, as Jen Pi-shih's statistics indicated. That is why Mao Tse-tung went out of his way to underline that, in redistributing the land, "if they [the middle peasants] do not agree, concessions should be made to them," and why Jen Pi-shih pointed to their rich production experience, from which erstwhile poor

[27] Mao Tse-tung, *Turning Point in China* (New York, 1948), p. 11.
[28] Jen Pi-shih, "Report on Agrarian Reform," *NCNA*, April 13, 1948.

peasants and landless labourers could learn, concluding that they were a permanent ally.

The poor peasants, composed of landless labourers and those farmers who owned too small an amount of land to yield a bare subsistence and who therefore had also to hire themselves out to others, were of course the chief gainers from land reform, the basic task of which was the satisfaction of their demands. It was they who were the backbone of the Peasant Associations, who led the attack on rural despotism and whose grievances the reform was primarily designed to redress. With the completion of the land redistribution, the size of the poor peasants' farms reached about 90 per cent of the average land holding in their locality, middle peasants' farms being slightly above and rich peasants' farms being about double the average.

The land reform was a gigantic operation involving the active participation of hundreds of millions of peasants who had never before been allowed, let alone encouraged, to stand up as individuals for themselves and have a voice in deciding their lot. As a precondition for its success a rudimentary rural democracy had to be set up by the peasants themselves — with, it is true, some guidance and direction from the cadres — in the very act of its being carried out. Innumerable factors had to be taken into account, such as the quality and location of the land, the finely graded economic status and the size of family of the recipient, the availability of work animals, implements, seed, and the like, the nature and dependability of the water supply, the immediate background and level of development of the village, the relative magnitude of the different social strata, to mention only a few. No wonder that Jen Pi-shih said the struggle for land reform required much art and delicacy in leadership and that mistakes and excesses occurred, in spite of the efforts of the most experienced cadres to restrain the peasants from adopting ill-advised and extreme measures. Yet, on the whole, the transformation was carried through reasonably efficiently and without any noticeable disruption of the course of agricultural production such as occurred, for instance, in the liquidation of the kulaks as a class in Russia.

It may well be argued that the land reform in its scope and immediate impact on a population far exceeding that of Western Europe was the biggest revolution in history. For the first time, it became possible to break down the local isolation of the Chinese agricultural economy and to draw the peasant into an increasingly national market, from which he bought producer and consumer goods he had never before

dreamed of. With the release of his productive energies, the farmer had an immediate incentive to adopt better methods of cultivation and to invest in production in order to raise his purchasing power. He has already achieved a rise in his standard of living, reflected in the higher consumption of better grains at the expense of coarse grains, in the doubled rural consumption of cotton cloth and in the rapidly mounting turnover of trade between town and country, which was facilitated by the remarkable growth of rural supply and marketing co-operatives. Rural purchasing power increased 25 per cent per annum in 1951 and 1952. The sales, first, of producers' goods such as modern farm implements, fertilisers and insecticides; second, of necessaries with only a limited rural market in the past; and third, of manufactured consumers' goods such as bicycles, fountain pens, rubber boots, thermos flasks and books, which by traditional standards were unheard of luxuries or extravagances, are clear evidence of the widening of the peasants' economic horizon. According to an Indian Government official report on Chinese rural economic reform, which is the more authoritative because of the immediate pertinence of Chinese experience to the Indian land problem, Chinese agrarian economic policy is activated by "a strong sense of realism and the lack of a doctrinaire attitude. The disappearance of feudalism and the creation of millions of peasant proprietors in place of tenant farmers and landless labourers have increased the farmers' will to work and produce more. Added to this there has been the creation by the State of the objective conditions for agricultural progress."[29]

It was inevitable that the transformation of the traditional rural institutional framework, with its powerful vested interests and its incubus of social inertia, custom and superstition, could not have occurred as smoothly and painlessly as "an invitation to a banquet." But the Government brought about this transformation largely by persuasion, by enlisting the voluntary co-operation of the peasants and releasing their latent energies rather than by coercion and bureaucratic pressure. This does not mean that land reform was an idyllic rural picnic or that the peasants abstained from the use of force in extirpating landlordism; in fact, the Government officials and the cadres participating in and guiding land reform often had to restrain the more tempestuous eruptions of pent-up peasant emotion. But the mainspring of change was ginger not compulsion.

The broader social aspects of the land reform are no less vital

[29] Quoted in the *New York Times*, October 23, 1953.

than the economic. The peasant now regards himself and is regarded by others as a man in his own right, and not as a beast of burden. He is no longer Markham's "Man with a Hoe,"

> A thing that grieves not and that never hopes,
> Stolid and stunned, a brother to the ox . . .

the passive object of external forces beyond his understanding and control, but a full-fledged citizen with an awareness of his place in society.

This growing awareness rendered practicable a series of social reforms, most of them long overdue and elementary in terms of humanist ethics but for this very reason involving drastic changes in the fabric of rural society. The outlawing of deeply rooted feudal marriage practices and the institution of sex equality (Common Programme, Article 6) must be ranked high among the new regime's achievements, and they have immediate economic as well as social significance. In the cultural field there was an active campaign against illiteracy and for the mastery of the indispensable minimum of characters among the older generation, while the educational system was enormously expanded. Great strides were taken in public health and hygiene, the emphasis again being on education and prevention.

All these and many other changes in the immemorial pattern of Chinese village life could not have been adopted without the land reform and the consequent emancipation of the peasantry. It is hard to think of any other single measure so directly and integrally contributing to "The Greatest Happiness of the Greatest Number."

III

China's Economic System

1 INTRODUCTION

THE STRUCTURE of the Chinese economy is evolving so rapidly that it is vital to distinguish between, first, the point of departure, second, current practice and, third, the goal. The point of departure was the disorder left by the Kuomintang. Current practice has itself been undergoing profound changes and cannot therefore be accurately represented by an instantaneous flashlight photograph; its basic features are those of a "New Democratic" society in transition towards socialism. As for the goal, while the Chinese Communists look forward to ultimately traversing the same road as Russia they recognize that the achievement of this goal will be the consummation of a protracted process. Their leaders are not doctrinaire visionaries — witness Mao Tse-tung's often quoted "Dogma is less useful than horse dung." They are highly sophisticated politicians with a background of thirty years of political and military experience probably unmatched in its richness and diversity.[1]

The present Chinese economy is both *mixed* and *transitional*.

It is mixed because the basic forms of ownership of the means of

[1] In General Marshall's judgment Chou En-lai was the ablest negotiator he had ever met with the exception of Winston Churchill.

production include State ownership, co-operative ownership, individual ownership by peasants, handicraftsmen, and the like, and capitalist ownership, which is differentiated from individual ownership by the fact that it covers only enterprises regularly employing hired labour. The State sector is, of course, socialist, as are those parts of the co-operative sector which are collectively owned by their members and in which the peasant's or worker's remuneration solely depends on his labour. "Semi-socialism" is considered an intermediate rather than a basic form of ownership comprising, first, those producers' co-operatives which are partly collectively owned and in which the peasant's remuneration depends on his property as well as on his labour contribution to the co-operative pool and, second, those industrial and commercial enterprises which are jointly owned by State and private interests.

Heavy industry, large-scale transport and distribution and finance, "the commanding heights of the economy," are predominantly socialist, although some big shipping, commercial and banking concerns are still jointly owned or semi-socialist. As a result of the remarkable growth of agricultural producers' co-operatives, agriculture is now largely either semi-socialist or socialist. For the rest, there is a wide variety of forms ranging all the way from socialism to private capitalism and individual peasant and handicraft production.

China is a transitional economy because it has already entered on the path of socialism and because economic growth is combined with socialisation. The proportions, first, of industrial to gross agricultural and industrial output and, second, of output of socialist and semi-socialist industrial enterprises to gross industrial output have risen. The capitalist sector has been almost entirely penetrated by the various forms of state-capitalism. In agriculture, the line of development has been from the institution of individual peasant ownership in the land reform through the growth of mutual aid teams to the dominance first of semi-socialist producers' co-operatives and then of fully socialist co-operatives. In handicrafts the movement away from largely atomistic individual production to co-operative semi-socialist and socialist production is being accelerated. The growth of semi-socialist and/or state-capitalist enterprises clearly reflects both the mixed and transitional nature of the Chinese economy.

The Chinese economic system is thus markedly different from the mixed economies of the West, where private capitalism is the mainstay of economic activity. At the same time, it is not identical with the

Soviet Russian system with its state socialism in all industry and commerce and its mechanised collective farms in agriculture.

The Chinese Communists have long maintained that the Chinese Revolution would consist of two stages, first the New Democratic and only then the Socialist stage.[2] The New Democratic stage is, in essence, the carrying out of the New Three People's Principles of Nationalism, Democracy and People's Livelihood formulated by Sun Yat-sen in 1923-1924, but with the addition of the eventual transition to socialism as the next objective. The political basis of New Democracy is a united front "so broad that it includes the working class, the peasantry, the petty bourgeoisie and national bourgeoisie"[3] — that is, the overwhelming majority of the population. The economic basis of New Democracy is correspondingly broad and mixed. The economic tasks of the New Democratic stage were formulated in 1949 in the Common Programme (see Appendix I), and substantial progress was made in implementing them during the next three years. Accordingly, in 1952 the Communists put forward their general line of the transition to socialism, which was incorporated in the Constitution adopted in September 1954 (see Appendix II). It is therefore most convenient to study the development of China's economic structure from the New Democratic stage to the stage of transition to socialism by a comparative analysis of the economic policies and objectives formulated in the two documents.

But if the New Democratic stage precedes, it also overlaps with, the Socialist stage of the Chinese Revolution. Any schema for a country as socially and economically heterogeneous as China involves simplification. Thus, the socialist sector immediately assumed the leadership in industry and finance in 1949 and continued to grow throughout the New Democratic stage. On the other hand, the New Democratic economic programme is far from having been completed, especially in the more remote and backward areas. As late as July 1955 Mao Tse-tung confessed: "the socialist revolution we are undertaking is a new revolution; we have experience only of bourgeois-democratic revolution, not of socialist revolution."[4]

[2] See, for example, Mao Tse-tung's *On New Democracy* (*Selected Works*, London, 1954, Vol. 3, p. 115), and *On Coalition Government* (*ibid.*, Vol. 4, pp. 274-278). They were originally published in 1940 and 1945 respectively.

[3] Mao Tse-tung, "Speech at the Preparatory Committee Meeting of the Chinese People's Political Consultative Conference, June 15, 1949," *People's Democratic Dictatorship* (London, 1950), pp. 27-28.

[4] "The Question of Agricultural Co-operation," *People's China*, November 1, 1955, p. 10.

2 FROM THE COMMON PROGRAMME TO THE CONSTITUTION

The main emphasis in 1949 was necessarily on rehabilitation and on wiping out the institutional encumbrances obstructing the growth of production. This demanded both certain minimum technical prerequisites and certain essential social reforms. While the Common Programme formulated these urgent goals and the methods by which they were to be attained, it also placed them in a broader setting. It accepted New Democracy as China's working political philosophy animating not only the current agenda but also the future path of development. The State became the "co-ordinator, regulator and leader" of the various sectors of the economy (Article 26) and State enterprises "the main material basis on which the People's Republic will develop production and bring about a prosperous economy" and "the leading force of the entire social economy" (Article 28). Co-operatives were to be fostered and to receive preferential treatment (Article 29). "Private capital shall be encouraged to develop in the direction of state-capitalism" (Article 31). "The system of workers' participation in the administration of production shall, for the present period, be established in state-owned enterprises" (Article 32). Once agrarian reform was completed and agricultural production increased, the Government was "also" to "guide the peasants step by step, in the organisation of various forms of mutual aid in labour and co-operation in production, according to the principle of willingness and mutual benefit" (Article 34).

If the overriding task was to get production going again on an orderly and expanding basis, the pattern within which it was to be achieved was clearly related to the existing technical and social conditions. Therefore, private enterprise "beneficial to the national welfare" was not only encouraged but "*actively assisted*" (Article 30, italics ours). As for agriculture, the main stress was on land reform and on releasing the productive powers of individual peasant proprietors. The word "also" in the passage from Article 34 on mutual aid and co-operation is highly revealing because it shows that the governmental function referred to was incidental.

But China is a society in a state of rapid flux and growth. By 1952 the process of rehabilitation had been completed and previous peak levels of production had been surpassed in virtually all important

fields. The First Five Year Plan was initiated at the end of that year, and the subsequent record in fulfilling Plan targets is truly impressive. Advances in industry and agriculture since 1949 called for both a re-examination of the existing situation and a reformulation of objectives. The economic course charted in 1949 was becoming out of date. Organisational forms which had served their purpose, and served it well, in the recent past were beginning to outlive their usefulness. Still others, while by no means having exhausted their possibilities, had reached the stage where a faster transformation than originally contemplated appeared feasible. Others, which it would have been premature to do more than experiment with in 1949, had demonstrated their value in practice, not merely as isolated experiments but as forms capable of sustained expansion in the future and, indeed, as perhaps the forms most appropriate to more advanced levels. Not least, the State and co-operative sectors had themselves undergone a substantial growth. It is in this context that the specifically economic articles of the Constitution must be analysed.

The Constitution is both a continuation of and a break with the Common Programme. And the historian must, as always in any given situation, differentiate what is continuous from what is discrete. The element of continuity here is obvious, in language as well as in content, in tactics as well as in strategy. With one exception the forms of ownership specified in Article 5 of the Constitution are virtually the same as those enumerated in Article 26 of the Common Programme, "the individual economy of peasants and handicraftsmen" of the latter becoming the "ownership by individual working people" of the former. The first clause in Article 6 of the Constitution, "The state sector of the economy is a socialist sector owned by the whole people," repeats and more explicitly defines the first sentence of Article 28 of the Common Programme, "State-owned economy is of a socialist nature." The first sentence of Article 8 of the Constitution, "The state protects the right of peasants to own land and other means of production according to law," resembles the second sentence of Article 27 of the Common Programme, "In all areas where agrarian reform has been carried out, the ownership of the land acquired by the peasants shall be protected." Similarly, the next clause, "The state guides and helps individual peasants to increase production," is an unmistakeable continuation of the Common Programme's leitmotif, the imperative necessity of increasing production. Even with respect to private enterprise, Article 10 affirms that "The state protects

the right of capitalists to own means of production and other capital according to law" and that "the state makes use of the positive sides of capitalist industry and commerce which are beneficial to national welfare and the people's livelihood," the last clause being identical with part of Article 30 of the Common Programme. And the function of state-capitalism is already visible in the second sentence of Article 31 of the Common Programme: "Whenever necessary and possible, private capitalism shall be encouraged to develop in the direction of state-capitalism. . . ."

In tactics, the Constitution, like the Common Programme, iterates and reiterates the gradual nature of many of the changes to be realized and the need to rely on voluntary co-operation wherever possible. Both contain articles which are in the nature of objectives to be attained, and both are pragmatic with respect to means. In strategy, each relies on New Democracy, on the preservation of the "broad people's democratic united front" as well as of the alliance of workers and peasants and on the equality of the various national components of the multi-national State. Each stresses the leading role of the State in the achievement of major economic objectives.

The element of discreteness, of discontinuity, is no less obvious. By 1954 the gains of the Common Programme had become the point of further departure, particularly as "the Chinese revolution has manifested a depth, thoroughness and a mass scale absolutely unparalleled in all previous revolutionary movements."[5] Therefore, the emphasis in the Constitution, from the Preamble to the last Article, is on the transitional character of the present period and on socialisation as the central task. While the material and social basis for achieving socialism did not have to be created from scratch, socialism demanded the construction of a much broader productive base and many wider and deeper changes in the social and economic structure.

This shift, this explicit emphasis on socialist transformation and socialist construction, on "the step by step abolition of systems of exploitation and the building of a socialist society" (Article 4), determines all the specific changes in the Constitution as compared with the Common Programme. The first sentence of Article 33 of the Common Programme declares that "The Central People's Government shall strive to draw up, as soon as possible, a general plan for re-

[5] Liu Shao-chi, "Report on the Draft Constitution, September 15, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 17.

habilitating and developing the main departments of the public and private economy of the entire country." Article 15 of the Constitution goes much further: "By economic planning the state directs the growth and transformation of the national economy." If the Common Programme recognised State-owned economy as the "leading force of the entire social economy," the Constitution affirms that "the state ensures *priority* for the development of the state-owned economy" (italics ours). In the Common Programme, the function of the State was "to co-ordinate and regulate," now it "directs the growth and transformation of the national economy." Co-operative economy is no longer only semi-socialist, i.e., partially collectively and partially individually owned, but also socialist, i.e., fully collectively owned, both forms existing side by side. The state actively "encourages" the peasants "to organise producers, supply and marketing, and credit co-operatives voluntarily." While the Common Programme made no reference to the rich peasant, Article 8 of the Constitution concludes with: "The policy of the state towards rich peasant economy is to restrict and gradually eliminate it." Whereas previously state-capitalism was designated a distinct form of ownership, now it is so no longer.

The language used with reference to private enterprise brings out the shift as clearly as any single example can. The second sentence of Article 10 of the Constitution baldly asserts: "The policy of the state towards capitalist industry and commerce is to use, restrict and transform them." Even in 1954 the complete abolition of private enterprise was still not on the order of the day. "During the transition period in our country, *we have not only socialism but also capitalism.*"[6] The Common Programme had affirmed the policy of State encouragement of and even assistance to private enterprises, subject to one proviso. The Constitution sharpens the edge of this proviso by adding that "the state . . . restricts their negative sides." And it explicitly formulates the goal of the eventual abolition of capitalism.

Finally, economic developments since 1949 made it possible to include certain features, particularly pertaining to rights and duties, for which there were at most only embryonic equivalents in the Common Programme, if only because the means for their implementation were as yet lacking. Hence the contrast between Articles 31-32 and 47-48 of the Common Programme and Articles 16 and 91-93 of the Constitution (see Appendices I and II).

[6] Liu Shao-chi, "Report on the Draft Constitution," p. 40 (italics ours).

The elements of continuity and discontinuity in the Constitution fuse in the statement in the Preamble that "This Constitution is based on, and is a development of, the Common Programme."

3 THE SECTORS OF THE CHINESE ECONOMY

a — *The State Sector*

Article 3 of the Common Programme specified that the Government "must confiscate bureaucratic capital and put it into the possession of the people's state," and Article 28 that all enterprises "exercising a dominant influence over the people's livelihood" were to be "under the unified operation of the state." Accordingly, the new Government took over all Kuomintang State enterprises and confiscated all enterprises owned by the Kuomintang leadership, which greatly facilitated the establishment and extension of State ownership.[7] The huge China Textiles Development Corporation furnished a striking example of a bureaucratic capitalist concern. Under the Kuomintang it was nominally a Government enterprise but actually a Soong concern formed by the private expropriation of Japanese mills.[8]

By the end of 1952 the State owned all the railways, nearly all the banks, 60 per cent of the coastal and Yangtze shipping, almost 80 per cent of heavy industry, and 50 per cent of modern light industry.[9] The State's share of gross industrial output rose from only a third in 1949 to over a half in 1952, as a result of progressive nationalisation and the expansion of old and the construction of new public

[7] In addition to the enterprises already under its control at the end of World War II, the dominant Kuomintang oligarchy had taken over, in the name of the Government, 1831 industrial units, 77 mines, 45 electric power stations and 1435 commercial firms in Japanese-occupied China. A major sector of the modern economy was thus under nominal State ownership and control before the turnover. See U.N., *Economic Survey of Asia and the Far East 1947*, p. 107; Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948), p. 31; D. K. Lieu, *China's Economic Stabilization and Reconstruction* (New Brunswick, New Jersey, 1948), pp. 78-85; and G. C. Allen and A. D. Donnithorne, *Western Enterprise in Far Eastern Economic Development* (London, 1954), p. 29.

[8] Before 1949 China Textiles owned 49 per cent of China's cotton spindles and 68 per cent of her looms. Its daily rate of yarn production per spindle was less than half the average for privately owned Chinese mills before the war and only 37 per cent of the world standard.

[9] China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 281.

enterprises. By 1954 the combined share of State, co-operative, and joint State and privately owned enterprises in gross industrial production was 75 per cent, or double that in 1949. The upward trend in the State-owned sector in industry was inevitable in the process of socialist industrialisation because of the stress laid on the expansion of heavy industry and of the State's preponderant role in this expansion. The Government's massive expenditures on capital construction in industry are virtually all allocated to State-owned industrial enterprises.

Table 4

GROSS INDUSTRIAL OUTPUT BY SECTORS 1949-1955

(Percentage distribution)

	All Industry[a]					Modern Industry
	1949	1952	1953	1954	1955	1952
State sector	33.9	52.9	54.0	59.0	63	61
Joint enterprises	2.4	5.0	5.7	12.3	16	6
Co-operative sector	1.0	3.0	3.3	3.8	5	3
Private sector	62.7	39.1	37.0	24.9	16	30

[a] Excluding individual handicraftsmen and handicraft co-operatives.

Source: State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*), 1952-1955, revised in the light of Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 119; and Li Hsien-nien, "Report on the 1955 State Budget," *New China News Agency Bulletin* (hereinafter *NCNA*), July 14-15, 1955, Supplement No. 229.

In the sphere of trade, State and co-operative commercial enterprises handled 63 per cent of the domestic wholesale trade transacted by purely commercial organisations in 1952 and 69 per cent in 1953, and in the latter year they already handled 41 per cent of all retail sales. By 1954 these respective percentages had increased to 89 and 58. The percentages of foreign trade directly handled by the State rose from 61 in 1950 to 90 in 1952 and 97 in 1954. In finance, a few jointly owned banking institutions survive, but the State banking system controls over 96 per cent of bank loans and deposits. The State sector is still negligible in agriculture except in the merchanting of staple crops, in agricultural education by example and in research,

and while the number of State farms is growing they are hardly a drop in the ocean of Chinese agriculture. There were only 97 mechanised State farms in the whole of China in 1954, and 106 at the end of 1955.

b — *Co-operatives*

According to Article 29 of the Common Programme, "Co-operative economy is of a semi-socialist nature and is an important component of the people's economy as a whole. The People's Government shall foster its development and accord it preferential treatment." This plank was implemented with spectacular results. China now has the biggest co-operative movement in the world. The vast majority of co-operators are members of the rural supply and marketing co-operatives. Beginning with a membership of 10¾ million in 1949, land reform gave these co-operatives an enormous fillip, and membership rose to over 95 million by the middle of 1952. Their further growth largely accounted for the increase in the combined membership of rural marketing and supply co-operatives and consumer co-operatives to nearly 158 million in 1953 and over 170 million in 1954. Rural co-operatives fulfil an indispensable function in promoting and expanding trade between town and country, in fostering the regular distribution of food supplies, in stimulating and improving agricultural production and in the education of the peasantry. They buy food grains, cotton, silk, ramie, tobacco, wool and export goods, providing in exchange cotton cloth, salt, coal, fertilisers, insecticides, tools and a wide variety of consumer goods, some of which had rarely if ever penetrated the Chinese countryside. In 1952 they handled 70 per cent of total State purchases of agricultural products, the Government fixing the prices and making the contracts, and they were the leading purchaser of all the main crops, absorbing 80 per cent of the cotton crop; in addition they bought up nearly 70 per cent of the products of rural subsidiary industries.

There are four main channels of supply, Government stores, wholesale co-operatives, local markets and producers' co-operatives working to contract. In 1952 the supply and marketing co-operatives bought 65 per cent of the manufactured goods they disposed of from State shops, 16 per cent from co-operatives and 19 per cent from the open market. They have directly contributed to raising the quality of many crops by making available better seeds and implements and by their educational work. Another function of the co-operatives is to repre-

sent the People's Bank in the rural areas. Of the 27,433 rural credit co-operatives in existence in 1952, 5559 were rural credit societies, 2643 credit departments of the rural marketing and supply co-operatives and 19,231 mutual aid credit teams.[10] By July 1956, 77 per cent of the peasantry were members of credit co-operatives. But there is still vast scope for their growth. It was hoped that every hsiang (county sub-district) would have one by the end of 1957.[11]

The urban consumer co-operatives organized in over 130 towns and 30 provincial federations had 132,000 retail shops, 5000 wholesale shops and 3000 processing factories by 1952. Their membership of 10 million included one quarter of the population of the seven leading cities. They sell at somewhat less than market price and obviate the need for a specialised and elaborate apparatus of direct price control.

Handicraft co-operatives comprise producers' teams, handicraft supply and marketing co-operatives and producers' co-operatives. The first two, in which the members still work in their own homes or workshops, are essentially preparations for the third, in which all work in one shop. Producers' co-operatives are either semi-socialist or socialist. In the former, itself a transitional stage to the latter, the individual members mostly own their own tools, for which they receive share capital, and their income consists of wages plus interest. In the latter, the means of production are collectively owned and the members' income consists solely of wages. Handicraft co-operatives are organised voluntarily, with apprenticeship to veteran artisans wherever possible in order to ensure maintenance of standards. The development of handicraft co-operatives was initially slow. By 1952 they had a membership of 218,000, a quarter of the total being engaged in cotton textile production. A year later there were over 4800 co-operatives with 300,000 members. With the speeding up of socialisation in 1954, the number of producers' co-operatives rose to over 11,700 and, in addition, more than a thousand supply and marketing co-operatives and nearly 29,000 producers' teams were organised. Their combined membership was 1,200,000.

The organisation of handicraftsmen into producers' co-operatives is clearly a great advance on isolated or petty commodity production.

[10] U.N., *Economic Bulletin for Asia and the Far East* (November 1953), p. 20, n. 1.

[11] Communist Party of China, Political Bureau, "The National Programme for Agricultural Development, 1956-1967 (Draft)," *People's China,* February 16, 1956, pp. 6-16. China has over 200,000 hsiang.

There are several factors conducive to the growth of such co-operatives. First, they make it possible to increase efficiency in production through greater division of labour, improvement of equipment and unified management in areas and sectors which are not yet ready, whether technically or socially, for factory production; and, once there has been an increase in the average size of the productive unit and in accumulated reserves, they facilitate the transition to semi-mechanised or mechanised workshop production. Second, they use widely scattered raw materials such as bamboo for manufacturing paper and deposits of minerals too small or dispersed to justify big investments for extraction. Third, they can absorb part of the under-employed and unemployed rural labour force; in North China, particularly, because of the relative shortness of the crop season, the farmers need ancillary non-agricultural occupations, and their womenfolk are even more intermittently employed.[12] Disguised and concealed rural unemployment is a prime source of social waste in under-developed countries, and the greater utilisation of this still largely untapped reservoir is bound to be socially and economically beneficial. Fourth, the expansion of producers' co-operatives can be achieved with relatively little State investment, a cogent consideration when State industrial investment is inevitably concentrated in heavy industry. Similarly, the growth of handicraft co-operatives makes it easier to increase the output of consumer goods and of the simplest agricultural implements during the period when the main task of socialist industrialisation is the building up of heavy industry. Finally, such co-operatives ease the change to factory life and discipline by training artisans and peasants in industrial team work.

The organisation of millions of handicraftsmen into co-operatives is no mean task.[13] Yet it is essential if socialism is to be established in a country where handicrafts are so important.

[12] In some parts of North China the farmer's specifically agricultural employment often did not exceed a hundred working days per year. See R. H. Tawney, *Land and Labour in China* (London, 1932), p. 96.

[13] Thus, Lai Jo-yu, the General Secretary of the All-China Federation of Labour, refers to "the small producers' traditional indiscipline, narrowness, selfishness and guild inclinations" (*The Seventh All-China Congress of Trade Unions,* Peking, 1953, p. 70); and Chou En-lai notes that "our handicrafts are characterised by scattered management, dispersion, very varied trades, general technical backwardness and have different social and economic characteristics" ("Political Report, January 30, 1956," *NCNA,* February 1, 1956, Supplement No. 237, reprinted in *People's China,* February 16, 1956, Supplement).

The status and role of agricultural producers' co-operatives is discussed in Chapter VI.

All co-operatives receive a 2.6 per cent discount on their transactions with State enterprises and — until 1953 — a remission of 20 per cent on sales taxes, and pay at least 10 per cent less than the normal rate of interest on their borrowings. The advantages of membership in distributive co-operatives lie not so much in the dividends as in the lower prices paid for goods purchased. Only 15 per cent of profits are apportioned among the members, 60 per cent going to investment in funds for development and expansion of activities.

It may be worth while reiterating that the educational functions of the co-operative movement are of great importance, particularly in the countryside, where in the past around 80 per cent or more of the population were illiterate peasants, where horizons were bounded by narrow family and local ties and where the traditional patterns of life had become deeply set.[14] In such an environment the co-operatives, by serving as active schools of citizenship, can make an immense contribution to speeding up agricultural progress and reducing the gap between town and country in living standards and social perspective.

c — *Individual Ownership by Working People*

The individual sector comprises individual peasants, individual handicraftsmen and other self-employed persons. Peasants are, of course, by far the most numerous persons in this category. As a result of the land reform the overwhelming majority of China's peasants became individual farmers cultivating their own land. With the growth of the various forms of agricultural co-operation (see pp. 105-106 below) the individualist nature of Chinese agriculture gradually became qualified. Mutual aid teams, which could be instituted on a large scale only after the land reform had been thoroughly carried out and which grew rapidly in 1952-1954, are entirely individualist in the distribution of their product. Even in agricultural co-operatives, with a membership of a quarter of one per cent of the peasantry in 1953 and two per cent in 1954, distribution in the initial and earlier phases is half on an individual property basis. Thus, while it was impossible to subsume Chinese agriculture under any simple or single formula, at any rate until the end of 1954 it was to a great extent

[14] "In the traditional structure peasants live in small cells, which are the families, without strong ties between the cells" (Fei Hsiao-tung, "Peasantry and Gentry," *American Journal of Sociology* (July 1946), p. 3).

individualist, although certain vital structural changes preparing the way for the transition to semi-socialist and socialist forms had already taken place and were indeed gathering momentum.

The statistics on the number of people engaged in handicraft production are still preliminary. Early in 1955, the Deputy-Director of the Central Handicrafts Administration claimed that there were close to 20 million handicraftsmen,[15] but it is only possible to reconcile this figure with the other available data on the assumption that he was including a large number of peasants engaging in part-time handicraft production. The official *First Five Year Plan* gives a figure of 6,035,000 for 1952 and Chou En-lai one of 7,850,000 in 1955, the difference being presumably due to actual growth and possibly also to better statistical recording in the intervening years.[16] Neither of these figures would appear to include workers employed in handicraft workshops.

In 1953, handicraft workshops accounted for 8 per cent of gross total output and individual handicraftsmen and co-operatives — almost entirely the former — for 7 per cent. In 1954 all handicraft output constituted 17 per cent of gross total output and was projected to constitute 15.3 per cent even in 1956. Handicraft production is still the main source of supply of manufactured consumer goods and — certainly until 1955 — of farm tools to the peasantry. It predominates in light industry where it produced 70 per cent of output in 1954. Handicraftsmen turned out half the paper and rubber products, 70 per cent of the knitted goods and matches, 75 per cent of the sugar, 80 per cent of the medicines and well over half the furniture, building materials and simple farm implements. While the economic weight of the handicraftsmen is bound to diminish in the course of industrialisation — though unquestionably more slowly than was the case in Russia — they constitute an enormous labour force and reserve.

d — *Capitalist Ownership*

The private sector's share of gross industrial output fell from over 60 per cent in 1949 to 39 per cent in 1952, 37 per cent in 1953 and then sharply to 25 per cent in 1954. Similarly, its share of commerce, amounting to 37 per cent of wholesale trade and two-thirds of retail

[15] Teng Chieh, "Handicrafts Take the Co-operative Road," *People's China,* February 1, 1955, p. 5.

[16] State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 72, and Chou En-lai, "Political Report, January 30, 1956."

trade in 1952, declined to 11 and 42 per cent respectively in 1954. Private enterprise was important in many branches of light industry, particularly in textiles. As late as 1953 privately owned handicraft workshops accounted for slightly over half the output of capitalist industry.[17] But while the private sector declined relatively, it expanded absolutely from 1949 right down to 1953. The output of private industrial concerns increased by about two-thirds between 1949 and 1952. The net increase in the number of private industrial and commercial enterprises in the seven leading cities was nearly 19,000 in 1950 and 20 per cent in the following year.[18] In 1953 private industrial output rose by over 20 per cent and private sales, wholesale and retail, by 16 per cent.

In accordance with Article 30 of the Common Programme (see Appendix I, p. 240 below) the new Government made orderly business activity possible by putting an end to the arbitrary exactions, irrational rules and regulations and economic and financial anarchy associated with its predecessor.[19] By introducing financial stability the Government enabled many private concerns on the verge of extinction to come to life again. By reviving urban-rural trade and by placing large orders for relatively long periods ahead it provided them with growing and profitable markets. By its tax and credit policies it deliberately stimulated new investment and industrial expansion. By accepting the principle of "benefiting both labour and capital" (Article 32 of the Common Programme) it normalised re-

[17] This proportion is derived from the percentage of gross total output constituted by gross industrial output, the latter including the output of handicraft workshops, and from the percentage of gross industrial output constituted by private industrial output in 1953. All statistical data for 1949-1954 are from the State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*) for 1952-1954 and from various reports by Chou En-lai and Li Fu-chun. Official data on the private industrial sector exclude jointly owned but include other state-capitalist enterprises.

[18] China Committee, *New China's Economic Achievements 1949-1952,* p. 229.

[19] In commenting on eighteenth-century China, Adam Smith wrote: "In a country . . . where though the rich or the owners of large capitals enjoy a good deal of security, the poor or the owners of small capitals enjoy scarce any, but are liable under the pretence of justice to be pillaged and plundered at any time by the inferior mandarines, the quantity of stock employed in all the different branches of business transacted within it can never be equal to what the nature and extent of that business might admit. In every different branch, the oppression of the poor must establish the monopoly of the rich, who by engrossing the whole trade to themselves, will be able to make very large profits." (*The Wealth of Nations,* Cannan edition, Vol. 1, p. 97.) This is equally applicable to what the Communists call Kuomintang bureaucratic capitalism.

lations between labour and capital. At the same time, in accordance with Article 26 of the Common Programme, it performed many regulatory functions with respect to the private sector, which was increasingly co-ordinated with the other sectors with the extension of state-capitalism.

It is erroneous to draw a parallel between the Common Programme policy towards private enterprise and the N.E.P. in Russia. N.E.P. was a conscious retreat necessitated by the collapse of "war communism" and the disastrous famine of 1921; the programme in China was one of economic expansion in which private enterprise was expected and positively exhorted to participate. The attitude of private business men in China to their place in society and to the national objectives is very different from that of the Nepmen in Russia: ". . . the controls which the Government can exercise are such that the position of the private industrialist is in no way comparable with that in non-Communist countries. In China today, however, many of these industrialists probably share the revolutionary ardour and nationalist pride which see an industrialised China holding up its head in the world as a country able to make its own machines."[20]

The implications of the economic changes taking place since 1949 were clearly drawn in the Constitution's programme of "using, restricting and transforming" the capitalist sector. But again the element of continuity as well as of discontinuity is manifested in the detailed treatment of this subject in Liu Shao-chi's Report on the Draft Constitution on September 15, 1954: "In the transition period the national bourgeoisie still plays an important role in the national economy. It can still make a definite contribution to the State in such fields as expanding production, improving management of enterprises and production techniques and training skilled workers and technicians, as well as by accepting socialist transformation."[21]

With the speeding up of socialist industrialisation and socialist transformation, the private sector began to decline absolutely as well as relatively. The output of private industrial enterprises fell by 5 per cent in 1954, and the fall in the volume of private commerce was

[20] *The Times* (London), November 5, 1953. Mao Tse-tung's memorial inscription to Fan Hsu-tung, the founder of the Yungli Chemical Company, "An Eminent Leader of Industry, A Meritorious Contributor to the Nation," is a neat example both of the Communists' attitude to industrial entrepreneurship and of their ability to use traditional Chinese forms.

[21] In *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 32.

greater. Capitalism was on its way out, but on the shorter time-scale its liquidation was to be altogether more gradual and peaceful than was the liquidation of feudal property relations in the land reform.

e — *State-Capitalism*

State-capitalism is a hybrid rather than an independent species, an unstable mixture rather than a compound of State and private ownership, and the instability of the mixture is reflected "in the various forms of state-capitalist economy which represent the economic alliance of state ownership and capitalist ownership in various complex forms."[22] Nevertheless, no account of the structure of the Chinese economy would be complete without a brief description of its development since 1949 and a discussion of its role in the socialisation of industry and commerce.

The policy adopted with respect to state-capitalism in 1949 was formulated in Article 31 of the Common Programme (see Appendix I). In the lowest form of state-capitalism, which became general in 1951, the State placed orders with private firms for six or twelve months ahead for specified quantities at specified prices. The State was here simply a customer to private industry for part of its output. This was the most frequent pattern in the early years, especially in cotton textiles. In the intermediate form of state-capitalism, the State increasingly controlled both the supply of raw materials to, and the marketing of the finished products of, the private firms, which still, however, remained in charge of production. There were several varieties of this stage in which the extent of State control was by no means uniform.

In its highest form, that of joint public and private ownership, the State is usually the majority shareholder and policy director, as in the case of the big Ming Sen shipping and Yungli chemical companies and of the Bank of China.[23] The acute economic problems of the period prior to and immediately after the take-over in 1949 facilitated the growth of joint enterprises, in which management is under the State's direct leadership. Until late 1955, a quarter of their profits went to the shareholders, both public and private, the remainder being allocated to investment, taxes and employee welfare facilities. Jointly owned enterprises are considered semi-socialist as much because of

[22] *Ibid.*, p. 62.

[23] Not to be confused with the People's Bank of China, which is entirely State-owned. The Bank of China is mainly concerned with financing overseas trade.

the State's participation in their operations as because of its share in their ownership.[24]

The forms of state-capitalism are particularly diverse in wholesale and retail commerce which lends itself less readily than do industry and finance to standardisation.

The two less advanced forms of state-capitalism accounted for one-third of the private capitalist sector's gross industrial output in 1952.

Table 5

GROWTH OF HIGHER FORMS OF STATE CAPITALISM 1949-1955

	Intermediate Form (Per Cent of Private Industrial Output)	Highest Form (Number of Joint Enterprises)
1949	11.8	98
1950	28.8	294
1951	42.7	706
1952	56.0	998
1953	66.4	1,035
1954	78.5	1,744
1955 (June)	83.0	2,068

Source: Chi Chao-ting, "Capitalists Cross Over," *China Reconstructs* (March 1956), pp. 2-5.

Two years later, the State controlled nearly nine-tenths of all large private industrial enterprises through Government purchases, marketing and placement of contracts. This expansion in the lower forms of state-capitalism, which occurred in commerce also, prepared the way for and accompanied a further extension of the highest form. The 1953 output of joint industrial enterprises was nine times that of 1949. In the following year joint enterprises produced one-eighth of gross industrial output and absorbed private concerns previously accounting for a quarter of all large-scale private industrial output.[25]

This growth, and particularly the sharp jump in 1954, was the more significant in view of Chou En-lai's prediction that "Judging by the trend of events, the transformation of capitalist industry will be brought about chiefly through . . . the advanced form of state-capitalism."[26] In other words, state-capitalism was regarded as a transitional

[24] Official statistics exclude their output from that of private industry.

[25] *SSBC* for 1954.

[26] "Report on the Work of the Government, September 23, 1954," *Documents of the First Session,* pp. 96-97.

stage through which private enterprise would evolve into socialist enterprise, usually though not necessarily passing through the intermediate form, in which it increasingly received its raw materials from and sold its finished products to State organisations while still remaining under private ownership and management, into the higher form of joint ownership and management in which the socialist elements would become more and more pervasive.

4 THE PACE OF SOCIALIST TRANSFORMATION

The First Five Year Plan targets for socialist transformation were adopted in July 1955. The 1957 goals in industry were the incorporation of half private industrial capacity into jointly owned enterprises, the extension of the intermediate form of state-capitalism to most of the remainder and the reduction of the private sector's share of gross industrial output to 12.2 per cent, or less than a third of its share in 1952. In commerce the 1957 target was the virtual absorption of wholesale trade by State and joint concerns and the reduction of purely private retailing to 21.1 per cent of total retail sales, likewise under a third of its shares in 1952. In agriculture and handicrafts it was hoped that a third of the peasants and about a quarter of the individual handicraftsmen would have joined producers' co-operatives — mainly semi-socialist ones — by the end of 1957. These targets appeared by no means modest when announced. Yet they were fulfilled and over-fulfilled within the next six months.

The decisive turning point seems to have been Mao Tse-tung's speech on agricultural co-operatives on July 31, 1955, in which he called for the semi-socialist transformation of half, instead of a third, of the Chinese countryside by the winter of 1957-1958.[27] The consequent impetus to the growth of agricultural co-operatives, which substantially exceeded the higher target set by Mao for 1957 before the end of 1955, immediately reacted on the pace of socialisation in industry, commerce and handicrafts.

In June 1955 the highest form of state-capitalism comprised 2000 industrial enterprises accounting for 60 per cent of all private and partly private industrial output and most of the big commercial concerns. At the year-end all private factories with over 500 employees and a half of large-scale capitalist industry had become jointly owned

[27] "The Question of Agricultural Co-operation." For a detailed discussion of the structure and socialisation of Chinese agriculture, see pp. 106-113, below.

and some form of state-capitalism had invaded 80 per cent of all private industry. By this time China was experiencing what Mao Tse-tung called "a high tide of socialist revolution." Whole trades began to go over to joint State and private ownership. At the end of January 1956 the conversion of private industrial and commercial enterprises into jointly owned ones had been carried out in 70 per cent of the cities, including all the large ones, and most of the county towns.[28] During the first quarter of 1956 over 70,000 private industrial enterprises employing 1,070,000 workers became jointly owned, and joint enterprises accounted for 92 per cent of the original output of capitalist industry. The process was to be virtually completed during the year as the projected share of private enterprise in total industrial output was set at a fraction of one per cent.

In the case of the larger enterprises it was relatively simple to assign managerial and technical jobs to their prior owners, whose experience and support the Government was anxious to retain. In smaller concerns, particularly commercial ones, the problems of consolidation and reorganisation were more complicated. In all cases, in addition to their salaries or commissions the prior owners were to receive not a proportion of the profits but a fixed interest, originally set at from 1 to 6 per cent on their investment but later revised to a minimum of 5 per cent. This interest arrangement was to last for some years. It would cost China the equivalent of several hundred million pounds which, Mao Tse-tung reckoned, is a cheap price to pay for the peacefulness of the transition to socialist industry and trade.

The temporary continuance of fixed income from property is thus the last institutional survival of capitalism in most Chinese industry and trade. In retrospect and on the longer time-scale, the liquidation of private enterprise was extraordinarily rapid. The Communist extension of the socialist sector and absorption of the private sector was, nevertheless, peaceful and smooth with a sustained reliance on semi-socialist joint ownership rather than outright confiscation, and at no point was there a sharp break in policy; while corruption, tax evasion and speculation were severely punished, every attempt was made to

[28] Shanghai alone had produced 42 per cent of the national private industrial output and had held 14 per cent of national private commercial capital (*NCNA*, February 3, 1956). For the above and following data, see Mao Tse-tung's "Speech of January 25, 1956" (*NCNA*, January 26, 1956), Chou En-lai, "Political Report, January 30, 1956," and *NCNA*, December 15, 1955, and January 10, and February 3, 13, and 14, and April 30, 1956.

avoid alienating the "national bourgeoisie" as a group. It was a euthanasia not of capitalists but of capitalism.

It may be argued that the treatment of private enterprise after 1949 was purely expedient and that the Government allowed it to grow initially in order to have more to expropriate later. Unquestionably, there was a strong element of expediency in official policy. With their pragmatic bias the Communists were predisposed to retain capitalist forms of production as long as they were demonstrably efficient in unleashing productive energy. But it was also part of their Marxist philosophy not to discard them until their potentialities had been exhausted and their usefulness outlived.

The pace of socialisation in individual handicrafts was not quite so swift. In June 1955 there were 50,000 handicraft co-operatives with 1,460,000 members and in December 70,000 co-operatives with over 2 million members. In other words, the 1957 target had been reached two years ahead of schedule, although the average size of the co-operative was only about two-fifths of what had been contemplated. But again the rate of growth rose markedly in 1956. During January nearly all the handicraftsmen in the largest cities became organised — 90,000 in Shanghai, 83,000 in Tientsin, 54,000 in Peking and 30,000 in Nanking — and co-operative membership for the whole country reached over 4,700,000 before the end of June. The socialisation of handicrafts was expected to be completed in 1956.

The speed of the growth of semi-socialist and later of socialist agricultural producers' co-operatives is perhaps the outstanding feature of "the high tide of socialism." In July 1955, 15 per cent of the peasantry were members of co-operatives. In December the percentage had risen to over 60 and a month later to over 70; well over a quarter of the latter were in fully collectively owned co-operatives. As a result of this vast change, the official goal is, in the main, to consummate the semi-socialisation of Chinese agriculture in 1956 and its socialisation in 1957.

When the Constitution was adopted in 1954, some of its Articles were in the nature of objectives to be attained rather than of descriptions of the existing situation. It was originally hoped to attain these objectives in the course of two or three Five Year Plans. In view of the breadth and depth of the socialist transformation in the succeeding eighteen months, the chances of attaining them within four years — by 1958 — were not unfavourable. In that event, an early revision of the Constitution in order to register these changes might be called for.

IV

Industrialisation and Planning

1 SOME MISCONCEPTIONS ABOUT INDUSTRIALISATION

FOR TWO GENERATIONS, if not more, prominent Chinese such as Chang Chih-tung, Kang Yu-wei, Liang Chi-chao and Sun Yat-sen advocated the need for large-scale industrialisation if China were to become a progressive modern world power, able to withstand encroachment from without and erosion from within.[1] There had been much drawing up of superficially imposing drafts but little or no action.[2] In the long war years the concocting of ambitious industrialisation projects was the intellectuals' ivory tower in which to escape from the harsh realities of the present. Sun Yat-sen's dictum, "Action is easy, thought is difficult," was indeed the reverse of the truth. The leaders of the C.C. clique[3] aspired to borrow Western technology

[1] For Chang Chih-tung, Kang Yu-wei and Liang Chi-chao, see Arthur Hummel, *Eminent Chinese of the Ch'ing Period* (2 vols., Washington, 1943-1944).

[2] See Sun Yat-sen, *The International Development of China* (2nd edition, London, 1928), and Chiang Kai-shek, *China's Destiny* (New York, 1947), pp. 171-182. It is common knowledge that the author of the latter was Tao Hsi-sheng, an ex-Marxist economic historian, who for a time served the Japanese under Wang Ching-wei and later became Chiang Kai-shek's Minister of Information in Taipei.

[3] ". . . the extreme right-wing faction of the Kuomintang . . . completely dominated by the two brothers Chen Li-fu and Chen Kuo-fu, who have long been associ-

while retaining all the detritus of a moribund social order. To them industrialisation was simply a matter of importing, preferably gratis, a vast flow of physical machinery and of foreign technologists to turn on the switch at the right moment, leaving otherwise intact an institutional fabric which was patently breaking under the accumulated stresses and strains of the last century. At the most, they hoped to turn China into a Confucianist replica of Imperial Japan. But industrialisation cannot be treated as a matter of technical gadgets. It is socially and economically all-pervasive. It involves a root and branch transformation not only of the way in which production is organised and carried on but not less of the pattern of life of those participating in the productive process.

Another mistake, more complex in character, arose from a misunderstanding of the specifically economic pre-requisites for industrialisation. The creation of modern industry involves a big increase, both quantitatively and qualitatively, in the rate of investment in general and of investment in basic industries in particular. Now a community living at bare subsistence levels is not in a position to allocate substantial resources from its current output to investment, and must either borrow from abroad or tighten its belt still further, or both, if it wishes to industrialise. It was widely believed that China was too poverty-stricken to have an actual or potential social surplus available for investment and that it would have to depend on long-term foreign loans for this purpose.[4] This was an error of fact. There are not many countries today in which there is *no* social surplus left over after meeting the conventional subsistence requirements, and in any case China is not one of them. The trouble in the past was not the absence of such a margin but that, first, the actual surplus was much smaller than it should have been, even within existing levels of technique, as a result of waste and inefficiency; and that, second, small as it was, it was largely dissipated with little net addition to the nation's productive resources. Instead of fructifying in the pockets of the taxpayer-investor as in the classical Gladstonian model, it was diverted to

ated with the Generalissimo. The latter has relied on them to discipline the rank and file of the Party" (U.S. Department of State, *United States Relations with China,* Washington, 1949, p. 235, n. 5).

[4] Thus, Guillain was only slightly exaggerating when he asserted that "in the opinion of all economists the necessary capital investments would be beyond her [China's] means" (O. B. van der Sprenkel, editor, *New China, Three Views,* London, 1950, p. 121). For a typical comment by a non-economist, see George B. Cressey, in Abram Bergson, editor, *Soviet Economic Growth* (New York, 1953), p. 366: "Estimates of capital needs from the outside world run into billions of dollars."

the small governing class of "bureaucratic bourgeoisie" and their hangers-on and mostly went to waste in purchases of land, private hoards, anti-social speculation and usury and the maintenance of a corrupt and incompetent government apparatus and army.[5] But if a country does have a disposable internal surplus, foreign loans cease to be indispensable. They could, of course, speed up and facilitate the rate of industrialisation and reduce the inevitable difficulties of the transition period. The development of railways in China, for example, would be an immensely simpler task if foreign capital were available on an appropriate scale and under mutually agreeable terms. But *new* private investment in foreign railways is a thing of the past, and Western government loans to China are politically out of the question, at least for the time being. China, like Russia, must plan its industrialisation on the assumption that Western long-term capital will not be available.

No less important, once the country does begin functioning as a going concern, output is bound to increase fairly rapidly and with it both the size of the pie available for consumption and the disposable surplus available for investment. It is clear from the 1949-1952 record that China's expanding current output can cover not only the bulk of her immediate investment needs but also the maintenance and indeed the modest amelioration of her low living standards.

But if a country has only a small industrial base from which to start, then although it need not import *capital* as long as it has an agricultural or other raw material export surplus, it does have to import *capital goods* in considerable quantities, and especially certain crucial categories of machinery which it cannot produce itself in the early stages of economic growth. Here, in addition to the error in logic arising from the confusion of capital with capital goods, there was an under-valuation both of the internal and external possibilities. First, the extent to which China could herself produce certain types of investment goods and the speed with which she could master the techniques of producing others were under-estimated. Second, the availability of non-Western sources of supply was overlooked or mini-

[5] The land purchases only accentuated the inequality in the distribution of land. The Chinese proverb, "Land breeds no land," points up the futility from a national point of view of private investment in purchases of land, given a static social structure. Investment by the buyer is matched by disinvestment by the seller, and there is no change in *net* national investment. For an assessment of the inadequacy of land purchase as a form of investment, see United Nations, *Processes and Problems of Industrialisation in Under-developed Countries* (New York, 1955), p. 34.

mised. It was forgotten that Russia and the Eastern bloc are both willing and able to supply China with machine tools, generators, heavy machinery and the paraphernalia of modern technology. China is acquiring large amounts of such goods from the Eastern bloc in exchange for exports of agricultural products and minerals. In addition, Russia made a five-year loan of U.S. $300 million in 1950, and a further loan of 520 million roubles in 1954,[6] both of which have been spent on investment-goods.

This is not to imply that a restoration of Chinese trade with the West and Japan to previous levels, let alone its expansion within fairly elastic limits beyond them, would not be desirable from China's point of view, or would not enable her to hasten the tempo of industrialisation. The point is that such trade is not a matter of life and death, and the goal of industrialisation can be achieved without it.

Similarly with the problem of foreign engineers and technologists. Russia has provided specialists — as many as 20,000 at any given time — who play their part both in planning and production and in training Chinese to take their place; in addition, many Chinese are given training in Russian educational institutions and factories.

Another error frequently to be found in discussions of underdeveloped countries has been a disproportionate emphasis on financial problems, which are ultimately of the second order of importance in this context. Here the question of economic development is not primarily one of pounds, shillings and pence, or for that matter of dollars or rupees or yuan, but, given the existence of a disposable social surplus, of centralising and mobilising it for application into constructive investment channels. If in the West its concentration and allocation occur through the medium of an elaborate financial apparatus, it does not follow that other societies must duplicate this mechanism or that in its absence a programme of large-scale investment is impossible — as the example of Russia shows. In China, the State itself owns and controls heavy industry, the main artery of economic development, and can directly allocate a proportion of its product to investment. In addition, taxation is used both to centralise

[6] There is no point in converting this sum — or the additional 400 million roubles of supplies granted at the same time — into sterling or dollars on the basis of an exchange rate derived from foreign visitors' comparisons of the cost of living in Moscow with that in Western cities. China spent most of these loans on machinery; and it is generally recognised that as a matter of deliberate policy the structure of Russian prices is such as to keep the prices of investment-goods relatively low; apart from anything else, they are free from the turnover tax.

part of the surplus and to stimulate incentives to invest, and savings are encouraged with the growth of banking institutions. There is naturally a *monetary* as well as a *real* side to investment, and these should interlock and synchronise if correctly planned.

In the first phases of industrialisation, particularly, there are some fields of investment in which the distinctively financial element plays little or no role. At this stage, it is essential to raise agricultural productivity by relatively simple means, in no way involving mechanisation, in order to increase the supply of food and of agricultural raw materials produced by a falling (comparatively) agricultural labour force, and thus to make possible the transfer of labour from agriculture to industry. One way to increase agricultural productivity with a minimum of elaborate machinery is to mobilise previously idle or largely unemployed labour to carry out basic irrigation, water conservancy and rural construction and transportation projects. In a country where labour is plentiful and capital goods scarce, and where, moreover, a virile tradition of organising large- and medium-scale public works survives, many labour-intensive projects can be undertaken in which there is no question either of dependence on abroad or of acute internal financial strain. Such measures often yield quick and highly remunerative results and *expand* the size of the social surplus available for investment. Needless to say, the greater the amount of advanced machinery available, the more ambitious these projects can become, so that they can eventually embrace a complex covering hydroelectricity, navigation, exploitation of mineral resources and industrial development as well as agricultural expansion.

Three other considerations are relevant to the analysis of Chinese economic development. The first is that at a certain stage the process of industrialisation becomes autonomous, the process of expansion becomes self-feeding and self-financing. The industrial sector ceases to be dependent on foreign sources for either crucial replacements or accretions and is now able to produce most of the required amounts and types of capital goods itself. Investment begets both replacement and further investment. This is *the critical point* in the process of accumulation and industrialisation. Once it has been reached, the primary foundations have been laid and the system grows of its own momentum, as can be seen from the examples of Japan and the Soviet Union, to cite two countries with quite different institutional frameworks and historical backgrounds. It is much easier to see this critical

point retrospectively than prospectively. Forecasting is necessarily hazardous. But the weight of the available evidence seems to indicate that China is nearer to completing the primary foundations, to reaching the critical point, than is generally realised in the West. Her coal production is already far above Japan's, her iron and steel production is rapidly expanding, and if electric power production is still low, projects for its expansion are already well under way. Her output of machinery is growing fast both in quantity and complexity. It is by no means improbable that, barring international crises, China will have approached the critical point by the end of the First Five Year Plan and that the process will become self-generating during the course of the Second.

The second consideration concerns the labour force. Many Western discussions of economic growth focus attention on those problems of capital and capital goods which are relatively tractable to economic analysis and, apart from dwelling on the question of the supply of managerial ability, skim lightly over what is perhaps the most difficult problem of all, namely, the creation of a large, disciplined and skilled labour force. *Given an adequate supply of food,* the creation of a skilled labour force is the crux of the process of industrialisation. With it, the problems of capital formation and capital maintenance can be solved; without it, the best machinery in the world will rust unused. The speed of reconstruction in devastated industrial countries is proof enough of its overriding importance. But the creation, or at any rate, the rapid expansion of a supply of skilled workers amenable to factory discipline is a problem of a very different order from that of mobilising a trained labour force already in being. The discipline needed for the smooth and continuous operation of a factory system is at least as hard to acquire as modern industrial skill; witness the huge rates of labour-turnover in industrial plants and mines in areas being opened up for the first time in Africa, Latin America and the Middle East, where the maintenance of the labour force is often as much of a problem as its initial recruitment.[7]

While the difficulties should not be minimised, China has several advantages in this sphere. First, she is not starting from scratch. Second, Chinese peasants have developed a knack of voluntary co-operation and self-discipline without which the large-scale public works indispensable to the traditional Chinese economy could not

[7] See Wilbert E. Moore, *Industrialization and Labor* (Ithaca, New York, 1951), Chapter V.

have been successfully carried out. The habit of working together, not merely in teams comprising a few individuals but in groups of thousands and tens of thousands, is not something to be acquired afresh. This is at least a negative asset. Finally, the diligence and aptitude of the Chinese worker and peasant have frequently evoked comment.[8]

The third consideration concerns the institution of a competent managerial staff in a country where large-scale industrial construction is a new departure and where only a small experienced domestic personnel had previously come to the fore. Some economists maintain that entrepreneurship constitutes a crucial bottleneck in industrialisation and that in this respect, at least, private enterprise is superior to socialism because of its ability to stimulate the emergence, growth and replenishment of an efficient entrepreneurial group. The example of Russia, they claim, is not conclusive, because the Communist Party fulfilled the traditional role of the entrepreneur, providing the ruthless energy, organising ability and leadership without which large-scale industrialisation would have been impossible. But there is no reason in history or logic to assume that the Chinese Communists are less able than their Russian confreres. In fact, the Chinese Communists are rather more favourably placed, if only because they have the advantage of hindsight with respect to the role of plant managers which the Russians lacked. Therefore, the course of discretion would be to assume that what the Russians could do, the Chinese can do at least as well.

2 LIGHT INDUSTRY VERSUS HEAVY INDUSTRY

One issue requiring clarification involves not the ultimate objective but the means to be adopted in approaching it. One prevalent view is that, in the first stages at least, industrialising countries should concentrate on the creation and expansion of light industry, largely neglecting heavy industry, the products of which, it is claimed, they should mostly import.[9] Light industry requires smaller initial investment, maintenance and replacement, and it is much simpler to

[8] For example, "the patience, industry and manual dexterity of her [China's] workers" (G. E. Hubbard, *Eastern Industrialization and Its Impact on the West*, 2nd edition, London, 1938, p. 198), and Tawney's remarks on the Chinese peasants, cited above (p. 4, note 4).

[9] Needless to say, the problem is not one of choosing between investing *only* in heavy or in light industry, but of concentrating on one rather than the other.

train a labour force in textiles, for instance, than in iron and steel and general engineering. Further, the experience gained in these industries should prove invaluable in the acquisition of more advanced skills. Finally, since light industry requires a shorter period of investment without immediate returns, it should facilitate a fairly quick rise in standards of living, which are far too low to begin with.

The issue is strategic at least as much as tactical. The speed of the general advance is fundamental. For the greater the concentration on heavy industry, the sooner will the critical point at which the process becomes self-generating be attained, and with its attainment the strains begin to diminish because the rewards begin to increase more than proportionately. Investment in light industry yields greater returns in the immediately succeeding years but is less successful than investment in heavy industry in raising living standards if a slightly longer time-horizon is chosen as the frame of reference. There is a general propensity to discount the future too heavily, which choosing the longer time-horizon tends automatically to correct. Chou En-lai put this argument bluntly in his "Report on the Work of the Government" on September 23, 1954:

> But which is better: to bear certain temporary hardships and inconveniences for the sake of long-range prosperity and happiness; or to seek petty benefits now and never manage to shake off poverty and backwardness? We believe that everyone will think the first a good idea, the second bad.[10]

Moreover, the comparatively inelastic supplies of raw materials from domestic agriculture impose a bottleneck on the rate of expansion of light industry, since the pace of increase is inevitably slower in agriculture than in industry.

Focussing on heavy industry also makes it easier to derive maximum advantage from "leap-frogging" and from the economies of large-scale production. The state of the industrial arts at a given moment is the end-product of a slow evolution, of a long-drawn-out system of trial and error. In certain branches of production — oil is an obvious example — an industrialising country can, under favourable

[10] *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 79. At the same time, Chou En-lai warned against the twin dangers of "economism," i.e., raising low living standards too quickly in relation to the current expansion of production, and "bureaucratism," i.e., indifference to the present (p. 102). Avoiding "both these erroneous tendencies" poses extraordinarily delicate problems in planning.

circumstances, avoid most of the intermediate stages of evolution and in one leap attain the best large-scale procedures. The national costs of innovation and of the adoption of improvements become smaller once "the penalty of being first" has been incurred by someone else, a maxim which sometimes applies on the social as well as on the technical level.

Concentration on light industry prolongs the period of dependence on abroad not only for such items as power and transport equipment but also for textile and food-processing machinery. It has been argued that this dependence is an asset rather than a drawback, since it increases the advantages accruing from the international division of labour. This argument has much less force for very large countries with abundant natural resources, such as China and India, than for small countries. In the long run, savings in otherwise recurring foreign exchange expenditures and economies of scale should far exceed the original foreign exchange cost of basic installations and any temporary losses from comparative inefficiency in the initial process of building up heavy industry.[11] Moreover, once a country has heavy industry, it is easier and not harder for it to benefit from the international division of labour.

Heavy industry is the foundation of all modern industry. As Nehru told the Indian National Development Council on January 21, 1956: "If you want India to industrialise and to go ahead, you must industrialise and not bother about with odd little factories producing hair oil and the like. You must go to the root and base on which you will build the structure of an industrial India. Therefore, it is heavy industry that counts."

Finally, economic development does not occur in a political vacuum. China has a background of comparatively recent humiliations by foreign invading and occupying forces. Admittedly, national defence is a regrettable and costly necessity especially for countries in the process of industrialisation. Given the need for a defence establishment and the danger of being cut off from normal sources of supply in case of war, industrialising countries will inevitably attach great weight to building up a minimum of military self-sufficiency, however painful the decision to allocate resources to industries which compete with both the civilian heavy industrial and the light industrial sector. And the more specialised the capital goods needed for defence, the more painful will the decision be. But

[11] See p. 97, note 44 below.

to the Chinese the alternative appears to be not so much guns versus soya beans as blast furnaces versus the foreign yoke.

The socialist arguments for concentrating on heavy industry are simple. Under private enterprise, industrialisation begins in light industry, and particularly in textiles, because the *market* is immediately in sight and because the risks arising from growth are correspondingly low. It is only later, after the development of light industry has itself created a demand for machinery, that a market for the products of heavy industry emerges which is wide enough to justify relatively large-scale *private* investment in basic industries. Under socialism, planning presupposes a fair degree of ability to foresee the future *en gros,* so that the expansion of the aggregate market as distinct from particular and individual markets can be rationally allowed for, and it is a comparatively easy matter to use the products of heavy industry with efficiency and advantage.[12]

Second, the State can take into account the whole "social" product of investment; whereas under capitalism the private investor, whose horizon is necessarily limited by the anticipated "private" returns, may decide that the latter are not big enough to justify the initial expenditures involved. Railways, for example, create economies external to the railway industry which may accrue to landowners and industrialists in other sectors. In order to increase the "private" returns and to reduce the investors' risks, the State sometimes made extravagant land grants, as in the United States, where railway construction at times became a form of land speculation, or extended guarantees, as in India, to railway companies. The risk element in this kind of investment is much smaller for the State than for private enterprise, since the former can more accurately gauge the external economies and longer-term "social" returns. There is also the question, clearly pertinent to the case of railways, of the drawbacks of private monopolies, which may tend to reduce the "social" product so as the better to be able to appropriate it. Lastly, the piecemeal expansion of transport, which may result in duplication in some areas and deficiencies in others, is more costly in terms of national as opposed to private accounting than is planned State expansion.

Chinese industrial development before 1949 had been exceptionally chaotic. "Chinese industrialisation has been fortuitous and hap-

[12] The author is indebted to Mrs. Joan Robinson for this suggestion. See also Paul M. Sweezy, "A Crucial Difference Between Capitalism and Socialism," *The Present as History* (New York, 1953), pp. 341-351.

hazard . . . industrial development in China has been little subject to general planning or co-ordinated control . . . and has taken place in an essentially casual and unregulated manner."[13] The socialist argument therefore applies *a fortiori* to China, since the losses from inability to take the long view and the gaps between the "social" and "private" product must have been extremely great and the possibilities of maximising, or at any rate of substantially increasing, net social advantage under effective State direction and co-ordination must now be correspondingly broad.

3 REASONS FOR THE ADOPTION OF THE FIVE YEAR PLAN

The completion of the process of rehabilitation and the preparation for future advance were the major tasks from 1949 to 1952. The question now was, what form should the future advance take? Either the previous line of development could be maintained without departing from the principle of setting goals one year ahead. Or the attempt could be made to accelerate and transform it by the adoption of longer-term targets for the economy as a whole with interdependent advances in specific sectors.

Naturally, the line of demarcation between the two alternatives was not absolute. Thus, the maintenance of the previous rate of advance already demanded at least the experimental formulation of overall targets and some co-ordinated planning between the different sectors; indeed without some such preliminary experience in planning in 1951 and 1952 the second alternative could not have been realistically considered. And yet there is a crucial difference between them.

In the circumstances, China's choice was a foregone conclusion. The socialist sector, particularly in modern industry and transport, had already assumed the role of "the leading force of the entire social economy" (Common Programme, Article 28) and it was rapidly growing in importance. Therefore, the predisposition towards a planned advance was bound to be powerful both on ideological and practical grounds: ideological, because it is a basic tenet of socialist theory that planned economy is more efficient than unplanned; practical, because the larger the sector owned by the State, the more

[13] Hubbard, *Eastern Industrialization and Its Impact on the West*, pp. 185 and 197-198.

feasible planning becomes. Article 15 of the Constitution runs: "By economic planning, the State directs the growth and transformation of the national economy . . ."

Nor could the historical example of Russia be ignored. Russia, within the space of three Five Year Plans, had achieved a degree of industrialisation sufficient to transform it from a technically backward country into the second (and later the first) industrial country in Europe. During this period its rate of growth was the fastest of which there is record.[14] The bonds of a common ideology and of material political interest reinforced the immediate relevance of the Russian experience. Was not China in 1952 in a position similar to that of Russia in 1927? Each was a huge sprawling country rich in natural resources, and with a large — in the case of China an enormous — population, with low — in the case of China extremely low — standards of living. Each was predominantly agricultural and each started from a limited and backward industrial base, China more so than Russia. In each the possibilities of a high rate of economic progress depended on, first, expanding per capita agricultural output, in the case of China by releasing the peasants' productive energies through the land reform; secondly, rapidly acquiring advanced industrial techniques; and, thirdly, turning their largely unexploited natural endowment to good account. In each the prospects for appreciably improving the people's livelihood over the long haul were dubious in the absence of a concerted drive towards industrialisation. Finally, whatever the persuasive force of ideology, to the pragmatic Chinese mind no argument could be more powerful than Russia's success within its framework of reference. Russia had shown that industrialisation could be achieved by a "forced march." When Russia embarked on its programme,

[14] See D. R. Hodgman, "Industrial Production," in Abram Bergson, editor, *Soviet Economic Growth* (New York, 1953), pp. 225-244. Whatever plausible indices are chosen, and however the "index number problem" is handled (necessarily acute and intractable in a rapidly industrialising country, with the inevitable bias introduced by the selection of a base-year and of prices appropriate to that year but increasingly inappropriate to more distant years), the annual average compounded rate of growth of industrial production from 1928 to 1950 was not less than 8.9 per cent per annum on Professor Hodgman's calculations and as much as 12.5 per cent on the official Russian calculations (*ibid.*, p. 242). The average annual *compounded* rate of increase of industrial output for 1927/8-1937 was 20.9 per cent on the official Russian calculations and 15.7 per cent on Hodgman's calculations. The lower figures far exceed the annual rate of growth in American industrial output for any group of years from 1899 to 1929 *after* excluding depression years (*ibid.*, p. 70).

it was undertaking a tremendous gamble against heavy odds. The gamble succeeded, and to that extent China's decision was so much the easier and less speculative. It had been done once. It could be done again. In the last analysis this was decisive.

None of which detracts from the massiveness of the undertaking which China has launched. The difficulties were and are great enough in all conscience. Drawing up a plan for five years ahead was itself a formidable undertaking in a country which had only recently been unified and which was still engaged in ascertaining its basic natural resources and building up the indispensable skeleton of statistical data.[15] It is not surprising, therefore, that Chou En-lai stated as late as September 1954 that "The entire work on the formulation of the First Five Year Plan is still not complete" nor that this work which was begun towards the end of 1951 was only completed in 1955. Planning in agriculture, which still accounted for over 60 per cent of gross total output, was especially difficult. It was not altogether impossible, but the margin of error was wider and the results less calculable. Nor did handicraft production easily lend itself to planning, although as in agriculture the growth of co-operatives undoubtedly helped.

In spite of substantial investments in 1950-1952 — the Government spent roughly the equivalent of £625 million in 1952 on capital construction projects[16] — the industrial base remained quite slender. In spite of a substantial increase since 1949, the number of trained engineers in 1952 was only 31,000, and there was an acute shortage of technicians. These problems were freely admitted, particularly with respect to large-scale capital construction enterprises.[17]

The mixed nature even of the industrial sector complicated the

[15] See Li Fu-chun's confessions that "we had little statistical data on hand" and that "our lack of experience in planning and the incompleteness of our statistical data are bound to affect the accuracy of our plans" (*Report on the First Five-Year Plan,* Peking, 1955, pp. 9 and 123). The U.N. *World Economic Report 1953-1954* indicates that "according to official statements considerable effort is being made to improve the quality and the coverage of the statistical information" (p. 47, n. 2).

[16] This is a very rough equivalent. The official exchange rate understates the *internal* purchasing power of the yuan, and its use as a conversion factor therefore tends to give a misleadingly low impression. This caveat should be borne in mind whenever Chinese sums of money are converted into Western equivalents.

[17] ". . . all the huge and complex new enterprises called for by the Five Year Plan are designed with the aid of the Soviet Union; our engineers and technicians are still unable to design such new enterprises independently" (Li Fu-chun, *Report on the First Five-Year Plan,* p. 46). See also *ibid.,* p. 130, and Chou En-lai, "Report on the Work of the Government, September 23, 1954," p. 83.

task of centralised supervision and control. For private enterprise had not only to be subjected to a constant check-up but to be linked into the State and jointly owned enterprises, so that a correct balance was maintained and bottlenecks and disproportionalities avoided. The different rates of progress in the various sectors and in the various regions needed to be taken into account. Lastly, there had to be a sufficient foundation in terms of *Chinese* experience of planning, first for specific enterprises, second, for specific sectors and, third, for the whole country.

Fortunately, the years preceding the formulation of the First Five Year Plan were rich in just such experience. Factories and mines under the various ministries of industry fulfilled the annual plan for 1952 by 112 per cent in terms of value of output. The Ministry of Heavy Industry over-fulfilled its plan by 18 per cent, the Ministry of Fuel Industry by 5 per cent and the Ministry of Light Industry by 7 per cent.[18] Generators and edible oils and fats were the only two major categories in which there was a marked falling short of the target, but, in general, the record in attaining planned targets was more than adequate.

Plan-fulfilment is not by itself a sufficient criterion of the efficiency of production under planning. Over-fulfilment in a sector may conceal under-fulfilment by a large number of plants in that sector. If the planned target is set too low, fulfilment or over-fulfilment may, in fact, mean very little.[19] On the other hand if it is set too high, under-fulfilment may reflect more on inability to set the optimum target than on the technical capacities of labour and management. Successful planning depends, among other things, on setting the targets for particular sectors sufficiently high to provide a spur to production, but not so high as to preclude their realisation, and on achieving the correct inter-relations between the sectors so as to avoid unwanted surpluses in some and bottlenecks in others. In the long run, the proof of the pudding is in the eating. In the short run,

[18] State Statistical Bureau, *Communiqué,* Annual Economic Summary, 1952. For details see Appendix III, Table 2 below.

[19] For actual examples, see Chou En-lai, "Report on the Work of the Government, September 23, 1954," p. 84, and his *Report on the Proposals for the Second Five-Year Plan for Development of the National Economy,* delivered at the Eighth Congress, September 16, 1956 (Peking, 1956, reprinted in *People's China,* November 1, 1956, Supplement), which contains some instructive examples of errors of under-estimation and over-estimation in annual plans. For other aspects of fulfilment, such as quality of output and evenness in the tempo of production, see Li Fu-chun, *Report on the First Five-Year Plan,* p. 62.

errors in specific industries or sub-industries are unavoidable in a rapidly developing economy, and the problem is to keep them to a minimum and to correct them as quickly as possible. Here again the Russian experience must be an invaluable asset to the Chinese in achieving the right balance between the different sectors within the annual plan, on the one hand, and between the annual plans and the longer-term plans, on the other.

V

The First Five Year Plan in Industry

1 THE TARGETS OF THE FIRST FIVE YEAR PLAN

THE INDUSTRIALISATION of China is a gigantic undertaking and the attainment of an advanced degree of socialist industrialisation is hardly likely to take less than two generations. The official Chinese goal is to achieve the essentials of socialist industrialisation, socialist transformation of agriculture and handicrafts and socialisation of private enterprise within about three Five Year Plans, that is, by around 1967.[1] The First Five Year Plan, however ambitiously conceived, is only one link in a long chain of economic development. Therefore, the year 1957 is to some extent an arbitrary *terminus ad quem,* since many vital heavy industrial projects initiated during the First Five Year Plan will require about five years for their completion. And in the case of other projects only the preliminary surveying and designing work will have been undertaken or begun by 1957. (The endpaper map inside the front cover shows the centres of heavy industry in China.)

The fundamental tasks of the First Five Year Plan, according to Li Fu-chun, were, first, to lay the *preliminary* groundwork for social-

[1] Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 18.

ist industrialisation, second, to lay the *preliminary* groundwork for the socialist transformation of agriculture and handicrafts and, third, to lay the foundations for the socialisation of private industry and commerce. In other words, socialist industrialisation and the socialist transformation of agriculture and handicrafts were expected to take much longer to achieve than the thoroughgoing nationalisation of private enterprise. Nevertheless, the projected pace of advance in production and socialisation was extremely rapid.[2] The gross total industrial and agricultural output envisaged for 1957 was just over 50 per cent above that of 1952, which would involve an annual rate of growth of nearly 9 per cent. If the target for industry was attained, 1957 gross industrial output would be almost double that of 1952, with a compound annual rate of growth of 14.7 per cent. The projected increase in agricultural output of a little under a quarter, with an annual rate of growth of 4.3 per cent, was inevitably more modest.

Table 6

TARGETS FOR GROWTH IN GROSS TOTAL OUTPUT 1952-1957

	1952 (Actual)	1957 (Projected)
	(£ Million)	
Agricultural output	7,050	8,700
Industrial output[a]	3,925	7,800
Handicraft output[b]	1,075	1,725
Gross total output	12,050	18,225

[a] Including handicraft workshops.
[b] Individual and co-operative handicrafts.

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 27. All yuan figures converted at 6.859 yuan to the pound sterling and rounded to the nearest £25 million.

The basic data are given in value terms in Table 6. Four points must be borne in mind in interpreting these figures. First, they are not based on net value added but are gross; on the restrictive Communist definition of national income as the net value of "material production," China's national income in 1952 was approximately the equivalent of £10 thousand million. The element of grossness is much greater

[2] For a discussion of the targets for socialisation see pp. 51-53 above and pp. 84-86 below.

in industry than in agriculture; in Chinese agriculture, with its relatively small inputs of artificial fertiliser and of other intermediate goods, the element of grossness is probably not very large at this stage and the proportion of agricultural to total output would undoubtedly be significantly higher on a net value added basis. But even in industry the fact that the data are gross would not appear to make much difference as to the *trend* and rate of growth.[3] The second point is that Chinese gross total output does not include commerce, finance and personal services, whether in the socialist, private or individual sector. Third, the official exchange rate underestimates the yuan's *internal* purchasing power. Finally, the 1957 targets are presumably calculated in 1952 prices.[4]

The first fundamental task of the Five Year Plan, namely laying the groundwork of socialist industrialisation, entails the growth of heavy industry to the stage where China both becomes a significant industrial power and approaches the critical point at which industrial expansion becomes self-generating. The main emphasis and drive are concentrated on this primary task. The State plans to spend the equivalent of over £11 thousand million on economic construction and cultural and educational development in 1953-1957. Of this total 55.8 per cent, or the equivalent of over £6200 million, is allocated to *net* investment in capital construction, and of this subtotal nearly three-fifths, or £3600 million, are to be invested in industry. Nearly nine-tenths of the net investment in industry, or the equivalent of £3200 million, are directly allocated to heavy industry. Moreover, a large part of the projected capital construction invest-

[3] See D. R. Hodgman, "Industrial Production," in Abram Bergson, editor, *Soviet Economic Growth* (New York, 1953), pp. 231-232, for a comparison of Soviet industrial production data on the basis of his own computed net value added index and of the official gross index. There are, of course, other differences between his and the official Soviet index. The figure for China's national income in 1952 is derived from percentage data in Po I-po, "Speech to the Eighth Congress of the Communist Party, September 18, 1956," reprinted as "How Much to Invest, How Much to Consume," *People's China,* November 1, 1956.

[4] No attempt is made to estimate the Chinese gross national product in terms of sterling because there is no rational way of precisely evaluating these factors. The Western definition of gross national product or expenditures is broader than the Western definition of national income and *a fortiori* than the Communist concept of national income. "It has been estimated that the items which are excluded by the Soviet definition and included in the American and British definitions of national income amount in American conditions to about a third of the American national income and in Soviet conditions . . . to slightly more than one-tenth of the Soviet national income" (Maurice Dobb, *On Economic Theory and Socialism,* London, 1955, p. 254).

ments in transport, trade and education (see Table 7 below) is directly connected with the growth of heavy industry. Therefore, the needs of heavy industry certainly account for an overwhelming proportion of expenditures on capital construction and probably for around half the projected outlay of over £11 thousand million on economic construction and education.

The emphasis on heavy industry is also apparent in the specific details on the number and scope of projects and on the targets for increases in capacity and output of major industrial commodities.

> The industrial construction programme is the core of our First Five Year Plan, and the construction of the 156 industrial projects with Soviet aid is in turn the core of the industrial construction programme. Within the period of the First Five Year Plan, work will have begun on 145 of these 156 projects. . . . These industrial construction projects are large in scale and new in technique. Many of them are unqualified first achievements in the history of Chinese industry.[5]

This industrial construction programme embraces 694 — later increased to 800 — major or above-norm industrial projects which are to be newly built or rebuilt and considerably extended and 2300 below-norm industrial projects.[6]

If the Plan is fulfilled, nearly two-thirds of the above-norm and most of the below-norm industrial projects will be completed by the end of 1957. In addition, it is hoped to complete nine-tenths of the above-norm and the bulk of the 6000 or so below-norm non-industrial capital construction projects. The scheduled completion of a smaller percentage of above-norm industrial projects than of above-norm non-industrial projects is to be explained by the much greater scale of the former. These include 48 major projects in the Anshan iron and steel combine, 15 thermal power plants with a capacity of over 50,000 kilowatts each, several even larger hydroelectric projects, 31 coal mines with an annual capacity of over a million tons each, two motor car plants and one tractor plant, two huge heavy machinery plants, plants capable of manufacturing 12,000, 25,000 and 50,000 kilowatt generators, and a number of large non-ferrous metallurgical, heavy engineering and chemical factories.

To give but a few examples of the scope of these undertakings:

[5] Li Fu-chun, *Report on the First Five-Year Plan*, pp. 26-27.

[6] The investment norms set by the State are the equivalent of roughly £725,000 to £1,450,000 for heavy industry and of roughly £435,000 to £580,000 for light industry. See *ibid.*, p. 21, n. 1.

Table 7

PLANNED CAPITAL CONSTRUCTION INVESTMENTS AND PROJECTS 1953-1957

Sector	Investment[a] (£ Million)	Percentage of Total	Number of Above-Norm Projects	Percentage[b] of Total
Industry	3,600	58.2	694	43.4
Agriculture, forestry and water conservancy	475	7.6	252	15.8
Transport	1,200	19.2	220	13.8
Trade, finance and stocks	200	3.0	N.A.[c]	N.A.[c]
Education and health	450	7.2	156	9.8
Urban public utilities	225	3.7	118	7.4
Other	75	1.1	160	10.0
Total	6,225	100.0	1,600	100.0

[a] Yuan figures converted at 6.859 yuan to the pound sterling and rounded to the nearest £25 million.

[b] Rounded to the first decimal place.

[c] No separate breakdown available; included in "Other."

N.A. = not available

Source: Li Fu-chun, *Report on the First Five-Year Plan*, p. 23.

Table 8

TARGETS FOR INDUSTRIAL OUTPUT

	1952	1955	1957	Percentage Increase on 1952[a]	1957
	(actual)		*(original plan)*		*(revised)*
Coal (million tons)	63.5	93.6	113.0	80	120.0
Crude oil (thousand tons)	436	966	2,012	360	N.A.
Electricity (thousand million kilowatt hours)	7.3	12.3	15.9	120	18.0
Pig iron (million tons)	1.87	3.63	4.61	160	N.A.
Crude steel (million tons)	1.35	2.85	4.12	210	5.5
Cement (million tons)	2.86	4.5	6.0	110	N.A.
Electric generators (thousand kilowatts)	30	108	227	670	340
Electric motors (thousand kilowatts)	640	N.A.	1,050	60	N.A.
Machine tools (thousand units)	14	14	13	−10[b]	30
Timber (million cubic metres)	10	N.A.	20	100	24
Cotton yarn (million bales)	3.5	4.0	5.0	40	5.6
Cotton cloth (million bolts)	111.6	128.4	163.7	50	N.A.
Paper (thousand tons)	370	589	650	80	800
Sugar (thousand tons)	249	410	686	180	800

N.A. = not available

[a] Percentages given to the nearest ten points.

[b] This figure has little meaning since both complexity and total tonnage produced have been increasing.

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955) pp. 36-37; Li Fu-chun, *Report on the First Five-Year Plan,* pp. 32-33 and 119; State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*) for 1952-1955; and Chou En-lai, *Report on the Proposals for the Second Five-Year Plan for Development of the National Economy* (Peking, 1956), p. 44, reprinted in *People's China,* November 1, 1956, Supplement.

With the completion of the Anshan iron and steel complex in 1960, it will be capable of turning out 2 ½ million tons of pig iron, over 3.2 million tons of ingot steel and nearly 2 ½ million tons of rolled steel per annum. When the Fengman hydroelectric station on the Sungari River is finished, it will have a capacity of over 560,000 kilowatts. That of the hydroelectric project at Sanmen Gorge on the Yellow River in Honan will be one million kilowatts. The five chief coal mining administrations, the Kailan, Fushun, Fuhsin, Huainan and Tatung, will have projected annual capacities of 9,680,000 tons, 9,300,000 tons, 8,450,000 tons, 6,850,000 tons and 6,450,000 tons respectively.[7]

The basic data on the targets for industrial output and for increases in annual industrial capacity to be attained with the completion of the industrial capital construction projects initiated during the course of the First Five Year Plan are contained in Tables 8 and 9.

Again, the concentration on the crucial fuel, iron and steel and heavy engineering industries is most marked. The original 1957 target for coal was 113 million tons, or a little over half Britain's current coal production. Electric generating capacity, which was only 2 million kilowatts in 1952, was to be doubled by 1957, and the increase in electric power production was to be somewhat greater. While oil refining output was to be increased several fold by the erection of a new refinery in Kansu, the projected crude oil production of 2 million tons is still negligible.

The scope of the Plan cannot be adequately gauged from Table 8 alone. Many key plants will not come into full production before 1957 and some will start even later. China's first automobile plant, near Changchun, only began to produce trucks in 1956, and her second automobile plant, which is to have double the capacity of the first, will still be under construction. And similarly with the great Paotow and Tayeh iron and steel complexes, which are both well sited with respect to coal supplies.[8]

[7] Fushun and Fuhsin, both in the Northeast, are two of the richest open-cast coal mining complexes in the world. Fushun is "known to contain the thickest seam of bituminous coal in the world," three new seams having recently been discovered, including one "from 98 to 360 feet thick" (*New York Times,* March 6, 1955, citing a U.N. Economic Commission for Asia and the Far East survey of recent mineral resources developments).

[8] Tayeh is very near Hankow and close to the rich Pinghsiang coalfield in Hunan. Paotow is in Inner Mongolia and close to the even richer Tatung coalfield in north Shansi. It lies on the Peking-Suiyuan railway, is the terminal of a projected railway from Lanchow and is connected by rail with the Trans-Sib via Chining.

Table 9

TARGETS FOR INCREASES IN ANNUAL CAPACITY

	Increase over 1952		
	by 1954 *(actual)*	by 1957 *(projected)*	by 1958-1962 *(projected)*
Coal (million tons)	13	53.9	93.1
Electric power (million kilowatts)	0.53	2.05	4.06
Pig iron (million tons)	N.A.	2.8	5.75
Crude steel (million tons)	0.43	2.53	6.1
Metallurgical machinery (thousand tons)	N.A.	70	190
Power generating equipment (thousand kilowatts)	N.A.	800	N.A.
Trucks (thousand)	0	30	90
Tractors (thousand units of 54 horse power)	0	0	15
Chemical fertiliser (thousand tons)	N.A.	280	910
Cement (million tons)	0.63	2.36	3.6
Cotton textiles (million spindles)	0.7	1.65	1.89
Paper (thousand tons)	40	95	186
Sugar (thousand tons)	109	428	560

N.A. = not available

Source: Li Fu-chun, *Report on the First Five-Year Plan,* pp. 25-26 and 118.

The original 1957 target for steel output was 4.1 million tons; crude steel output had already reached 2.85 million tons in 1955, and the revised target for 1956 called for an output of 4.5 million tons, or 10 per cent more than the original 1957 goal. During the Second Five Year Plan, Anshan, Paotow and Tayeh will come into full operation and other plants will be initiated, so that the 1962 goal has been set at 10½ to 12 million tons. This more distant goal is not far-fetched, since the move from 1.35 million tons in 1952 to 4.5 million tons in 1956 is obviously harder than that from 4.5 million tons in 1956 to around 12 million tons in 1962, and since "when the two heavy machinery plants . . . which begin construction in the

present 5-year period are completed, they will be able . . . to produce every year a complete set of iron-smelting, steel-making, rolling mill and coke oven equipment for an integrated iron and steel works, with an annual capacity of 1,600,000 tons of steel."[9] The ultimate goal for 1975-1980 is of the order of 50 million tons.

The First Five Year Plan also called for the building of more than 2500 miles of new railway lines and for either the restoration, reconstruction, double tracking or specialised extension of a further 3750 miles of line. The goal for railway freight ton-mileage was double the level of 1952. About 6250 miles of trunk highways were to be built. The projected increase of 400,000 tons in coastal and inland steamship net tonnage is not very impressive, although presumably it is to come from China's own shipbuilding yards.

Laying the preliminary foundations of socialist industrialisation and, in particular, the expansion of heavy industry require the training of vast numbers of top-level technicians and of intermediate technical personnel. The Plan envisages the turning out of nearly 20,000 highly qualified engineers per annum (less in the first and more in the later years of the Plan); the magnitude of this task can be grasped from the fact that the number of *all* graduates from British universities per annum is also around 20,000. Two out of five Chinese university students are to enter the engineering faculties and one out of three graduates is to be an engineer.[10]

The goal for university enrolment in 1957 is 434,000 students, or more than double enrolment in 1952, and more than five times the current university population in the United Kingdom. The supply of middle rank trained cadres is to increase substantially more, judging by the projected rise of over 175 per cent in senior middle schools and the projected expansion of vocational schools, night schools, and the like.

But managers, engineers and foremen compose only a small part of a modern labour force. Millions of workers will be needed who will have to be trained on the job, with supplementary part-time training wherever possible.

The actual composition of the work force, outside private industry and commerce and the handicrafts, and the targets for 1957 are given in Table 10. In addition to the 10,124,000 employed in State, co-

[9] Li Fu-chun, *Report on the First Five-Year Plan*, p. 29.

[10] "Summary of the First Five Year Plan," *New China News Agency Bulletin*, August 19, 1955, Supplement No. 232.

Table 10

NUMBER OF EMPLOYEES IN THE SOCIALIST AND SEMI-SOCIALIST SECTORS

(thousands)

		1952 (Actual)		Number to be added 1953-1957		1957 (Projected)	1957 as Percentage of 1952
Total		10,124		5,360		15,484	153
Industry		2,864		2,272		5,135	179
State	2,513		1,323		3,836		153
Co-operative	130		92		222		170
Joint	220		857		1,077		490
Agriculture and water conservancy (State)		239		371		610	256
Building		1,021		744		1,765	173
Transport		716		376		1,093	153
State	707		360		1,068		151
Joint	9		16		25		278
Commerce		1,134		953		2,087	184
State	492		583		1,075		218
Co-operative	641		371		1,012		158
Finance		305		71		377	123
State	298		71		369		124
Joint	8		0		8		100
Government employees		1,523		55		1,578	104
Culture, education and health		2,282		463		2,744	120
Municipal enterprises		41		55		96	235

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), pp. 128-129. All figures rounded to the nearest thousand employees and to the nearest percentage point. The above figures for 1952 are not consistent with those for 1952 derivable from the *SSBC* for 1953, but they are later and presumably more accurate. (The employment figures in all national statistics are, of course, notoriously full of pitfalls.)

operative and joint enterprises in 1952, there were 2,542,000 employees in private industry, 2,320,000 in private commerce and 6,035,000 individual handicraftsmen, or in other words a total of 21 million in all.[11] A transfer of 1,140,000 employees from the private sector to State, co-operative and joint enterprises — mostly to the latter — was envisaged during the five years, a target which was almost certainly exceeded in 1955-1956. The projected net increase in employment, assuming that the number of handicraftsmen remains constant,[12] is of the order of 4,200,000, not so large an increase as might have been expected in an industrialising country with a growing population. It was officially anticipated that some unemployed urban labour would be transferred to agriculture during the First Five Year Plan, and that some unemployment would continue at least until the Second. Nevertheless, the 1957 target involves an increase of 20 per cent on 1952, and it will probably be exceeded, since according to Li Fu-chun there was a *net* increase of 2 million in the work force in 1953-1954. The addition of 4,200,000 employees would entail a rise of 16-20 million — or between a fifth and a quarter — in the urban population. This rate of urbanisation while extremely rapid would be smaller than that occurring in 1950-1953 (see p. 144 below). Apart from construction projects to provide educational and other facilities for the expanding city population, the State expected to build 500 million square feet of floor space to meet the housing needs of factory and office workers.

The size of the work force engaged in *modern* industry and transport in 1952 may be tentatively estimated to include all those employed in the socialist and semi-socialist sectors in industry and transport, plus at least half of those originally scheduled to be transferred from the private industrial sector to jointly owned industrial enterprises during the Five Year Plan, or about 4 million in all. On the same basis, the projected total in 1957 should be around 6

[11] The State Statistical Bureau *Communiqué* (Annual Economic Summary) for 1955 gives a figure of 18,500,000 for the number of workers and employees in 1955. But this total almost certainly excludes groups contained in the 1952 total of 21 million. It should be unnecessary to add that the labour statistics for the smaller joint and private industrial and commercial enterprises and for handicraftsmen are bound to be rough and ready. See also p. 66, note 15 above.

[12] This is a peculiar assumption unless the number of new recruits to handicrafts is exactly matched by the departures from handicrafts to the other sectors. In any case, the number of handicraftsmen would appear to have increased between 1952 and 1955 (see p. 46 above).

million.[13] This would constitute an increase of around 50 per cent in the size of the technically most advanced section of the working class. While this target is not modest, it may well turn out to have been unduly cautious.

The projected rise of 64 per cent in per capita labour productivity in State-owned industrial enterprises was not excessive, judging by the labour emulation campaigns and by the current scale of capital investments and of the labour training programmes. Average wages of factory and office employees in State, co-operative and joint enterprises were scheduled to rise by a third during the five years.

While the massiveness of the undertakings with respect to increases in output, capital construction, capacity and the technical and the labour force in heavy industry is the salient feature of the Five Year Plan, the targets set in other fields are not small. The scheduled investment in light industrial capital construction projects is the equivalent of £400 million, mostly in textiles and food-processing. Thirty-nine new textile mills were to be set up, the number of cotton spindles was to be increased from 5,660,000 in 1952 to 7,310,000 in 1957, and the target for cotton piece goods was an increase in output of 47 per cent to over 163 million bolts; its achievement is especially important because increased supplies of textiles to the countryside contribute to raising the supplies of marketed grain. The Plan calls for a rise of approximately 80 per cent both in the industrial output of consumer goods and in the volume of retail sales as a whole, which would appear to indicate that the Chinese planners are aware of the need for maintaining a reasonable degree of balance between the different sectors and for avoiding excessively sharp sacrifices of present against future income.

The agricultural targets are discussed later. Suffice to say that the size of the food surplus imposes an upper limit on the scale of investment. In China, as in Russia, the success of the Revolution would have been impossible without land reform. In China, as in Russia, land reform brought with it an increase in the peasants' consumption of grain.[14] The Russians adopted the drastic solution of the liquida-

[13] This guess may be too low. Whatever the level of industrial organisation in private enterprises before their conversion into jointly owned ones, it tends to be raised after this conversion. Workers employed in modern constructional and water conservancy works are excluded from both the 1952 and 1957 estimates.

[14] See Chen Yun, "Report on the Food Situation," *NCNA*, July 26, 1955: "After the land reform, grain output increased. However, along with the improved living standards of the peasants, their grain consumption has increased and they are not

tion of the kulaks as a class and the collectivisation-cum-mechanisation of agriculture. In China, *per contra,* the rich peasants are a small and relatively unimportant group, and thoroughgoing mechanised collectivisation is going to take a long time. Therefore, the Chinese Communists must rely on other means. So far, at any rate, the food supply has been adequate in spite of exceptionally severe natural calamities in 1953 and 1954 and in spite of temporary strains in certain localities.

2 THE PATTERN OF INDUSTRIAL CHANGE

In the process of industrialisation, industrial output increases at a rapid rate both absolutely and relatively to output as a whole. The annual growth of gross industrial output, i.e., excluding the output of individual handicraftsmen, was 35.8 per cent between 1949 and 1952. Starting from the low point of 1949, the rate of increase during the period of recovery and rehabilitation was naturally very high and could not be indefinitely maintained. Nevertheless, the rate of increase was over 30 per cent in 1953, or actually higher than in 1952, and 17 per cent in 1954, but it fell to 8 per cent in 1955. However, it was scheduled to rise by 19.7 per cent in 1956 and to reach the original 1957 target a full year in advance.[15]

anxious to sell their surplus grain, so their rate of marketable grain has dropped instead of rising." For the comparable Russian experience, see Maurice Dobb, *Soviet Economic Development Since 1917* (London, 1948), p. 216, n. 2.

[15] Unless otherwise stated, all figures — usually the latest available — are taken from the *SSBC* for 1952-1955 and particularly *SSBC* for 1954 (Peking, 1956), pp. 26-27 (see also its general comment on statistical revisions, p. 24); Chou En-lai, "Report on the Work of the Government, September 23, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), and his *Report on Proposals;* Li Fu-chun, *Report on the First Five-Year Plan;* Li Hsien-nien, "Report on the 1956 State Budget," *NCNA,* June 19, 1956, Supplement No. 240 (reprinted in *New China Advances to Socialism,* Peking, 1956); Liu Shao-chi, *Political Report of the Central Committee of the Communist Party of China to the Eighth National Congress,* September 15, 1956 (Peking, 1956), reprinted in *People's China,* October 1, 1956, Supplement; State Council, *The First Five Year Plan* (Peking, Chinese language, 1955); Po I-po, "How Much to Invest, How Much to Consume," *People's China,* November 1, 1956 (speech to the Eighth Congress); and *Proposals of the Eighth National Congress of the Communist Party of China for the Second Five-Year Plan for Development of the National Economy (1958-1962)* (Peking, 1956, hereinafter referred to as *Proposals for the Second Five-Year Plan*). The figures are not always reconcilable with those in Table 2, p. 24 above, perhaps because the coverage is not identical and because of revisions of preliminary data for the earlier years. The index numbers of gross total output for 1949-1952 are constructed on the basis of 1952 constant prices (Li Fu-chun, *Report on the*

Modern industrial output in 1955 was more than 4½ times higher than in 1949, and gross total output was nearly 2.4 times higher.[16] The increase in modern industrial output was thus nearly quadruple that in all other output, while the proportion of modern industrial to gross total output rose from 17 per cent in 1949 to 34 in 1955.

As for the period 1953-1956, given the attainment of the 1956 annual plan targets, net national income — narrowly defined — would have risen by 43.8 per cent, gross total output by 52.3 per cent, agricultural output by 19 per cent and industrial output by about 100 per cent. On the same basis, their respective annual rates of growth for the four years would be 9.5, 11, 4.4 and 19.5 per cent.

The process of industrialisation likewise entails changes in the composition of industrial output. The output of means of production constituted 28.8 per cent of gross industrial output in 1949, 39.7 per cent in 1952 and 46 per cent in 1955. This percentage change reflects the growing importance of heavy industry as the base for further sustained industrial expansion. In value terms, 1955 production of the means of production was nearly 7 times that in 1949, while the value of output of consumer goods industries was more than treble 1949. If the increase in the production of consumer goods was not so great as that of producers' goods, it was still very large. Again, on a four-year basis, the annual rate of growth from 1953 to 1956 should have been 23.9 per cent for heavy industry, 14.8 per cent for light industry and 12.3 per cent for handicrafts. Of the two components of net national income, consumption should have increased by 29.7 per cent and investment by 106.5 per cent, with respective annual rates of growth of 6.7 and 19.9 per cent.

The change in the composition of industrial output also reflects the growth of gross and net investment, both absolutely and in relation to total output. This growth is brought out not only by the

First Five-Year Plan, pp. 6-7), which give a downward bias to the increases from 1949 to 1952. Presumably, 1952 prices are also being used in the index numbers of output for later years, which would give post-1952 increases an upward bias. There is a voluminous literature on this aspect of the index number problem, to which there is no logical unique solution, the choice of an earlier year's weights being no more and no less arbitrary than that of a later year's. In any case, as no pre-1952 prices are used, the index number spread is correspondingly narrowed.

[16] For detailed figures, see Tables 11 and 12, pp. 85, 86 below. It must be repeated that gross total output does not correspond to gross national product and that the element of grossness would not appear significantly to distort the short period rate of growth (see notes 3 and 4, at p. 71 above).

growth in the production of means of production but also by the scale of budgetary expenditures on economic construction. Current expenditures on capital construction projects clearly belong to the category of net investment, while almost all other current Government expenditures on economic construction constitute some form of gross investment. Planned budgetary expenditures on economic construction, including capital construction projects, are of the order of the equivalent of some £8500 million for the five years 1953-1957, with the annual sum rising progressively.

But these expenditures are far from exhausting the gross investment category. There is no reason to suppose that there was no gross investment in the private sector in industry, for example, since allowance had to be made for depreciation and since the tax structure and the policy of allocating a definite proportion of profits to a reserve fund were specifically designed to stimulate private investment. There must also have been some gross investment in the private sector of commerce and in handicrafts. Nor is gross investment in agriculture confined to Government. It was officially estimated that apart from non-monetary investments direct and indirect expenditures on the expansion of productive capacity in agriculture in 1953-1957 would total the equivalent of slightly under £2700 million, of which about 40 per cent would be disbursed by the State and the remainder by the peasants themselves.[17]

In September 1956, Po I-po, the Chairman of the National Economic Commission, revealed that the proportion of national income constituted by accumulation was 15.7 per cent in 1952, 18.3 per cent in 1953, 21.6 per cent in 1954, 20.5 per cent in 1955 and 22.8 per cent (planned) in 1956.[18]

[17] "Summary of the First Five Year Plan," *NCNA,* August 19, 1955, Supplement No. 232. According to Li Fu-chun, total gross investment in agriculture during the five years may actually be greater ("Report, June 18, 1956," *NCNA,* June 21, 1956, Supplement No. 241).

[18] Po I-po, "How Much to Invest, How Much to Consume," *People's China,* November 1, 1956, p. 19. For the Communist concept of national income, see note 4, p. 71 above, and Po I-po, notes at pp. 17, 19.

Rostow and Eckstein arrive at a figure of 12 per cent for the 1952 ratio of gross investment to gross national product by relating the budgetary expenditure on economic construction to their own estimate of gross national product (W. W. Rostow and associates, *The Prospects for Communist China,* New York, 1954, p. 279). They assume without offering any supporting evidence that gross investment in the private sector was negligible and that there was no monetary investment by the peasants in agriculture, and acknowledge that they are leaving out of account non-monetary investments in agriculture. Since their figure for gross investment is thus

Finally, the proportion of industrial output produced by the socialist and semi-socialist sectors has risen very sharply. State, co-operative and jointly owned enterprises accounted for 37 per cent of industrial output in 1949 and 84 per cent in 1955. Their 1955 output was nearly 10 times higher than in 1949, while that of private enterprise was only slightly larger. Part of this difference in rates of growth was, of course, due to the socialisation of previously private enterprises; however, the private sector's output rose substantially in absolute terms until 1953. Further, the big expansion in the production of the means of production occurred in enterprises which were State enterprises in 1949 or at their inception later. Lastly, part of the increase in the production of consumer goods is to be ascribed to the creation of new State enterprises in this sphere as well as to better utilisation of capacity previously owned by the "bureaucratic bourgeoisie." The output of the State sector increased by 45 per cent in 1952, 35 per cent in 1953, 27 per cent in 1954 and 15 per cent in 1955.

The salient data are summarised in Tables 11 and 12. The disparities in the differential rates of growth between, first, industrial and all other output, between, second, output of the means of production and output of consumer goods within industry and between, third, the industrial output of the State sector and that of the private sector are unmistakeable. The first two disparities are inherent in the process of industrialisation as such, the third, of course, being characteristic of socialist industrialisation.[19]

too low and since their estimate of the gross national product has little meaning (the basis of the "tentative and crude calculations" underlying the "indications of the approximate orders of magnitude" is nowhere given), the percentage they arrive at would seem clearly arbitrary.

Their "Model of Economic Growth in Communist China" (pp. 284-285) is an undependable guide, since, quite apart from any other deficiencies, it postulates too low a rate of growth in gross national product (3 per cent per annum over the period 1952-1962 and only 2 per cent per annum in the first three years, whereas the actual annual rate of growth in gross output was 10 per cent in 1953-1955 and the projected annual rate of growth for 1953-1957 is almost 9 per cent) and too low an initial volume of gross and net investment, both errors which become cumulative. They nevertheless conclude that "a number of factors seem to point to comparatively rapid rates of growth in Communist China, even on the bases of expansion envisaged in our model."

[19] However, the increasing importance of the State sector in industry is not confined to socialist or socialising countries but also holds for most under-developed countries; this direct participation is not to be confused with the State promotion of economic development in countries such as Germany, Japan and tsarist Russia in the nineteenth century. At the same time, China is manifestly different from

The annual average rate of growth in gross industrial output was 18 per cent in 1953-1955. Russia had achieved a somewhat higher annual rate of growth — also gross — during the comparable period of its First Five Year Plan, while the yearly increase in the Indian index of industrial production averaged over 9 per cent from 1951-1952 to 1953-1954.[20] By 1955 China had completed nearly two-

Table 11

INCREASES IN OUTPUT 1949-1955, AND 1957 TARGETS

	1949	1954 (Actual)	1955	1957 (Original target)
		1952 = 100		
Total output	56.3	125.2	133.5	151.1
Agriculture	67.3	106.6	114.8	123.3
Industry[a]	39.9	153.7	165.6	198.3
Modern industry	35.9	154.1	170.1	204.1
Handicrafts[b]	44.2	142.9	152.7	165.7
Means of production[a]	28.9	163.8	191.8	226.8
Consumer goods[a]	47.1	147.0	148.4	179.6
Socialist and joint enterprises[a]	24.0	189.0	227.1	289.5

[a] Including handicraft workshops, but excluding other handicrafts.
[b] Excluding handicraft workshops.

Source: See note 15, at p. 81 above.

thirds of the scheduled Five Year Plan expansion in industrial output, and if the 1956 target of a 19.7 per cent increase is fulfilled, China will have virtually reached her Five Year Plan industrial goals in four years.

Since China's original industrial base was slender, it was essential, first, to utilise existing capacity to the utmost, second, to enlarge existing plants and, third, to construct entirely new plants, although there is, in fact, no sharp dividing line between these phases. There are numerous examples of the first process from the uncovering and reassembling of large stocks of capital goods not used under the

India, for example, with respect to the relative magnitude of the State sector in industry and to the nature of State planning and control.

[20] For Russia, see Dobb, *Soviet Economic Development Since 1917*, p. 242, and Hodgman, "Industrial Production," in Bergson, *Soviet Economic Growth*, p. 232 (Hodgman's adjusted and revised figures are smaller than the official Russian figures). For India, see U.N., *Economic Survey of Asia and the Far East 1954*.

Kuomintang to the institution of less wasteful mining methods in existing coal mines, greater efficiency in public utility and transport operations and the adoption of the three-shift system in cotton spinning in 1951.[21] Not only was the fuller utilisation of existing capacity of overwhelming importance in the period of rehabilitation and reconstruction. Together with the extension of existing plants and the

Table 12

INDICATORS OF INDUSTRIAL CHANGE 1949-1955, AND 1957 TARGETS

	1949	1954 (Actual)	1955	1957 (Original Target)
Modern industrial output as percent of gross total output	17	32.8	34	36
Industrial output[a] as percent of gross total output	23.2	40.1	40.5	44.6
Output of means of production as percent of industrial output[a]	28.8	42.3	46	45.4
Output of consumer goods as percent of industrial output	71.2	57.7	54	54.6
Output of socialist and joint enterprises as percent of industrial output	37	75.1	84	87.8
Output of private sector as percent of industrial output	63	24.9	16	12.2

[a] Excluding individual and co-operative handicrafts.

Source: See note 15, at p. 81 above. The data have been tested for internal consistency with, on the whole, reasonable results.

addition of new plants between 1949 and 1952, it was to be of decisive importance even during the First Five Year Plan. "A rough estimate . . . shows that about 70 per cent of the rise in the value of [industrial] output from 1952 to 1957 will come from old enterprises, while about 30 per cent will come from newly built enterprises and those which underwent major reconstruction."[22]

The second process of enlargement of existing plants is evident in electric power, coal mining, iron and steel and chemicals, among

[21] Capacity utilisation in State-owned cotton mills was estimated at 95.4 per cent in 1953. See U.N., *Economic Survey of Asia and the Far East 1954*, p. 103, n. 1.

[22] Li Fu-chun, *Report on the First Five-Year Plan*, p. 55. See also p. 69 above.

others. The "major reconstruction" of old plants belongs to the third process of the construction of entirely new plants rather than to the second. Despite the continuing importance of the original industrial base, creation of new capacity increasingly becomes the focal point of economic development during large-scale industrialisation.

Already in 1952 one-third of the investment in capital construction was allocated to new projects and the major extension of old enterprises. In the following year, 20 above-norm projects were completed, 34 were started and work continued on 80 others, including the Heavy Steel Rolling and Seamless Steel Tubing Mills and Blast Furnaces Nos. 7 and 8, all at Anshan, the Haichow open-cast coal mine at Fuhsin, a power plant at Fushun, the Fengman hydroelectric station, the No. 2 power plant at Sian and power plants at Chengchow and Urumchi. Automatic Blast Furnace No. 8 at Anshan was originally designed by the German Wolff Company for the Japanese in 1939 and was not technically advanced. Inactive from 1945 to 1953, it is now virtually new and is completely electrified.[23]

New starts totalled 333 in 1954 and 191 in 1955 while completions were 39 and 82 respectively. The latter included several coal mines and electric power stations, additions to coal-mining and generating capacity in 1953-1955 totalling 26 million tons and 900,000 kilowatts respectively; the Anshan Steel Metal Mill; the No. 6 Open-hearth Furnace; the first instalment of the Fushun Aluminium Plant; the Mukden Pneumatic Tool Plant and No. 1 Machine Tool Factory; part of the Harbin Machine Tool Plant; 12 sugar refineries and 28 major textile projects. According to Chou

[23] See Rostow, *The Prospects for Communist China*, p. 285: " . . . even the post-war dismantling of Manchurian plants by the Soviets may be considered as a blessing in disguise from the Chinese point of view. Japanese plant installations that were removed in 1945 have largely been replaced with more up-to-date Soviet equipment." Rostow's judgment may be contrasted with the Pauley Mission's opinion that it would take a generation to make good the lossses due to Russian removals or with Dr. F. C. Jones' judgment that "even if the figures of the Pauley report are accepted, it remains true that there is still more industrial plant in Manchuria than the Chinese could fully operate, even if internal peace were restored" (*Manchuria Since 1931*, London, 1949, p. 230). In 1954 Anshan produced 1½ million tons of pig iron, or 200,000 tons more than the peak Anshan production under Japanese occupation in 1943 (U.N., *Economic Survey of Asia and the Far East 1954*, p. 102 and n. 3). Mr. Pauley and Dr. Jones were both writing before the change-over. But as late as April 1955, Yoshida "caustically said that the country had made no progress, no improvement in the last thousand years. The only significant changes, he said, were the direct result of the activities of foreign residents there" (*New York Times*, April 29, 1955).

En-lai, of the 141 above-norm plants completed in 1953-1955, 30 exceeded their designed capacity ahead of schedule, 33 more should do so and 71 should reach their designed capacity on time.

It was originally planned to complete 45 out of the 156 key projects to be built or enlarged with Russian material and technical assistance during 1953-1957. In April 1956 the number of key plants was raised to 205 and the target for completions to 65.

The progress in machine-building and heavy and light engineering is especially noteworthy. Within three years pig iron capacity increased by 1,650,000 tons and steel capacity by 790,000 tons. According to 1956 revised targets, 60 per cent of machinery and 80 per cent of steel requirements were to be covered by internal production during the First Five Year Plan. Similarly, the revised 1957 targets for steel and machine tools were 5½ million tons and 30,000 units, or increases of respectively 33 and 131 per cent above the original goals. The projected annual rate of growth in steel production was thus 32.5 per cent.

This progress was qualitative as well as quantitative. By 1952 China had produced automatic looms, her first fully equipped 240-kilowatt generator and her first 375-horse-power steam engine.[24] In the same year pilot production was started on medium-sized lathes, universal milling machines, 3000-kilowatt turbo-generators, 1000-kilowatt electric motors, 44,000-volt and 5000-kilovolt ampere transformers, 300-horse-power air compressors, 5-ton steel hammers, rotary drills and locomotives.[25] New products successfully tested in 1953 and 1954 included heavy steel rails, seamless steel tubing, high-grade carbon steel, high-grade alloy structural steel, 6000-kilowatt turbo-generators, 150-kilovolt and 20,000-kilovolt ampere transformers, heavy-duty and semi-automatic lathes, precision boring and precision grinding machines, and a 2600-ton cargo vessel, among others.[26] At the Leipzig Fair in 1954 "the Chinese display as a whole serves to remind the visitor that China is making many more products than he

[24] "Production of automatic looms is reported to have supplied half the country's requirements in 1951, and self-sufficiency in relation to current needs is expected to be attained" (U.N., *Economic Survey of Asia and the Far East 1951*, pp. 68-69). China now exports cotton textile machinery, including automatic looms and automatic printing and dyeing equipment.

[25] The turbo-generators are another instance where China benefited from Russian mistakes; Russia concentrated on the construction of a 7-point power grid system in its First Five Year Plan and only subsequently began to use generators with a smaller capacity.

[26] *SSBC* for 1952-1954.

would have supposed, and many of which were Western monopolies not long ago."[27]

China produced her first automatic hydroelectric 10,000-kilowatt generator in 1955. According to Li Fu-chun, she will be able to manufacture 12,000, 25,000 and even 50,000 kilowatt generating equipment when all the electrical machinery projects started before 1957 are finished. In 1956 the first successful trial production of jet plane engines was carried out.

By 1954 China was turning out about half the machines needed for large-scale industrialisation, including 1900 kinds of important machines and electrical equipment items.[28] There can thus be no doubt of the momentum already acquired by Chinese economic development. The process is still not self-generating. China is still dependent on abroad for many categories of machinery. Nevertheless, she is unmistakeably becoming less so.

Nor is progress in capacity and technique confined to heavy industry. The not unexpected growth of textile output (see Tables 8 and 9, pp. 74, 76 above) was facilitated by the emergence of a large-scale textile machinery industry, which produced 1½ million spindles and 40,000 looms between 1951 and March 1956. More surprising is the growth and diversification of the pharmaceutical chemicals industry, not to mention the installation of the first plastics plant in China and the manufacture in their entirety of radios and parts, typewriters, calculating machines and X-ray apparatus.

As in other Communist countries, inferior quality and lack of variety are serious problems with respect to certain light industrial products, presumably because of the concentration on heavy industry, the difficulties in extending mass production, given a low initial technical level, and the pressure to achieve planned targets. It is hoped to alleviate these problems by the introduction of incentive prizes for quality and by the establishment of a controlled "free" market with wider price ranges for some commodities. But a longer-term solution can only be achieved by systematically raising technical levels in manufacture, design and management.[29]

In the field of labour productivity, China started from such low levels that the rate of change is not surprising. Its speed must be ascribed not only to the scale of investment but to the growth of

[27] *The Times* (London), September 8, 1954.
[28] U.N., *Economic Survey of Asia and the Far East 1954*, p. 102.
[29] Chou En-lai, *Report on Proposals*, pp. 74-76.

labour efficiency and to the drive to raise standards of industrial management and administration.[30] A number of factors have contributed to the growth of labour efficiency, including the spread of the emulation movement and other organised drives to increase production, which now embrace the vast majority of workers in modern industry; the extension of piece-rate work and the gradual abandonment of the "supply" system in Government enterprises and offices completed in 1955; the institution of large-scale training programmes, both on and off the job; and the enhanced political status and general improvement in living conditions of the urban working class.[31] The social prestige and material rewards accruing to outstanding workers also serve as effective labour incentives.

To cite a few instances of increases in labour productivity in the period of reconstruction: "The average coal output per man-shift in Northeast China in 1949 rose to 0.54 tons compared to an average of 0.36 tons in the period of Japanese occupation. According to a sample survey of factories and mines in that region, labour productivity in December 1949 was about 33 per cent greater than in June 1949. . . . Labour productivity in coal mines during the second quarter of 1950 as compared with the average for 1949 was reported to have gained 29 per cent in the Northeast, 32 per cent in North China, 11 per cent in East China, and 52 per cent in Central China."[32] By 1952 the average daily per capita production in State-owned collieries had risen to 0.62 tons, or about half that of British miners.[33] In the same year, the number of spindles per fine yarn worker was 800 as compared with 250 in 1949, the number of ordinary looms operated per worker was 24, or six times the 1949 figure, and of automatic looms per worker more than three times the 1949 level.[34]

[30] See Li Fu-chun, "The Restoration and Development of Our Industries in the Past Three Years," in China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 177, and his *Report on the First Five-Year Plan*, pp. 62-63.

[31] See pp. 194-197 below.

[32] U.N., *Economic Survey of Asia and the Far East 1950*, p. 74, and the *Survey 1951*, pp. 63 and 68-69.

[33] China Committee, *New China's Economic Achievements 1949-1952*, p. 178. In the early 1930's per capita production in Chinese coal mines was about one-fifth that in British (R. H. Tawney, *Land and Labour in China*, London, 1932, p. 119). Naturally, these comparisons ignore differences in thickness of seam. Late in 1956 the Minister of the Coal Industry reported that output per man-shift was running at 1.7 tons (*NCNA*, November 27, 1956).

[34] China Committee, *New China's Economic Achievements 1949-1952*, p. 178.

In the first two years of the Five Year Plan labour productivity in State and joint industrial enterprises increased by 29 per cent, or a little under half the 1957 target. It rose by a further 10 per cent in 1955, while productivity in construction rose by 17 per cent. With the attainment of the 1956 annual plan with respect to labour productivity in industrial enterprises, it will have risen 70 per cent in four years.[35]

Chinese industry is heavily concentrated in the seven coastal provinces and Shanghai, Tientsin and Peking, which produced about 73 per cent of industrial output as recently as 1952. One objective of the industrialisation programme is to reduce this unbalance and "not to develop big coastal cities but medium and small cities." Accordingly, 472 of the 694 above-norm industrial projects originally to be constructed during 1953-1957 are located in the interior in Northwest and Central China and to a lesser extent in the Southwest. In 1953-1955 inland industrial output rose by 96 per cent, as against an increase of 54.4 per cent in the seven coastal provinces and three leading municipalities. Yet the proportion of industrial output produced in the "old" industrial areas was still over two-thirds, and most large cities are growing larger.

The optimum regional allocation of productive resources cannot be resolved by abstract maxims. Full advantage must be taken of existing capacity, it is often easier to expand capacity where some already exists than to create new capacity from scratch, and it is essential to strengthen existing plants, especially in the Northeast. Moreover, while the Northwest and Southwest are proving rich in natural resources, the potentialities of the country as a whole — including the Northeast — are only beginning to be tapped. The development of new industrial bases in the interior retains a high priority in planning, both short-term and long-term, but there is considerable fluidity in official thinking and policy on shorter-term regional allocation of resources.[36]

Detailed information on the growth of cities and towns must await the final publication of the fuller 1953 Census returns. But sufficient is already known to indicate post-1949 developments. Shanghai is still the largest city in China, with over 6 million in-

[35] *SSBC* for 1955, and Chou En-lai, *Report on Proposals*, p. 47.

[36] See Li Fu-chun, *Report on the First Five-Year Plan*, pp. 41 and 50-51; Liu Shao-chi, *Political Report* (*People's China*, October 1, 1956, Supplement), pp. 22-23; and Chou En-lai, *Report on Proposals*, pp. 67-69. See also note 42, p. 94 below.

habitants. Apparently, its population fell in the years immediately after 1949 partly as a result of the Kuomintang blockade and partly as the result of a strategic decision to reduce the country's dependence on her dominant light industrial centre, which in 1936 had accounted for half her modern industrial output and half her foreign trade.[37] But it recovered subsequently and still maintains its leading position as a producer of consumer goods, although its relative importance has diminished. While it still has two-fifths of the country's cotton spindles, spindleage in the interior increased by 84 per cent between 1949 and 1955 as compared with 14 per cent for the whole of China. Of the 20 new textile mills completed or started in 1953-1954, none is located in Shanghai; seven are in the North, six in the Central-South, five in the Northwest and two in the Southwest.[38] Shanghai has a diversified industrial establishment embracing machine-tool and other engineering works, chemical and cement plants, a shipbuilding yard, and the like, as well as light industry, and has a reservoir of 800,000 industrial workers, who have made notable contributions to the training of a modern industrial labour force in other areas. Its significance as an international port has diminished in comparison with that of Tientsin. Nevertheless, if it is no longer the key to contemporary China, it is likely to remain her leading single industrial city for many years.[39]

Peking has become a large industrial as well as administrative centre, and Tientsin, in addition to retaining its position as the leading industrial city of North China, is now the country's chief port. The population of Shenyang (Mukden) and Anshan doubled to 2 million and 600,000 respectively within four years. Other cities in the Northeast such as Dairen, Changchun, and Harbin have also grown rapidly. But urban growth has not been confined to the Northeast and the coastal industrial cities. Chungking now has a population of over 1,600,000; it has a large steel rail factory, not to mention air compressor and other engineering works, textile and other consumer good plants. Taiyuan, the capital of Shansi, which under Yen Hsi-san was the last refuge of Japanese and German militarists, business men and technicians avoiding repatriation after 1945, is now a centre of heavy industry with a population of 600,000.

[37] See Rhoads Murphey, *Shanghai, Key to Modern China* (Cambridge, Massachusetts, 1953), pp. 21 and 203.

[38] U.N., *Economic Survey of Asia and the Far East 1954*, p. 103.

[39] For a reasoned discussion of Shanghai's future, see Murphey, *Shanghai, Key to Modern China*, Chapter 11.

Urban expansion has also occurred in many medium-sized, small and new towns.

While the record of achievement in the industrialisation programme is impressive, China still has a long road to traverse. The modern industrial sector produced barely a third of gross total output in 1955 or only double the output of all handicrafts, including handicraft workshops. For the foreseeable future, at least, small industry and handicrafts will continue to account for a sizeable fraction of industrial production. Some observers consider the survival of handicraft production more of an asset than a liability, since, apart from its specifically although primarily temporary economic advantages, it may also make possible the retention of the high aesthetic standards of artisan production, although the example of Japan in this respect is not very reassuring. In any case, Chinese industry will continue to present a variegated pattern, running from great iron and steel complexes, coal mines and automatic textile plants down to quite small power-driven plants, still smaller workshops and even petty handicraft production.

China may be a museum of technological history. But the museum is not confined to dead or dying specimens. Chinese industry is very much alive. Even though it still retains labour-intensive methods of production which are extinct in the industrialised West but still economically remunerative in China, it already possesses many capital-intensive plants employing advanced equipment and techniques, and before the end of the Five Year Plan it is to "begin construction for peaceful utilisation of atomic energy with direct Soviet aid."[40] Economic progress is uneven by its very nature. It first invades one process or group of processes without necessarily or immediately affecting others, and only gradually penetrates and permeates the whole fabric of production.[41] What is important in China is, first, that the heavy industrial base is rapidly expanding and that the gap between modern technological standards and best Chinese practice is being narrowed; second, that the considerable opportunities for advance in labour-intensive, smaller-scale and even petty production are not being neglected; and, third, that there is a conscious effort to synchronise progress. Each individual gain, however small, raises the general level and makes the next step easier. The systematic

[40] Li Fu-chun, *Report on the First Five-Year Plan*, p. 31.

[41] Sometimes, traditional processes may take an unconscionable time a-dying, as with the decay of handloom weaving in nineteenth-century England.

campaign to increase production at all levels has not flagged since the adoption of the Common Programme and has gained force and direction from the Five Year Plan.

3 CAN THE FIRST FIVE YEAR PLAN SUCCEED? CHINA COMPARED WITH RUSSIA IN 1927

What are the chances of China's fulfilling the tasks and attaining the goals set out in the First Five Year Plan? First, it is necessary to begin with the assumption that a state of peace will be preserved. Just as Russia's Fourth Five Year Plan had to be scrapped under the exigencies of the Nazi invasion, so China's First Five Year Plan would have to be sacrificed in the event of a major war. The very existence of the Plan gives China a vested interest in the maintenance of peace. If China's ambition is to become a significant industrial power by 1957 and a major industrial power sometime between 1962 and 1967, it cannot at the same time afford aggressive foreign policies. From which it does not follow that China will avoid war at all costs.

Given peace, the chances for success are by no means unfavourable. One way in which to appraise the probabilities is to compare the position of China in 1952 with that of Russia in 1927. China's railway mileage is much smaller than the Russian in 1927, but although it does not have to feed so large a territory it is largely confined to the eastern half of the country, and even there it constitutes little more than the bare bones of an adequate system. This is a serious disadvantage, since China must allocate a substantial part of new investment to railways, which are both capital-intensive and competitive with heavy industry in their demands for capital goods; thus, projected investments in transport — mostly in railways — account for nearly a fifth of total capital construction expenditures during the First Five Year Plan. Russia could to a great extent make do with its existing railway facilities, China cannot.[42]

[42] For a discussion of some of the problems of industrial location in planning, see Dobb, *Soviet Economic Development Since 1917*, pp. 274-277 and Chapter 15, and his *Some Aspects of Economic Development* (Delhi, 1951), pp. 84-86. China, like Russia, has limited transport facilities and the need for economising in freight movements is a major consideration. Again, like Russia in the initial phases of its industrialisation, China has allotted a substantial part of the development of heavy industry to the "traditional" centres. But, unlike Russia, China has no east-west through railway. Again, there are no "old" centres of heavy industry in China save for the Mukden-Anshan-Fushun triangle. Therefore, while the gradual construction of the outlines of an east-west railway system is an inescapable imperative for China,

Table 13

COMPARISON OF RUSSIAN AND CHINESE ECONOMIES, 1927 AND 1952

	China 1952	Russia 1927
Population (millions)	583[a]	147[b]
Urban population as per cent of total	13.3[a]	17.9[b]
Industrial workers and employees (millions)	4.0	4.1
Total sown area (million hectares)	108	112.4
Share of socialised industry in industrial production (per cent)	50.0[c]	89.5[d]
Coal production (million tons)	63.5	32.3
Oil (thousand tons)	436	10,446
Pig iron production (million tons)	1.9	3.0
Steel production (million tons)	1.35	3.72
Electric power (million kilowatt-hours)	7,260	4,205
Cement (thousand tons)	2,860	1,403
Railways (thousand kilometres)	24.2	75.6
Navigable rivers and canals (thousand kilometres)	Over 90	68.3

[a] 1953; [b] 1926; [c] All industry; for large industry alone it was 60 per cent; [d] 1929.

Sources: For China, data already cited in the text are used. For population, see Tables 19 and 20, pp. 144, 145. The figure for industrial workers and employees is an estimate of the number employed in modern industry and transport (see p. 79 above). The figures for Russia are taken from the *U.S.S.R. Handbook* (London, 1936).

As against this drawback, China is not as dependent on railways for the movement of freight and has a single continuous coastline navigable the whole year round in contrast to a discrete Russian coastline consisting of four separate littorals, the Black Sea, the Baltic, the Far Eastern and Northern, of which only the first is open all year and the last raises almost insoluble problems except for a few months in the year. Further, China has a potentially first-rate inland waterway system more extensive than and certainly not inferior to that of Russia. Most of the latter's rivers flow from south to north, in contradistinction to the channels of trade which, except in European

she may have a greater range of choice in the location of certain branches of industry than did Russia. However, a westward shift of industry in China corresponding to the eastward shift in Russia after 1928 is most probable.

Russia, run from east to west, and many flow into landlocked seas or the Arctic Ocean and are frozen for a considerable part of the year; whereas China's main rivers, conforming with — and in the past to a great extent determining — the channels of trade, flow from west to east and, when the Yellow River is tamed, will form a relatively well distributed network.

As far as natural resources are concerned, Russia may be somewhat better placed than China. But while Russia is extraordinarily rich in its natural endowment, China is still very far from having been either extensively or intensively surveyed, and the Russian margin of advantage, if any, is not of the kind that should make a great difference one way or another at this stage. China is well endowed in the crucial elements of coal, iron and non-ferrous metals and she has sizeable oil reserves and a big hydroelectric potential. And while she may not have as much uncultivated arable land available as Russia, the supply is much greater than had previously been supposed.

A comparison of the level of China's industrial production in 1952 with Russia's in 1927 yields a mixed picture. On the one hand, China's production of coal and cement was double and of electricity 175 per cent that of Russia. On the other hand, her production of pig iron was two-thirds, of crude steel a little over one-third and of oil only a tiny fraction of Russian production. Furthermore, China's industrial work force while about the same size as the Russian absolutely was much smaller relatively. Indeed, global comparisons are misleading insofar as they ignore the big disparity in population and the importance of the *relative* size of the modern industrial sector. While the quantitative difference in the degree of urbanisation is not in itself significant, it may tend to conceal qualitative differences which are to China's disadvantage. Finally, allowance must be made for the fact that as initial Chinese living standards were undoubtedly lower than the Russian, a greater part of the earlier increases in output may have to be allocated to raising them than was the case in Russia.

As against these disadvantages, however, China has certain assets, both positive and negative. First, China's international position is much more favourable than was Russia's in 1927-1928. Russia was isolated. Foreign capital markets were closed except for limited short-term financing of imports, and Russia had to buy the capital goods it needed from abroad during the Great Depression when the terms of trade were turning catastrophically against agricultural

goods.[43] There was no country Russia could trust, and while many foreign technologists were hired, they never enjoyed their employer's full confidence. Furthermore, with the increasing chances of war in the '30s the highest priority had to be given to national defence. China, on the other hand, is not isolated politically. She can obtain large amounts of investment goods from Russia and the Eastern bloc countries on relatively favourable terms; at the very least, she has more freedom to choose and manoeuvre in her foreign trade than had Russia.

This consideration applies with greater force to foreign technicians. It is perhaps not too much to say that the most important single form of aid Russia is furnishing to China is not so much the export of capital goods and the extension of credits, vital as these are, but technical assistance in the form of planners, surveyors, designers, consultants and other high-grade technicians participating in the work of capital construction. Their active aid makes it possible for China to overcome an otherwise almost impassable bottleneck. Russian consultants, engineers particularly, have just the kind of experience both on the purely technical level and in the field of planning which China most needs. Russia's foreign advisors were accustomed to a high capital-labour ratio and often pronounced insoluble certain technological problems, such as the conversion of low-grade coal to electricity, which the Russians had to solve for themselves; in fact, the scale of Russia's planned investments was frequently beyond that with which Western engineers were familiar.[44] Russian advisors should be more adaptable to the Chinese milieu than were foreign advisors to the Russian.

Finally, because of the existence of Russia, the overriding pressure to concentrate on national defence is not as great for China, though,

[43] Like Russia in 1928-1936, China is in a position where "the imported machinery needed by industry has to be paid for *mainly* by the export of agricultural produce" (Chou En-lai, "Report on the Work of the Government, September 23, 1954," p. 89, italics ours). But China is less likely to encounter a sharp reversal in the terms of trade, especially since the Eastern bloc countries form a stable market for her exports.

[44] See M. Gardner Clark's comments on iron and steel, in Abram Bergson, editor, *Soviet Economic Growth*, p. 222: "after 1928 . . . the Russians went beyond what their American advisors thought they could handle in size and complexity. At first they had a terrible time learning how to handle their new equipment, but after a few years they caught on, and then proceeded to set world records in terms of output per furnace."

of course, defence considerations do enter into the setting of industrial targets.[45]

In the internal field, too, China has certain advantages. Internal opposition was much stronger in Russia precisely because capitalism had reached a higher stage in industry and agriculture. The kulaks presented a major problem which almost wrecked the First Five Year Plan. In China, on the other hand, the fact that the Kuomintang succeeded in completely discrediting itself has strengthened internal political unity and enabled the new regime to rely largely on persuasion.[46] Similarly, the Russian Communist Party had only just emerged from its first big internecine conflict, in which Trotsky had been defeated, and was to experience the big purges of the Right and Left-Wing Opposition in the '30s.

From all appearances, the Chinese Communist Party since 1935 has been united under the leadership of Mao Tse-tung and has been free of schismatic tendencies.[47] If the absorption of new members on an unprecedented scale, first during the War of Resistance, then during the Civil War and now since 1949 poses new questions, the social basis of potential organised intra-party and non-party opposition would appear to be much weaker and more ineffectual. The survival of Chiang Kai-shek rule in Taiwan cannot be deemed a significant internal as distinct from external threat, since it is dependent on American support and has no sizeable following on the mainland.

Russia, the pioneer in socialist industrialisation, had to pay the penalty of being first, just as England did as the pioneer of capitalist

[45] The conclusion reached by Rostow and Eckstein that "the Soviet Union launched its program of industrialization in a much more favorable international setting" than China is apparently based on their two arguments that Russia had a respite of ten to twelve years, while China has already been involved in "Korea-like interruptions," and secondly that "the Soviet Union could import capital-goods, technology and know-how from the West without restrictions" (*The Prospects for Communist China,* p. 260). Their main conclusion would seem to leave out of account that Russia was and felt isolated in a hostile world, whereas China has several allies, including Russia, and has moreover the tremendous advantage of Russian experience and assistance. Their first supporting argument ignores the reduction in China's defence burden through the Russian alliance and the relative invulnerability of China's land frontiers, with the exception of the Korean border. Their second supporting argument takes no account of China's trade with the Eastern bloc, for which Russia had no equivalent.

[46] The Kuomintang in its last stages has been well described as a machine for the manufacture of Communists.

[47] The exception which proves the rule is the purge of Kao Kang, Jao Shu-shih and a small number of other veterans early in 1954.

industrialisation.[48] Russia had to solve *de novo* such inordinately difficult tasks as establishing the correct relations between urban and rural economic development and between industrial and agricultural prices or as devising working techniques for meeting the peasants' wants. It could not avoid committing many mistakes and making many false starts. China has all Russia's accumulated experience to draw from and can avoid many of the errors and blind alleys.

A word may be ventured on the subjects of population and labour.[49] China has a much bigger population; Russia had a somewhat bigger skilled industrial labour force absolutely and a much bigger one relatively. However, it is by no means implausible to argue that for certain historical reasons China will find it less difficult rapidly to expand her supply of factory labour. In Russia, the changes in agrarian society consequent upon the transfer of labour from agriculture and the countryside to industry and the city had to be concentrated in a few years; at the same time, because of the social structure and technical character of Russian agriculture, the adjustment of rural labour to urban factory conditions raised acute social, economic and psychological problems. In the case of China, the process of agricultural reorganisation will be slower and the pressure more gradual. Similarly, the Chinese peasant, because of his background in "garden" agriculture, in rural handicrafts and in a densely populated village society, should be able to make the transition more smoothly and at less initial psychic cost than his Russian counterpart.

In striking an overall balance, it is reasonable to conclude that China is on the whole not less favourably situated for the achievement of industrialisation than was Russia in 1927. In the light of the Russian case-history and Chinese progress since 1949 and, particularly, of the record in attaining and exceeding planned outputs in 1953-1955, China should achieve the main industrial targets of the First Five Year Plan with a margin to spare. If she does, she will have emerged in less than a decade from her centuries of backwardness and have become a serious rival to Japan for the industrial leadership of Asia. Within the course of the Second Five Year Plan she should in all probability leave Japan well behind.

[48] See Veblen, *Imperial Germany and the Industrial Revolution* (New York, 1915), pp. 130-132. Veblen's concept may prove as illuminating in cultural as in economic history.

[49] For a brief discussion of the population problem, see pp. 143-148 below.

The Second Five Year Plan targets proposed at the Eighth Congress of the Chinese Communist Party in September 1956 lend support to this view and suggest that the pace of advance should not be much slower than during the First Five Year Plan. Taking the original 1957 target as the base, the aim is to raise national income by 50 per cent, gross total output by 75 per cent, i.e., to almost £32 thousand million, and gross agricultural output by 35 per cent to around £12 thousand million and to double gross industrial output to around £20 thousand million. With the exception of agriculture, in

Table 14

PROJECTED PERCENTAGE INCREASES IN GROSS OUTPUT
1952-1962

	Total Output	Agricultural Output	Industrial Output
1952-1957, original target	51.1	23.3	90.4
1952-1957, revised target	60+	23.3[a]	119
1957 (revised target) to 1962	60+	35	74
1952 (actual) to 1962 (projected)	164	66.5	280.8

[a] Official statements imply that the original target for agricultural output as a whole was expected to be attained in 1957, despite a number of shortfalls.

Source: See note 50 below.

each case it was anticipated in 1956 that actual output in 1957 should exceed the original target, so that the projected rate of growth is somewhat lower than that indicated by the above percentage increases. Thus gross total output was expected to reach around £19 thousand million and gross industrial output a little under £11 thousand million in 1957.[50] Table 14 compares the projected increases under the two Plans and projected 1962 output with 1952 output. The element of grossness in gross output will undoubtedly rise during the Second Five Year Plan, in addition to which allowance must be made for the

[50] All figures are from the *Proposals for the Second Five-Year Plan;* Liu Shao-chi, *Political Report*; Chou En-lai, *Report on Proposals*; and Po I-po, "How Much to Invest, How Much to Consume." It should be noted that gross industrial output is now re-defined to include *all* handicraft output and not merely the output of handicraft workshops; hence there are some apparent discrepancies with the data on the First Five Year Plan in Tables 6, 11 and 12, on pp. 70, 85 and 86 above.

greater upward bias resulting from the use of 1952 constant prices in Second Five Year Plan as compared with First Five Year Plan figures, if such is the case.[51] But the element of grossness should probably not be substantially higher than during 1953-1957 in the agricultural sector, for which a *higher* annual rate of growth is planned for 1958-1962. As for industry, the projected annual rate of growth under 12 per cent is significantly lower than under the revised First Five Year Plan, probably partly because of cautious planning, partly because of the increasing difficulty of maintaining the initial momentum in any programme of industrialisation and partly because of the greater inputs required by agriculture if its planned rate of increase is to be achieved.

As in the First Five Year Plan the first priority is given to the development of heavy industry. Thus, the proportion of capital goods to *all* industrial output was originally set at 38 per cent for 1957 but was later raised to over 40 per cent. The projected proportion for 1962 is 50 per cent. Similarly, the projected ratio of accumulation to national income is not less and possibly more than 20 per cent. There will probably be a shortfall of one percentage point on the preliminary estimates of 22 per cent for the First Five Year Plan. In any case, the rate of accumulation in the Second Five Year Plan should not be less than and should possibly exceed the rate in the first.

The aim in capital construction is to invest £12.5 thousand million, or double the original, and nearly 90 per cent more than the revised, target for 1957. Of this total it is planned to allocate £7.5 thousand million to industry, of which around £6.5 thousand million will be invested in the direct expansion of the heavy industrial base. Major stress is to be laid on the growth of the machine-tool and metallurgical industries. The goal for the former calls for raising the share of requirements met by home production from 60 per cent in 1957 (target) to 70 per cent in 1962, and as for the latter it is hoped greatly to reduce dependence on abroad for supplies of high-grade steel alloys. Specific targets in heavy industry are shown in Table 15.

Again, the increases actually projected for 1958-1962 are smaller,

[51] This is not altogether clear. Judging from Li Hsien-nien's "Report on the 1956 State Budget," annual plan value targets are drawn up on the basis of prices in the previous year with adjustments, where justified, for reductions in these prices to ensue from lower current costs of production. If a similar procedure has been adopted with respect to the longer-term plan, the upward bias consequent upon using a much earlier year as the base would be correspondingly reduced. For the comparable Russian experience, see Maurice Dobb, *On Economic Theory and Socialism* (London, 1955), pp. 250-256.

and in some cases markedly so, since revised targets for 1957 are all bigger than original targets with the one exception of crude oil. The new 1957 target for machine tools is 30,000 units so that projected 1962 output would be roughly double the revised 1957 target. The planned expansion in the production of aluminium ingots is especially noteworthy, since the newly built Fushun works only started operation in 1955. While the steepness of the specific percentage increases partly reflects the distance China still has to travel before the bases of

Table 15

TARGETS IN HEAVY INDUSTRY 1962

Commodity	Quantity	Percentage Increase on 1957 Targets
Electricity (million kilowatt-hours)	40,000–43,000	152–170
Coal (million tons)	190–210	68–86
Crude oil (million tons)	5–6	150–200
Steel (million tons)	10.5–12	155–191
Aluminium ingots (thousand tons)	100–120	400–500
Chemical fertilisers (million tons)	3–3.2	419–454
Metallurgical equipment (thousand tons)	30–40	275–400
Machine tools (thousand units)	60–65	362–400
Power-generating equipment (million kilowatts)	1.4–1.5	754–815
Cement (million tons)	12.5–14.5	108–142
Timber (million cubic metres)	31–34	55–70

Source: Proposals for the Second Five-Year Plan, p. 14. Percentage increases are rounded to the nearest percentage point.

industrial power are completed, the absolute levels of the targets tend to confirm the hypothesis that the critical point in the process of accumulation and industrialisation may well be passed during the second quinquennium. The still unpublished targets for the non-ferrous metals should be most revealing in this respect.

The Plan envisages the investment of £1000 million in light industry, or double the *revised* target for 1953-1957. The 1962 goal for output of consumer goods is an increase of 50 per cent on 1957, an increase in which the handicraft industries are expected to participate. This goal would appear to be unduly cautious and may well be revised upwards before the Draft Plan is adopted. The Chinese

are not under the same pressure as were the Russians to achieve industrialisation by a forced march, and in the circumstances the dangers of "bureaucratism" are greater than those of "economism."

Specific targets in light industry[52] include cotton yarn, 8-9 million bales (60-80 per cent); cotton piece goods, 235-260 million bolts (44-59 per cent); salt, 10-11 million tons (32-46 per cent); edible oils, 3.1-3.2 million tons (73-78 per cent); sugar, 2.4-2.5 million tons (118-127 per cent); and paper, 1.5-1.6 million tons (129-144 per cent). As a shortfall in edible oils is anticipated for 1957, the increase required to reach the 1962 goal is actually greater and, in the light of previous experience, should prove one of the hardest to attain.

A rise of 6-7 million in the work force and of 50 per cent in labour productivity in industrial enterprises is projected for the five years 1958-1962. Both these targets would appear to be relatively moderate in view of the large scale of anticipated capital construction and of the fact that the First Five Year Plan goal for labour productivity was scheduled to be surpassed within four years.

The above targets are of course all preliminary and tentative and subject to revision both in the process of gestation of the Draft Second Five Year Plan and in the course of the second quinquennium itself. On the other hand, the task of drawing up the Second Five Year Plan should be incomparably simpler than was the case with its predecessor, since the economy is more unified and co-ordinated, since there is more accumulated experience, both positive and negative, to serve as a guide and since the basic statistical information is far more adequate. The *Proposals for the Second Five-Year Plan* therefore give a reasonably clear picture both of the next stage of economic development as a whole and of its chief sectoral and individual components. The rate of growth envisaged for the Second Five Year Plan would again appear to be somewhat lower than that achieved by Russia in its Second Five Year Plan, and higher than that projected by India for its Second Five Year Plan.

[52] The percentage increases on the original 1957 targets are rounded to the nearest percentage point.

VI

Agriculture, 1

1 THE CHANGING STRUCTURE OF CHINESE AGRICULTURE

CHINESE AGRICULTURE is in the process of gradual but nevertheless revolutionary transformation. The land reform made the individual peasant the fundamental unit of Chinese farming. It brought about a shift in rural class composition and an increase in the relative significance of the middle peasants.[1] According to Liao Lu-yen, the Minister of Agriculture, the proportion of poor peasants to the total rural population, which had been 60-70 per cent before the land reform, had fallen by 1955 to 10-20 per cent in the old and 30 per cent in the newly liberated areas, while middle peasants now constituted 70-80 per cent of the total rural population in the former and 60 per cent in the latter.[2] However, the majority of the middle peasants were

[1] For poor, middle and rich peasants, see pp. 28-30 and p. 28, note 25, above. The Communists further differentiate between old and new middle peasants; between lower, or less well off, and upper, or well off, middle peasants; and between old and new rich peasants.

[2] *New China News Agency Bulletin,* July 28, 1955. The distinction between old and newly liberated areas is most important. The former have been consistently used as large-scale social engineering laboratories in which to test innovations before they are launched on a national scale, a fact which goes far towards explaining both the smoothness and the rapidity with which many basic changes have been carried through. At the same time, it should be added that the nature of farming in the

lower middle peasants, since the two categories of poor and lower middle peasants still formed about 60 to 70 per cent of the village population.[3]

The next goal in agriculture, once the land reform had systematically been carried out, was the rapid diffusion of mutual aid as a stage in the transition to and gradual expansion of agricultural producers' co-operatives. Mutual aid was not an alien form imported from abroad, but a living organism growing out of past practice and carried to a more advanced level, and therefore well adapted to Chinese agriculture, both technically and socially.[4] By 1952 there were over 8 million mutual aid teams; over 65 per cent of the peasants in the old liberated areas and 25 per cent in the new had been organised on a mutual aid basis. In December 1953, 46 million peasant households, comprising nearly 40 per cent of all rural households, were members of temporary or year-round mutual aid teams and agricultural producers' co-operatives. The number of producers' co-operatives had risen from over 3600 at the end of 1952 to 14,900 in 1953.[5] The official emphasis throughout was on gradualness, persuasion and voluntary co-operation, and over-enthusiastic cadres who forced the pace and forgot that growth must be step by step and not by "compulsion and commandism" were severely rebuked.[6]

Mutual aid does not mean socialisation of agriculture but more effective utilisation of the advantages of division of labour and of larger (*not* large) scale production within the framework of individual ownership and a reduction of the disadvantages arising from the cultivation of small and scattered strips. "Co-operation and mutual aid at present mean collective labour practised on the basis of an individual economy (private ownership of property by peasants)."[7]

North and Northeast facilitated the transition from individual to semi-socialist and socialist forms.

[3] Mao Tse-tung, "The Question of Agricultural Co-operation," *People's China,* November 1, 1955, p. 9.

[4] See Fei Hsiao-tung and Chang Chih-i, *Earthbound China* (Chicago, 1945), p. 36; the example of a village in Yunnan is cited where half the work in the field at harvest time was done on the basis of exchange of labour. See also Mao Tse-tung, *Selected Works,* Vol. 4 (London, 1956), pp. 148-156.

[5] Data for 1952 and 1953 are from the State Statistical Bureau *Communiqué,* Annual Economic Summary (hereinafter *SSBC*) for 1954 (Peking, 1956), p. 34.

[6] See Communist Party of China, Central Committee, "Decisions on Mutual Aid and Co-operation in Agricultural Production," circulated December 15, 1951 and amended February 15, 1953, in *People's China,* July 1, 1953, Supplement. See also *SSBC* for 1952.

[7] Communist Party, Central Committee, "Decisions on Mutual Aid."

Even in the case of the semi-socialist agricultural producers' co-operative, the individual peasant remains the owner of his land; work is done in common, and initially 50 per cent of the product is distributed among the members in accordance with their labour contribution and 50 per cent in accordance with their contribution of land, animals and implements.

There have been three types of mutual aid. The first was a temporary association arising from the need to meet seasonal or specific needs, usually embracing three to five households and more rarely as many as seven or eight, and operating on a very rough and ready basis. This simple form was most widespread in the old liberated areas and accounted for about 80 per cent of all peasant households organised in mutual aid teams in 1952 and for about 70 per cent in 1953. It appeared to be official policy that with rare exceptions this type should remain a small-scale unit.

The second type was an annual association usually of six to seven but sometimes of as many as twenty households and this was based on mutual aid in side-occupations as well as in agriculture. It provided wider scope for mutual aid in labour, for the gradual accumulation of some common property, for a more rational division of labour and for technical improvements, was organised on a less *ad hoc* basis and facilitated production according to a simple and tentative plan. This form covered 3 per cent of the peasant households in mutual aid teams in 1950, 10 per cent in 1951, and 20 per cent in 1952 and embraced 25 per cent in the old liberated areas. In North China 60 per cent of the peasants, and in Northeast China 70, were then members of these two types of mutual aid. In 1953 the proportion of peasants organized in year-round mutual aid teams rose to 28 per cent.

The third type of mutual aid is the partially collective agricultural producers' co-operative, which is half individualist and half socialist. The peasant members of the co-operative pool their means of production as well as their labour, without, however, forgoing their individual ownership of the former. The co-operatives initially consisted of ten to twenty households, though co-operatives of forty to fifty and more rarely of one to two hundred families were not unknown. The average size of a co-operative was 80 acres, the largest ranging from 480 to 625 acres. It possesses the characteristics of the second type of mutual aid to a more marked degree, with unified land utilisation and unified management and has generally developed on the basis of successful experience with the lower forms of mutual aid.

THE STAGES IN THE SOCIALISATION OF AGRICULTURE

Form of Production	Type of Farm	Form of Ownership
Isolated Production	(1) *Individual Farm:* unit, the single peasant household; purely private property.	Individual Ownership
Mutual Aid in Production	(2) *Individual Farms Joining in Seasonal Mutual Aid Team:* unit, 3 to 5 peasant households; no common property.	Individual Ownership
Mutual Aid in Production	(3) *Individual Farms Joining in Year-round Mutual Aid Team:* unit, 6 to 7 peasant households; little common property in animals and implements.	Individual Ownership
Co-operation in Production	(4) *Semi-socialist Producers' Co-operatives:* unit, growing from 20 to 40 or 50 peasant households; more common property in land, animals and implements, but also individual ownership of all three.	Partially Collective Ownership
Co-operation in Production	(5) *Socialist Producers' Co-operative or Collective Farm:* unit, 100 peasant households and upwards; no private property in land, animals and implements, save for small holdings.	Fully Collective Ownership

As indicated in Article 7 of the Constitution, the semi-socialist producers' co-operative is itself a transitional form preceding the fully socialist producers' co-operative. The latter is entirely collectively owned by its members, whose income — apart from what they grow on their own vegetable patches and from what they earn in individual side-occupations — depends solely on their labour contribution to the co-operative pool.

The accompanying diagram depicts the various steps in the socialisation of agriculture; it should be noted that the actual process of transformation has embraced both the skipping of one or more steps in some cases and considerable gradations between the steps in others.

In December 1953 it was decided to accelerate the growth of semi-socialist agricultural producers' co-operatives. There were several reasons for this decision. First,

> The development of the productive forces in agriculture . . . is hampered by the existing isolated, scattered, conservative and backward individual small-peasant economy. The growing contradictions between the individual small-peasant economy and socialist industrialisation have come more and more to the fore.[8]

In other words, not only was the expansion of agricultural production and the raising of rural living standards retarded by the organisation of farming on the basis of small — by Western standards, minute — individual farms, but also the spurt in socialist industrialisation brought into being by the First Five Year Plan necessitated a speedier development in agriculture, if the inevitable disproportions between the two sectors were not to become too sharp. Unless agricultural production increased at a sufficient pace, socialist industrialisation would be delayed and even imperilled.

Second, because of the dual character of the peasantry — mainly the middle peasantry — arising from the fact that they are simultaneously property owners and workers, their desire to increase production takes two opposing paths. As owners of the land and sellers of its produce they are potentially small capitalists, but as working members of mutual aid teams, which are more efficient production units than individual non-co-operating farms, they are potentially socialist. The question of which tendency would predominate could not be a matter of indifference in a country engaged in the construction of a socialist

[8] Communist Party, Central Committee, "Decisions on the Development of Agricultural Producers' Co-operatives," adopted December 15, 1953, in *People's China*, April 1, 1954, Supplement.

economy. It was to be expected that the former would be curbed and the latter encouraged in every way feasible, given the structure and *mores* of a changing agrarian society and always taking into account the overriding pressure to raise production.

Third, evidence began to accumulate indicating that agricultural and side-occupation productivity in producers' co-operatives is higher than in mutual aid teams and higher in the latter than in individual farming. According to Mao Tse-tung, about 80 per cent of the co-operatives in existence in July 1955 had increased their output by 10 to 30 per cent as compared with the previous level of output of their members before they were co-operatively organised. Producers' co-operatives have revealed several advantages. Unified management facilitates more efficient utilisation of land, extension of division of labour, the better use of new farming techniques and of investment and the growth of subsidiary occupations. The co-operatives also stimulate production because the members' shares depend largely on the amount of work they do and, at the same time, the co-operatives preserve and consolidate the unity of poor and middle peasants. They are a definite step in the direction of planned production and therefore fit more easily into the pattern of the State-owned socialist sector and of the State economic plan. By their practice and example they promoted the growth of mutual aid teams among as yet unorganised peasants and the further growth of co-operatives among those already organised at lower levels, and they raised the general rural social and economic level.

For all these reasons "they represent a transitional form through which the peasants can be induced to advance naturally and willingly to socialism." It is "a basic principle" that the development of co-operation in agricultural production "should be voluntary on the part of the peasants. . . . Compulsion and commandism and expropriating the peasants' means of production are criminal acts. . . . Blind, rash adventurism is totally wrong."[9]

Models were to be set up in every province and county where the land reform had been completed. The form of development was to be from the lower to the higher, from the small to the big, from a few to a great many and from single points to whole areas. This emphasis reinforces the impression of step by step development. There was no urgent pressure for sharp and abrupt change, and the People's Gov-

[9] *Ibid.*

ernment had everything to gain from relying on suasion and teaching by example as well as by precept. It could afford to adopt Fabian — in the original sense — tactics and to avoid venturesome policies which might threaten its political lifeline of union with the middle peasants. And, as in past measures of agrarian reform, "the basic criteria . . . of success . . . are their increases in their production and in the income of their members." Detailed practical advice was offered on a wide variety of questions. Trading outside the supply and marketing co-operatives was not permitted. Co-operatives were warned not to make the scope of their production plans too large and to institute simple but strict financial management. Members' shares where circumstances permitted were to be increasingly based on their labour contributions and decreasingly on their property contribution. Work was to be paid for in accordance with both quantity and quality and there was to be equal pay for equal work for men and women. Investment policy, like planning, was to proceed from the small and simple to the larger and more complex, and so on.

The goal of 35,000 co-operatives, two-thirds of which were to be located in the old liberated areas, set for the late summer of 1954 was quite modest; assuming an average membership of 20 per co-operative, the number of peasants to be directly involved was just about 700,000. But the fact that the change was to take place slowly and gradually, that each step forward was to serve as the basis for the next and that headlong and impetuous advances were to be avoided did not mean that change — and important change — was not occurring at all. Thus far, both in industry and agriculture the Chinese have shown a strong preference for changes in which each individual jump is preferably not too long and the prospects of landing on firm ground are reasonably good, although the cumulative effect of the sum of changes is very large on any relevant standard of comparison.[10]

In the event, the rate of growth exceeded expectations. The number of agricultural producers' co-operatives was 58,000 at the beginning of April 1954 and over 80,000 in May with a membership of over 1½ million peasants. In the North co-operatives comprised 7 per cent of the peasants with 6.3 per cent of the land, and in the Northeast 4.4 per cent of the peasants with approximately the same percentage of the land.

[10] See Mao Tse-tung's repetition of the Communist military slogan: "Fight no battle that is not well prepared, no battle whose outcome is uncertain" ("The Question of Agricultural Co-operation," p. 7).

By August 1954, 60 per cent of all peasant households had joined mutual aid teams and producers' co-operatives. The number of co-operatives had reached 100,000 with a membership of over 1,700,000.

Accordingly, in the autumn of 1954 the target for 1955 spring sowing was raised to half a million co-operatives embracing 10 million peasant households. But the target was again exceeded, and the State Council reported that by February there were almost 600,000 co-operatives with a membership of under 15 million. There was a definite seasonal rhythm in the growth of co-operatives, the big changes being concentrated in the period between autumn harvesting and spring sowing so that they might interfere as little as possible with the process of production. In July 1955 there were some 650,000 co-operatives with some 17 million members. The size of the co-operative was tending to increase slightly, the average membership being now about 26 peasant households; this slow increase in average size did not entail any radical departure and was yet another indication of the co-operative's growing importance in the rural economy.

By this time the goal for 1957 of 800,000 co-operatives with 22 million members, which was originally set in December 1953, had become unduly modest. Chou En-lai had indicated in September 1954 that if all went well the Government hoped that by 1957 over half the peasantry would have joined co-operatives. In the intervening months before the final draft of the First Five Year Plan was adopted, this hope rather than specific target must have begun to appear overly ambitious, and the 1957 target actually announced by Li Fu-chun on July 5, 1955, was the organisation of one-third of the peasantry in co-operatives.[11] The more immediate target set for the 1956 autumn harvest was one million co-operatives with a membership of over 25 million.

The next and decisive revision occurred less than a month later, probably on Mao Tse-tung's own initiative. Speaking on July 31, he suggested raising the target for October 1956 to 1,300,000 co-operatives. The swiftness of the changes in the Chinese countryside in the preceding year or two and the penultimate setting of a target of one million co-operatives by October 1956 had obviously inspired

[11] Chou En-lai, "Report on the Work of the Government, September 23, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 90, and Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 37.

much trepidation within party ranks. Mao sharply criticised some Communists for "tottering along like a woman with bound feet" and "for fearing the dragon ahead and the tiger behind," warning that the main danger was under- rather than over-estimation of the potential speed of progress. He predicted that "an upsurge in socialist transformation will soon come about all over the country's rural areas" and that half the peasantry would have entered co-operatives by 1957-1958 and virtually all by 1960.[12]

Mao's speech triggered off the remarkable development of the next six months which, indeed, far exceeded his own initial forecast. Within four months, that is, by November, the number of peasants in co-operatives had trebled, having risen to roughly 50 million. In December, 25 million more peasants joined. There were 1,900,000 co-operatives, or nearly 50 per cent more than Mao's proposed target for October 1956, and average membership per co-operative farm was now around 40 households, a substantial increase on July. The advance continued in January 1956, by the end of which the movement embraced nearly 93 million peasants. Fully socialist co-operatives alone, as distinct from partially collective semi-socialist co-operatives, had nearly 25 million members, their rate of growth being greatest in the North and the Northeast.

The events of January 1956 revealed that the transition from semi-socialist to fully socialist co-operatives or collective farms had become a large-scale phenomenon. Originally, it had been anticipated that it would be a slow process, requiring both the accumulation of a fair amount of property by the co-operative as an entity and the gradual changing of the labour-property ratio in the division of the product in favour of labour. But the high tide of socialism was simultaneously sweeping individual peasants and mutual aid teams into new semi-socialist co-operatives, and existing semi-socialist co-operatives into new socialist ones. In Hopei, which is one of the most advanced provinces, 28,000 collective farms were formed by the amalgamation of over 120,000 producers' co-operatives plus the entry of a number of individual peasants completely omitting the intervening transitional steps. The average size and membership of the collective farm were thus about five times those of the producers' co-operative. Individual farming in Hopei virtually disappeared. The unprecedented speed of the pace of socialisation in agriculture between August 1955 and

[12] "The Question of Agricultural Co-operation," pp. 1, 9, and 14.

January 1956 made it necessary to revise the targets once again. Official statements in late January and early February 1956 called for the completion of the organisation of most peasant households outside a few provinces and the border areas in producers' co-operatives during 1956, for the transition to collectives to be more or less completed in advanced areas in the same year and to be more or less carried through in the whole country by 1958 and for the elimination and not merely the restriction of rich peasant farming in the near future.[13] The striking change in policy with regard to ex-landlords and rich peasants, the rules for whose admission into co-operatives were now substantially relaxed, reflected the rapid shift in the rural balance of power in the previous six months.

By the end of June 1956 the number of peasant households in co-operatives reached 110 million, of which 75 million were members of advanced co-operatives. As the number of co-operatives fell to just under a million, the average membership per co-operative was around 110.[14]

China has within less than a decade experienced two agrarian revolutions, the second still unfinished but so far entirely peaceful. The apparent success of the second revolution is more difficult to understand than that of the first. In European Communist countries, the spread of co-operative farming has invariably invoked stubborn and persistent resistance, particularly from the rich peasants, and collectivisation came close to wrecking the Russian First Five Year Plan. Yet in China the transition to co-operatives occurred not only without opposition but at a pace inexplicable merely in terms of peasant acquiescence.

What are the causes of this difference between China and Eastern Europe?

First, the Chinese Revolution maintained its impetus in the transition from its New Democratic to its Socialist phase. Rural class composition goes far to account for its "depth, thoroughness and mass scale" in the countryside. When nearly a fifth of the peasantry "lead difficult lives" and another 40 to 50 per cent "are still badly off,"[15]

[13] *NCNA,* January 27, 1956; Liao Lu-yen, "Speech, January 25, 1956," *NCNA,* January 31, 1956, reprinted in *People's China,* February 16, 1956. The collective farms here referred to are, of course, non-mechanised.

[14] Liu Shao-chi, *Political Report of the Central Committee of the Communist Party of China to the Eighth National Congress,* September 15, 1956, in *People's China,* October 1, 1956, Supplement, pp. 4-5. There were 120 million peasant households in June 1956, or about 10 million more than in 1952.

[15] Mao Tse-tung, "The Question of Agricultural Co-operation," p. 8.

and when, moreover, they are shaking off the inertia which so often accompanies rural poverty, they will the more easily regard the producers' co-operative as a definite step forward, especially if there is a growing number of successful co-operatives to which the Government is offering positive inducements and incentives in the way of better implements and seeds and cheaper and bigger credits. In fact, the 1955 returns for the major crop-growing areas showed that per acre productivity on co-operative farms was 10 per cent higher than on individual peasants' farms in the case of rice, 7 per cent higher for wheat, 19 per cent higher for soya beans and 26 per cent higher for cotton.

Second, the compactness of the Chinese village, the tradition of exchange of labour and the obvious advantages of rural marketing and credit co-operatives tended to mitigate the psychological reluctance towards co-operation in production. It is also probable that the Chinese peasant had a less stubborn attachment to his small, scattered and only recently acquired holdings than his East European counterpart, who has owned a single and much larger piece of land for a longer time.[16]

Third, the Chinese Communists have been extremely supple in their agricultural policy. They have consistently organised each advance around the socially most dependable groups of peasants and used the old liberated areas as testing grounds for each new departure. The transition from one stage to the next would begin gradually and only be hastened when a favourable response was forthcoming. There was no hesitation in calling a halt, when necessary: "the idea of never allowing any pause, any rest, is all wrong."[17] Judging from Mao's successive statements, there was effective two-way communication between headquarters in Peking and the grass roots in the provinces, counties and districts.

The Chinese also had the benefit of the Russian experience. The Communist Party had nearly 4 million rural members early in 1955 and well over 7 million in 1956, higher numbers both absolutely and relatively than in Russia on the eve of or during collectivisation. An abrupt and headlong collision with the rich peasants was avoided, although admittedly this was much easier than in Russia because of

[16] The argument that recent acquisition strengthens rather than weakens the sense of ownership, whatever its validity in other cases, does not apply to the acquisition of widely separated strips.

[17] Mao Tse-tung, "The Question of Agricultural Co-operation," p. 13.

the difference in rural social stratification. From the beginning each co-operative member retained for his own private use 2 to 5 per cent of his original land contribution and was free to withdraw from the co-operative with his original property contribution whenever he wished.

Last, and perhaps most decisive of all, capitalism was weak in the Chinese countryside. Rich peasants grow and flourish as a group with the growth of rural capitalism. Before the land reform Chinese agriculture was essentially but not exclusively pre-capitalistic, and the old rich peasant was often both a landlord and a capitalist. The land reform abolished landlordism and to that extent reduced his power; at the same time, the tendency of capitalism to develop spontaneously out of individual peasant ownership and the extension of commodity production was reflected in the emergence of a group of new rich peasants. But capitalism did not have time to take deep roots in the Chinese village before the spread of mutual aid teams and producers' co-operatives, and the market had from the beginning many semi-socialist elements so that capitalism was partly controlled and regulated. The weakening of the old rich peasants more than outweighed the emergence of a new rich peasant group, and "rich peasant economy, generally speaking, has not grown but declined."[18]

Socialisation is changing the form of ownership and the form of organisation of production of Chinese agriculture without as yet changing its technological basis. Collectivisation has so far taken place *without* mechanisation. Large-scale mechanisation is out of the question until the foundations of heavy industry are completed and until the basic production unit in agriculture has become the large-scale socialist producers' co-operative or collective farm. But the pace of social progress in agriculture has provided a stimulus to technical progress. The growth of semi-socialist co-operatives in 1955-1956 immediately raised the demand for tractors, modern agricultural implements, chemical fertilisers, and so forth, and with the conversion of semi-socialist into fully socialist co-operatives this demand will be intensified, since sooner or later the collective farms will require more adequate technical foundations. Technical progress in agriculture is limited, among other things, by the capacity of industry to turn out agricultural production goods. Therefore, agricultural demand for more and better means of production necessitates an

[18] Liu Shao-chi, "Report on the Draft Constitution, September 15, 1954," *Documents of the First Session of the First National People's Congress*, p. 39.

even faster rate of industrial progress unless it is to encroach on the investment programme in basic heavy industry.

The interaction between socialisation in industry and socialisation in agriculture is quite unmistakeable. But it is the industrial base which is the limiting factor, whether in industry or in agriculture. At whatever point the Chinese economy is dissected, the development of modern industry, and above all of heavy industry, turns out to be the pivot on which all else ultimately depends.

The direct role of the State in agricultural production continues to be primarily that of carrying on research, education and the promotion of organisational and technical improvements. The main function of the 2400 State farms is to help raise general farming efficiency by familiarising the peasants in the surrounding countryside with more up-to-date agricultural practice and by training managerial and technical personnel. The eventual aim is to have one such farm in every county in the country. Apart from the diffusion of selected seeds, the main role of the State farming system still remains primarily educational and experimental. But while State farms will undoubtedly grow in importance, they are not likely to produce a really sizeable part of agricultural output for a long time. Even the 1967 goal is an increase from the 2.2 million acres under cultivation in all State farms in 1955 to 23 million acres, which would absorb less than a third of the new land it is proposed to reclaim in this period.

Only a very small number of State farms are mechanised or semi-mechanised. There were 106 in 1955, occupying an area of 675,000 acres and employing over 3000 tractors (units of 15 horse power). Mention may be made of the new 49,500-acre State farm east of Chiamusso opened on unbroken soil for which Soviet Russia donated the necessary machinery and provided initial technical assistance. The revised goal for 1957, which exceeds the original 1957 target, was 152 mechanised farms employing around 4400 tractors on an area of 1,200,000 acres, or under 0.5 per cent of the area under cultivation.

In 1955 there were 138 machine and tractor stations with a park of 2200 tractors. The revised target for 1956 was 275 stations with 6700 tractors available for co-operatives tilling 2,800,000 acres of land. Their main use is in cotton cultivation, which lends itself most readily to mechanisation because of the relatively small area involved and its concentration in the more advanced provinces. The growth of co-operatives in 1955-1956 resulted in a shift in the centre of

gravity of mechanisation from State farms to machine and tractor stations.

The mechanisation of Chinese agriculture with its correlatives of labour-intensive cultivation and a dense rural population raises formidable social and economic as well as technical problems in the solution of which the Chinese Communists are unlikely to abandon their blend of gradualist and revolutionary methods. Mao had forecast in 1955 that the *technical* reform of Chinese agriculture would take four or five Five Year Plans, i.e., up to roughly 1975. A year later Liu Shao-chi estimated that the area under mechanised cultivation would reach around 30 million acres — presumably mostly under industrial crops — at the end of the Second Five Year Plan (1962). According to the Draft Twelve-Year Programme for Agriculture (1956-1967), "Agricultural mechanisation should be carried out gradually, in line with the industrial development of the country." In his speech explaining the Draft Programme, Liao Lu-yen envisaged the eventual use of 1,200,000 to 1,500,000 tractors (units of 15 horse power) with an annual replacement rate of 10 per cent.[19] But he set no time-limit.

These and other official statements at least imply that the big spurt in agricultural mechanisation according to present long-term planning objectives will probably occur during the Third Five Year Plan (1963-1967). Even so, if cultivation of a tenth of the arable land is to be mechanised by 1962, domestic tractor production, the original targets for which have already been stepped up, will not cover needs (see Table 9, p. 76 above). China will therefore have to import a substantial number of tractors and much other agricultural machinery.

2 TECHNICAL PROGRESS

Within his framework of reference the Chinese farmer has traditionally been a competent and able husbandman. However, this framework was extremely narrow, and obstructed where it did not prevent the adoption of quite elementary improvements. Quite apart from the question of mechanisation or of the application of advanced agricultural techniques there was vast scope for raising agricultural production and productivity by relatively simple measures such as the standardisation and selection of seed;[20] the increasing use of insecticides

[19] The Draft Programme and Liao's speech of January 25, 1956 (*NCNA*, January 31, 1956) are both printed in *People's China*, February 16, 1956.

[20] China lost its commanding position in the world tea market to India by falling behind in this respect.

and fertilisers; the introduction of more up-to-date hand and animal-drawn implements; the adoption of better methods of ploughing, planting and storing; and the extension of irrigation and water conservancy works. Many of these measures can be instituted without large-scale industrialisation. The use of fertiliser on an adequate scale, however, requires either a much bigger chemical industry, or much higher imports, or both. Irrigation projects can be executed at various levels, ranging from small-scale efforts to huge public works such as the Huai River and Yellow River projects.

There has been marked progress in all these fields. Standardisation and selection of seed have already brought about notable improvements in the yield and quality of cereals, cotton and other crops. By September 1952 high-grade seed had been introduced on over 33 million acres of grain land and on over half the total cotton-growing area.[21] Between 1950 and 1953 the State distributed 150,000 tons of improved cotton seed.

Close planting, deep ploughing to prevent evaporation, inter-row cultivation and grass-field rotation are being widely extended. Close planting has been particularly successful in cotton cultivation, where in some cases it has raised the yield per acre by as much as 50 to 100 per cent.

In 1949 Chinese farms were equipped with 30 per cent less of the main farm implements, including ploughs and harrows, than before the Japanese War, and consumed 30 per cent less manure and 50 per cent less of chemical fertilisers. By 1952 this loss had been made good and pre-war standards surpassed. Old types of farm tools were replaced and improved and modern ones such as the seven-inch plough and animal-drawn agricultural implements popularised.[22] In 1953 the marketing and supply co-operatives provided the peasants with 56 per cent more farm implements and supplies than in 1952. Over 500,000 double-wheeled double-shared ploughs were manufactured

[21] China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 192.

[22] Peasants initially had some difficulty in adapting themselves to implements with modern screws. The Archimedean screw is one of the three basic inventions introduced by the Jesuits into China in the seventeenth century, the others being the crankshaft and the force-pump. Previously the flow of inventions, including printing, the magnetic compass and gunpowder (three inventions which, in the words of Bacon, who was unaware of their origin, "have changed the whole face and state of things throughout the world"), had been largely in the other direction. See J. Needham, *Science and Civilisation in China,* Vol. I, (Cambridge, 1954), pp. 19 and 241.

in 1955, and the 1956 target of 4 million was more than double the original 1957 target; according to Chou En-lai, this impetuous increase, which was a by-product of the growth of producers' co-operatives, created tension in the supply of steel. Farm machinery and water wheels are made available to the villages on the instalment system.

Between 1949 and 1952 the cultivated area using fertiliser increased by 15 per cent; half the cotton area was enriched with chemicals or chemical fertiliser; in 1955 the government supplied farmers with 4½ million tons of bean-cake and chemical fertiliser. Expansion in domestic production — the output of ammonium sulphate in 1955 was 320,000 tons — did not keep pace with demand, and fertiliser is a significant import. Thus in February 1956 orders were placed for 425,000 tons of chemical fertiliser from Belgium and 60,000 tons from Britain. The 1962 target for chemical fertiliser production is 3 to 3.2 million tons, which would only provide around 20 pounds per acre from domestic output. China will thus continue to remain partially dependent on foreign sources of supply for a long time.

The incidence of locust plagues, which used to be the harbinger of famine, has been sharply curtailed and the locust menace reduced to manageable dimensions by a combination of methods. These include the breaking down of the ancient peasant superstition that locusts were Heaven-sent; the widespread dissemination of benzene hexachloride dust, poison bait and dusters; the use of aircraft to decontaminate large areas; and the mobilisation of the peasants in pest elimination campaigns. The old flood area of the Yellow River in Honan, formerly a big locust reservoir, is now completely rid of the plague.

Between 1949 and 1952, 120 million people were mobilised to fight insect pests with a consequent net saving of 20 million tons of grain.[23] Peasant purchases of insecticides and chemicals for preventing or curing plant diseases increased with the increase in the production of pyrethrum, DDT and insecticide 666; 90,000 tons of insecticide were distributed to the peasantry in 1955.

In 1949 the national supply of livestock was 16 per cent less than pre-war and in some regions as much as 40 per cent less. With the institution of effective veterinary measures, including the virtual elimination of rinderpest, a marked reduction in the incidence of anthrax

[23] China Committee, *New China's Economic Achievements 1949-1952*, p. 192

and foot-and-mouth disease and the spread of animal breeding and artificial insemination stations, the supply of big animals in 1953 was 33 per cent greater than in 1949 and over 12½ per cent greater than pre-war.[24] According to Chen Yun, the number of pigs was 93 million in 1953, as compared with 63 million in 1936. Progress was not sustained in 1954 and 1955, the number of pigs actually falling in the latter year.[25]

The deforestation of the Chinese countryside has been going on for generations. In the words of Tawney, "Chinese farming, frugal to the point of parsimony in everything else, was wasteful in the clearing of forests." A long overdue programme of afforestation was inaugurated soon after the change-over.

But it was in the field of irrigation and water conservancy that progress was most spectacular. Measures for irrigation and water conservancy are indispensable, first, to prevent or mitigate the incidence of floods and droughts, second, to ensure better utilisation of land under cultivation and, third, to make it possible to bring new land under the plough. Great energy was, therefore, devoted to carrying out Article 34 of the Common Programme (see Appendix I, p. 241 below). Between 1949 and 1952 the equivalent of £200 million of public funds was spent for this purpose, expenditures in 1952 alone totalling 52 times the maximum annual amount spent by the Kuomintang. As a result partly of favourable weather conditions and partly of the rehabilitation of water conservancy works, the area under flood fell from over 100 million *mou* (nearly 16½ million acres) in 1949 to 60 million in 1950, 20 million in 1951, and 16 million in the first nine months of 1952. In a number of reports on work from 1949 to September 1952, General Fu Tso-yi, Minister of Water Conservancy, indicated that since 1949 the peasants had raised nearly 500 miles of dykes along the lower reaches of the Yellow River 1½ to 3 yards above the 1933 peak flood level; erected over 6 million small-scale dykes and ditches; dug 800,000 wells; built or rebuilt 250 large-scale irrigation projects; installed 7½ million water wheels and power-pumps; reformed the management of irrigation channels on demo-

[24] According to the *Proposals of the Eighth National Congress for the Second Five-Year Plan* (Peking, 1956), p. 19, the peak pre-war totals for livestock were as follows: cattle, 48.3 million (1935); horses, 6.5 million (1935); sheep and goats, 62.5 million (1937); and pigs, 78.5 million (1934). For the 1952 totals, see Table 17, p. 132 below.

[25] Chen Yun, "Bridging the Gap Between Supply and Demand," *People's China*, November 16, 1954, p. 3, and *SSBC* for 1954-1955.

cratic lines (landlord control of these channels was a perennial source of disputes in the past); increased the irrigated area by over 9 million acres and improved irrigation and drainage on approximately one-sixth of the total area under cultivation. Irrigation generally raises average yield per acre by 40 to 50 per cent in China.

The First Five Year Plan target called for an increase in the irrigated area from 71 to 83 million acres. Under half the required increase was achieved in the first three years of the Plan. But the "high tide of socialism" brought about a rapid advance and the area under irrigation was expanded by 16½ million acres between October 1955 and May 1956.[26]

Between 1949 and 1955 innumerable small-scale conservancy projects carried out throughout the country improved existing irrigation over an area of 60 million acres. Most of the 26,000 miles of existing river dykes were repaired and strengthened, largely by mutual aid teams. Such projects may not have attracted as much attention abroad as the big public works, but they made a sizeable contribution to China's agricultural capacity. They yielded immediate returns, were economical, and well suited to current needs and potentialities.

Of the large-scale projects in this field it is the Huai River Plan which has evoked the greatest interest. The Huai River, which is situated in North China about halfway between the Yangtze and Yellow Rivers, runs through a fertile valley in which many of the major historic battles for the control of China have been fought (the Battle of Hsuchow in November 1948 is the most recent example). The regularity with which it overflowed its banks and brought disaster to millions — seventy major and minor floods every hundred years have been recorded since the fourteenth century — symbolised the Chinese people's helplessness in the face of natural calamity, a helplessness which gave rise to the fatalism traditionally associated with the Chinese character. In 1950, Mao Tse-tung called for its taming. The project covers an area nine-tenths that of the British Isles, inhabited by 60 million people. The work force engaged was comprised of 4,600,000 peasants, 40,000 Government employees and 16,000 engineers and technicians. Within four years 1800 miles of river had been dredged; 1350 miles of dyke repaired; one 60-mile canal opened

[26] State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 91; and Teng Tze-hui, "Speech, June 19, 1956" (to the National People's Congress), *NCNA*, June 20, 1956, in *New China Advances to Socialism* (Peking, 1956), p. 119.

to navigation by 900-ton boats; and a 600-yard moveable dam, 3 gorge-type reservoirs, 15 lowland flood detention basins and over 130 culverts erected. The first two stages of the plan, in which the emphasis was primarily on flood control, were completed in 1953. The third stage involved the construction of regulating gates which would once and for all free the plains from possibility of floods, the excavation of canals and the construction of reservoirs and hydroelectric power stations. When the whole project is brought to a close, it will have added 50 million *mou* or over 8 million acres of irrigated land, improved 1250 miles of waterway, thus greatly facilitating the handling of the historic problem of north-south transportation and communication, and helped raise the electric power supply.

An Indian official delegation visiting China in 1954 was struck by the speed with which vast irrigation canals had been completed, citing as an instance the construction of the North Kiangsu Canal, which is part of the Huai complex. This canal, 420 feet wide and 100 miles long, was completed in 80 days by over 1,200,000 peasants working with very little machinery. The delegation's report, issued by the Indian Ministry of Irrigation and Power, stated that the Chinese Government had evolved an integrated plan for flood control of all major rivers, resulting in an efficient system of dyke protection. The delegation, which was impressed by the way the regime "laid emphasis on acquainting the workers with the purpose of every project to obtain their fullest co-operation," also reported that each worker was paid according to his work and was guaranteed a minimum wage.[27]

Other major water-conservancy works are in progress on the Rivers Yi and Hsu in North Kiangsu and on the Yungting near Peking, the periodic flooding of which was as disastrous for Hopei as the

[27] Cited by the *New York Times*, July 17, 1954. The information about wages is important because, if the building of large-scale public works is traditional in China, the remuneration of the labour engaged in it is not. The Government *corvée* has a long history, continuing right down to Kuomintang days. The unifier of China and the founder of the Sui dynasty left names which were execrated by the common people, the former because of his association with the Great Wall and the latter because of his association with the Grand Canal. A well-known example of Kuomintang public works was the construction of the B-29 air base near Chengtu in 1944, on which half a million labourers were at one time employed. First, the peasantry was dispossessed of its land without adequate compensation, second, the huge labour force was drafted and ill treated, and, third, the Government officials supervising the works made a fat killing.

Huai was for Shantung, Honan and North Kiangsu.[28] Work was also undertaken to regulate the Yangtze more effectively and the Chingkiang water detention project in the middle Yangtze Valley was completed.

The new Yellow River plan, announced in July 1955, dwarfs all previous schemes for taming and utilising Chinese rivers.[29] The Yellow River is 3000 miles long and is China's second greatest river. Its basin comprises nearly 110 million acres of cultivated land, of which only 2½ per cent are irrigated. It has 38 per cent of the national grain-growing area, but yields only 28 per cent of the national grain output. "The Yellow River is notorious, the world over and all through history, for the havoc it has wrought, mainly by flood." In three thousand years of recorded history, there has been one flood every two years, and there have been twenty-six important changes in its course, nine of them major. The river carries away each year 3700 tons of soil per square kilometre of land, which is 27 times the world average for river systems. As a result, there has been appalling soil erosion in the loess areas of Kansu, Shansi and Shensi, and in its lower reaches the Yellow River is an "elevated river" with a bed sometimes as much as 32 feet higher than the surrounding countryside. Many parts of the river basin are intermittently subject to drought, and no part of the Yellow River system is navigable by modern shipping.

To bring the Yellow River under adequate control will require several decades. The overall scheme presented by Teng Tze-hui, in the working out of which Soviet experts participated, consists of a comprehensive plan and a first phase plan. The main feature of the comprehensive plan is the so-called Staircase Plan for the Yellow River itself, which envisages the building of a series of 46 dams on the main river in such a way that the river levels will form a staircase. In addition to the Sanmen Gorge project in Shanhsien, Honan, three other large multi-purpose projects will eventually be built at Lungyang and Chishih in Chinghai and Liuchia in Kansu above Lanchow. The plan also includes detailed schemes for water and

[28] For an eye-witness account of the Yungting project, see Joan Robinson, *Letters From a Visitor to China* (Cambridge, 1954), p. 26.

[29] The details given here are taken from Teng Tze-hui's "Report on the Multi-Purpose Plan for Permanently Controlling the Yellow River and Exploiting Its Water Resources," *People's China*, September 1, 1955, Supplement.

soil conservation which will require the widespread diffusion of more progressive farming practices.

The first phase of the plan, which it is hoped to complete by 1967, i.e., by the end of the Third Five Year Plan, includes the construction of several multi-purpose projects, the execution of temporary flood-prevention measures, the extension and improvement of irrigation and transportation, and soil and water conservation measures. The two largest projects of the first phase are to be located at Sanmen and Liuchia, each of which is to have a generating capacity of 1 million kilowatts. Work on Sanmen is to begin in 1957. The first phase plan calls for an investment of the equivalent of £780 million, of which a quarter will go into the Sanmen project alone. If these preliminary estimates are at all a reasonable guide, Teng Tze-hui's statement that "building costs at the Sanmen Gorge and Liuchia Gorge stations are remarkably low" would appear fully justified.

The advances registered in water conservancy works since 1949 proved their worth in 1954 when weather conditions were exceptionally adverse. China was visited with the worst floods in the last hundred years. They were greater in severity than those of 1931, when the Yangtze reached 92 feet 9 inches at Wuhan and the Huai 66 feet 11½ inches at Pengpu in north Kiangsu. The respective levels of the two rivers in these places in 1954 were 97 feet 6½ inches and 72 feet 8 inches. In 1931 nearly 123,000 square miles were flooded and 3,700,000 people lost their lives, mostly through famine; the Government was passive before and during the floods and leaned heavily on the International Relief Commission's philanthropic measures after. In 1954, the damage done was incomparably less, thanks to the restoration and extension of water conservancy instituted in the previous years, to the stepping up of flood control work in the two months before the floods arrived, to the mobilisation of 10 million people from June onwards and to the Government's immediate palliative and remedial measures. Forty thousand square miles of farmland, an area greater than the farmland of Great Britain and about one-tenth of the total under cultivation, was inundated. Half this land was saved by prompt drainage, and seedlings were replanted for autumn crops. "In the flooded areas the Government is making sustained efforts to reduce the effect of the calamity, to drain the flood water and promptly replant the land."[30] The

[30] Chou En-lai, "Report on the Work of the Government, September 23, 1954," *Documents of the First Session of the First National People's Congress*, p. 92.

Government created a £35 million relief fund and advanced nearly £15 million in production loans to refugees.

In 1931 the Huai devastated over 4 million acres in north Kiangsu. In 1954 two million people reinforced several hundred miles of dykes and raised them from 3 to 6½ feet, and "the Huai River harnessing project — not yet entirely completed — did even more than was anticipated in the prevention of floods."[31] In 1931 the crucial Chingkiang Dyke above Wuhan was breached, with disastrous consequences to the adjacent areas. In 1954 the new Chingkiang Flood Detention Basin was opened when the Yangtze reached 182 feet at Ichang, and the Chingkiang Dyke successfully survived five flood crests. In 1931 Wuhan and Nanking were inundated, Wuhan for four months; in 1954 normal life was maintained in both cities throughout the flood crisis.

"More than in any other country, not excepting Holland, land in China is an article manufactured by man."[32] It was therefore logical for Chinese historiographers to use the maintenance and construction of waterworks as an acid test in passing final judgment on dynasties. On its record to date, the new regime should fare well by this criterion.

Government disbursements on agriculture, while very large by former standards, were necessarily limited by the competing and overriding demand from heavy industry. Projected Government agricultural expenditures for 1953-1957 were the equivalent of £475 million on capital construction projects and £625 million on economic developments, or £220 million per annum in all. The preliminary draft of the Second Five Year Plan set a target of £1250 million for Government capital construction outlays on agriculture. The systematic technical improvements envisaged in the Draft Twelve Year Programme for Agriculture, including as they do water conservancy, agricultural machinery and implements, fertilisers, rural communications and electrification, and prevention of human, animal and plant diseases, will entail a sustained increase in Government outlays on agriculture, although, no doubt, non-monetary and monetary investment by co-operatives will play a very large part.

The example of Japan may be instructive in assessing the possibilities of technical progress in agriculture *prior to* large-scale mechani-

[31] Chou En-lai, "Report on the Work of the Government," p. 91.
[32] R. H. Tawney, *Land and Labour in China* (London, 1932), p. 46.

sation.[33] Japanese agricultural labour productivity doubled between 1885 and 1915, a rate of increase of 2.4 per cent per annum, and in the same period total agricultural output rose by 75 per cent. There was an *absolute* decline in the agricultural labour force, the gainfully occupied agricultural population falling by 14 per cent, or nearly 2½ million, while total population increased by 42 per cent, or 16 million. The rise in agricultural labour productivity and output occurred without a fundamental change in *either* the social framework *or* the manual basis of Japanese farming. The two chief causes of rising productivity were standardisation and selection of seed, which was carried through by seed-propagation farms, and a heavy expansion in the application of commercial fertilisers; also of importance were improved irrigation, the introduction of insecticides, and improvements in cultivation, transplanting and weeding. There are several interesting features of these innovations. They were mostly land-saving — between 1881 and 1920 the crop area rose by only one-fifth, while per acre yield rose by 50 per cent, and it appears that the secular trend of the size of the Japanese farm was downwards. Secondly, the capital outlays involved were relatively small, the role of mechanical power and labour-saving machinery being comparatively insignificant. Taken together, they make it clear that there was no question of cashing in on the economies of direct large-scale production. Furthermore, throughout this period tenancy and the landlords' share in the national income both rose, while the tax structure was discriminatory against the rural population. Finally, the land tax was a most important source of government revenue, and the increase in agricultural output, in general, and the land tax, in particular, provided a large part of the real resources devoted to the capital accumulation needed for industrialisation, so that the farmers gained little in the way of higher living standards.[34]

[33] See Bruce M. Johnston, "Agricultural Productivity and Economic Development in Japan," *Journal of Political Economy* (December 1951), pp. 498-513; K. Takahashi, "La Place de la Révolution de Meiji dans l'histoire agraire du Japon," Revue *Historique* (October-December 1953), pp. 233-270; and E. H. Norman, *Japan's Emergence as a Modern State* (New York, 1940), Chapter V.

[34] See Takao Tsuchiya, "War and Japanese Capitalism," in Institute of Pacific Relations, editors, *Industrial Japan* (Shanghai, 1941), pp. 4 and 7, cited by Johnston, "Agricultural Productivity," p. 503: "The urgent necessity of protecting and fostering other industries compelled the government to impose a heavy land tax on the agricultural population to obtain the wherewithal to carry out industrial development programs. . . . The government's armament expansion program and its policy of protecting industry and commerce increased the burdens of the rural community, and the development of big industries proceeded at the expense of the countryside."

Chinese agriculture is more favourably placed than was Japan's for several reasons. First, all the opportunities for the kind of improvement carried through in Japan are present; although the application of commercial fertilisers on a big scale will take some time, China has the advantage of beginning at a later period when the agricultural arts themselves are more advanced. Second, the margin of extensive cultivation is much wider in China, since the goal for 1967 is the reclamation of 65-82 million acres and apparently crop area can ultimately be increased by around three-quarters.[35] Third, the social basis of Chinese agriculture has been transformed. Fourth, the size of the average *unit* of cultivation has risen sharply and the more elementary advantages of larger scale production are already being reaped. Fifth, this combined with the progress of industrialisation should eventually make possible the mechanisation of agriculture, a development which even now is not in prospect for Japan. In conclusion, the increase in agricultural productivity and output is undoubtedly contributing to industrial investment and will continue to do so;[36] but the lop-sided extent to which it served as the basis for initial capital accumulation in Japan is unlikely to be duplicated in China.

[35] Mao Tse-tung, "The Question of Agricultural Co-operation," p. 10. According to official estimates early in 1955, there are 36 million acres of usable virgin land in the Northeast, over 100 million acres of potentially irrigable virgin land in the Northwest and 60 to 85 million acres of reclaimable land in the rest of China. A later estimate (*NCNA*, August 24, 1955) placed the total even higher. Examples of the extreme caution shown by foreign experts in estimating the area of usable land are too numerous to cite. O. E. Baker ("Agriculture and the Future of China," *Foreign Affairs*, April 1928) is the prominent exception, but he went to the other extreme.

[36] See Li Fu-chun's reference to the peasants' capacity "to use part of their gains to help national construction" (*Report on the First Five-Year Plan*, p. 44), and Mao's flat statement that "a considerable part of these funds [the large funds needed for industrialisation and the technical reconstruction of agriculture] is derived from agriculture" ("The Question of Agricultural Co-operation," p. 11).

VII

Agriculture, 2

1 AGRICULTURAL PRODUCTION

THE GROSS OUTPUT of agriculture and subsidiary industries increased by 48.5 per cent between 1949 and 1952.[1] This increase occurred both in food and raw materials. Output of cereals in 1952 was 45 per cent, or 51 million tons, higher than in 1949.[2] Progress

[1] Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 7. For the significance of grossness in agricultural output see p. 71 above.

[2] It is to be regretted that with the exception of the annual *World Economic Report* the level of reporting by United Nations organisations on China falls below that of the Economic Commission for Europe's reporting on Russia and Eastern Europe. Thus the material on Chinese agriculture in the Food and Agriculture Organisation *Yearbooks of Food and Agricultural Statistics,* from which the data in the United Nations *Statistical Yearbooks* are derived, must be considered dubious on several grounds.

The "Country Notes" on China in the F.A.O. *Yearbook 1955* (Part 1, p. 336) state: "Since 1949, no reliable official estimates have been available; however, though not shown, the best available information for China and Manchuria, in all instances where official data were not available, has been used for computing continental, regional and world totals." This statement is open to four objections. In the first place, it implies that official estimates for years before 1949 *were* reliable, an implication which is generous, to say the least, for a country as little unified and as lacking in firm basic statistics as was China, and which is manifestly absurd for the years 1946-1948. In the second place, the F.A.O. abstained from using the *available official* data and estimates for years after 1949, which are certainly not less reliable than those for any of the years before 1949. In the third place, no indication is

Table 16

FOOD GRAINS AND COTTON PRODUCTION 1936-1955

YEAR	GRAINS[a]	COTTON
	(million metric tons)	
1936[b]	150	0.85
1949	113	0.44
1950	132	0.71
1951	145	1.04
1952	164	1.30
1953	167	1.18
1954	170	1.07
1955	184	1.52

[a] Including soya beans.
[b] Peak pre-war year.

Source: For 1936, *Proposals of the Eighth National Congress of the Communist Party of China for the Second Five-Year Plan for Development of the National Economy (1958-1962)* (Peking, 1956), p. 18; for 1949 and 1952-1955, State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*), 1952-1955; for 1950-1951, from the conversion of index numbers in Table 1, p. 23 above.

was general throughout China, though naturally greater in the old liberated areas where land reform was completed first. In the Northeast, wheat production in 1952 was over 20 per cent above the pre-1949 peak; in the far South, Kwangtung, previously a food-deficit province, became self-sufficient in 1953. At the same time the output of soya beans, which reached 9½ million tons in 1952, was still well below the 1936 peak of 11.2 million tons.

Expansion of the production of other agricultural products paralleled that of the main food staples. Cotton output trebled from 440,000 tons in 1949 to 1,300,000 tons in 1952, with acreage more than doubling to nearly 14 million acres.[3] The average quality of

given in the "Country Notes" of the source or nature of "the best available information" employed in computing not only the Chinese component in continental, regional and world totals but also, in many instances, area under cultivation, yield per hectare and production in China and the Northeast. Finally, the "best available information" used by F.A.O. is often implausible and internally inconsistent.

[3] Rostow and Eckstein (*The Prospects for Communist China,* New York, 1954, p. 240) maintain that Chinese official data exaggerate the difference between cotton production in 1952 and in 1936, basing their claim on the 1936 figure given by T. H.

cotton produced improved and long staple was produced in quantity for the first time in Chinese history. In 1952 China produced 220,000 tons of cured tobacco. Raw silk production is largely a peasant side-occupation as in Japan. Output in 1949 was only 20 per cent of 1931. Restoring production was a laborious process, and while a big improvement occurred in quality and standardisation 1954 output was still only 30 per cent of the pre-war peak.[4] The area under jute was extended and a start was made in the production of rubber, coffee and cocoa in the tropical island of Hainan and in the provinces of Kwangtung, Kwangsi and Yunnan.

Output of marine products fell in 1949 to 30 per cent of pre-war but had fully recovered by 1952. Oil-bearing crops and tea are the most important categories in which post-1949 output has not exceeded pre-war peaks, and even here there was an annual increase, which was not, however, able to keep pace with rising demand. The domestic shortage of vegetable oils was not caused by any increase in exports, since the annual level of exports, which was kept stable at 236,000 tons between 1950 and 1953, is slightly lower than pre-war. Owing to their importance in the national diet, the disparity between supply and demand creates serious problems. The Government is trying to promote production and has included vegetable oils in its planned purchase and supply and rationing schemes.[5]

While agricultural output continued to rise both in 1953 and 1954, it fell below plan as a result of unusually unfavourable climatic conditions. Grain production in 1954 was only 3.4 per cent higher than in 1952, while cotton output actually fell — partly, it is true, as a result of a slight reduction in acreage. The showing in other fields was markedly better.

Nevertheless, the disappointing results in food grains and cotton undoubtedly influenced the planners, whose cautious targets for 1957 were adopted early in 1955 (see Table 17). It was then impossible to cavil at Li Fu-chun's statement that "this growth in agriculture cannot be considered too slow,"[6] since the required annual

Shen in his *Agricultural Resources of China* (Ithaca, New York, 1951), p. 308. Shen's figure for 1946 is double and for 1947 80 per cent greater than the Kuomintang official estimates for those years used in the F.A.O. *Yearbook 1949*, Part 1, and in the U.N. *Statistical Yearbook 1954*.

[4] Yin Chiu-sung, "Sericulture," *China Reconstructs* (April 1955), p. 20.

[5] Chen Yun, "Bridging the Gap Between Supply and Demand," *People's China*, November 16, 1954, pp. 4 and 7-8. For a discussion of planned purchase and supply and rationing, see pp. 172-176 below.

[6] *Report on the First Five-Year Plan*, pp. 36-37.

rate of growth in 1955-1957 was 6 per cent if the agricultural plan was to be fulfilled. But the record of agricultural production in 1955 greatly improved the outlook. Production in 1955 consistently exceeded planned targets, grain showing an increase of 8 per cent and cotton of over 40 per cent on 1954 and both attaining new peaks. The gross value of agricultural output was 14.8 per cent higher than in 1952. Accordingly, the sights were again raised not only because of the excellent harvests of the previous year but also because of the still incomplete but rapidly advancing second Agrarian Revolution. In the event, fairly unfavourable weather conditions prevailed in 1956 and production fell short of the ambitious targets laid down in the annual plan. Nevertheless, the output of grain appeared to have slightly exceeded the level set for 1957, while that of cotton fell only a little short of the 1957 target.[7]

Thus, barring severe natural calamities in 1957, the chances were that the original overall Five Year Plan for agriculture would be fulfilled with a margin to spare. But shortfalls were anticipated in soya beans, other oil-bearing crops, jute, draught animals and pigs.

The preliminary Second Five Year Plan targets for agricultural production are more ambitious than those for the first quinquennium, requiring as they do a rise in gross agricultural output of 35 per cent in 1958-1962 for their fulfilment as against the projected increase of 23.3 per cent in 1953-1957. The goals include 250 million tons for grain (excluding soya beans), 12.5 million tons for soya beans and 2.4 million tons for cotton, or respective increases on 1957 of 38, 11 and 47 per cent. These are much larger for cotton and grain, excluding soya beans, than in the First Five Year Plan (see Table 17); the reduction in the projected percentage increase in soya beans must be due to the painful experience of 1954-1955, when output actually fell below the 1952 level. The goals for total output over the five years were set at 1100 million tons for grain, 55 million tons for soya beans and 10.5 million tons for cotton; in other words, the rate of growth was to be relatively gradual. In the case of soya beans the scheduled *five-year* annual average was *lower* than the original target for 1957.

[7] Liu Shao-chi, *Political Report of the Central Committee of the Communist Party of China to the Eighth National Congress,* September 15, 1956, *People's China,* October 1, 1956, Supplement, p. 17; Chou En-lai, *Report on the Proposals for the Second Five-Year Plan for Development of the National Economy* (Peking, 1956), p. 19, reprinted in *People's China,* November 1, 1956, Supplement; and *New China News Agency Bulletin* (hereinafter *NCNA*), December 14, 1956.

Table 17

TARGETS FOR AGRICULTURAL OUTPUT 1957

	1952 (Actual)	1957 (Projected)	Projected Percentage Increase
Total output (*index number*)	100	123.3	23.3
Grain (million metric tons)	164.0	192.9	17.6
Rice	68.4	81.8	19.5
Wheat	18.1	23.7	36.1
Soya beans	9.5	11.2	17.9
Mixed grains	51.5	54.8	6.4
Tubers	16.3	21.3	30.5
Economic crops (thousand metric tons)			
Cotton	1,305	1,635	25.4
Jute and hemp	305	365	19.7
Silk cocoons	62.2	93.4	50.1
Cured tobacco	220	390	76.6
Sugar cane (million metric tons)	7.1	13.2	85.1
Sugar beets (million metric tons)	0.5	2.1	346.4
Aquatic products (thousand metric tons)	1,670	2,810	68.5
Livestock (thousands)			
Horses	6,130	8,340	36
Mules	1,640	1,970	21
Donkeys	11,810	13,950	18
Cattle	56,660	73,610	30
Sheep	36,880	68,720	86
Goats	24,900	44,320	78
Pigs	89,770	138,340	54

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), pp. 80 and 88. All figures, except those for livestock, rounded to the nearest first decimal place.

It is hoped that the co-operative basis of farming will facilitate the extension and promotion of technical progress in irrigation and in the use of fertiliser and better implements but without entailing radical changes on a big scale and that the resultant increases in per acre yields may render the attainment of the grain target feasible.

The 1962 goals for livestock are 90 million head of cattle, 11

million horses, 170 million sheep and goats and 250 million pigs with respective increases on 1957 original targets of 22, 32, 50 and 81 per cent. These increases are all lower than those projected for 1953-1957, except in the case of pig breeding, probably because by 1956 it became evident that the 1957 targets were themselves excessive. The actual increases required to reach the 1962 targets would therefore be greater than indicated. The Government is largely relying on price incentives to co-operatives in order to achieve the target for pigs.

The first draft of the Twelve Year Programme for agriculture covering 1956 to 1967 envisaged an increase in grain output (including soya beans) of 150 per cent and in cotton output of 200 per cent over the twelve years and increases of roughly 75 per cent in the former and 90 per cent in the latter over the five years 1963-1967.[8] It is premature to pass on the feasibility of these long-term objectives without further evidence concerning the impact of collectivisation on peasant incentives and productive efficiency and on the ability of Chinese industry to expand the mechanical and chemical sinews of agricultural production sufficiently rapidly. European Communist countries have generally set both their short-term and longer-term agricultural targets too high and the usual result has been under-fulfilment rather than over-fulfilment. While the Chinese performance, with respect both to output and to changes in the structure of agricultural production, has hitherto usually kept pace with the planned mark, the projected rates of increase from 1962 to 1967 are much greater than any so far planned. The heady wine of success in socialist transformation may have led the Chinese to abandon their customary caution in setting their targets for 1967. But it would be wisest to suspend judgment for a few years.

Much the bigger part of the increase in agricultural production was the result of increasing productivity per acre, as the increase in total area under cultivation after 1950 was quite small. From 1949 to 1952 the yield per acre of rice and wheat rose by roughly 27 and 14 per cent respectively, or by 463 pounds for rice and 79 pounds for wheat.[9] The First Five Year Plan targets for crop acre area and productivity per acre are given in Table 18. The prospects for attain-

[8] For the text, see "The National Programme for Agricultural Development, 1956-1967 (Draft)," *People's China*, February 16, 1956, pp. 6-16.

[9] Sun Ching-chih, "Food Resources and Population Growth," *People's China*, May 16, 1956, p. 9.

Table 18

TARGETS FOR CROP ACRE AREA AND PRODUCTIVITY PER ACRE 1957

	1952 (Actual)		1957 (Projected)		Projected Percentage Increase	
	(Million Acres)	(Pounds Per Acre)	(Million Acres)	(Pounds Per Acre)	(Acres)	(Pounds Per Acre)
Grain	306.3	1,180	315.4	1,348	3.0	14.2
Rice	70.1	2,152	73.3	2,460	4.5	14.3
Wheat	61.2	653	65.9	794	7.7	21.6
Soya beans	28.9	728	31.3	790	8.6	8.6
Mixed grains	124.6	912	120.6	1,002	−3.2	9.9
Tubers	21.5	1,677	24.2	1,937	13.0	15.5
Economic crops	29.39		37.36		27.1	
Cotton	13.77	209	15.65	230	13.6	10.3
Jute and hemp	.39	1,724	.34	2,345	−12.4	36.6
Cured tobacco	.46	1,063	.69	1,252	50.0	17.8
Sugar cane	.47	34,805	.67	43,501	48.1	25.0
Sugar beets	.08	12,175	.35	13,425	304.9	10.3
Oil-bearing crops	14.12		19.45		37.8	
Others	13.29		21.76		63.7	

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 80. Conversion factors of 1 *mou* = 0.1647 acres and 1 catty = 1.1023 pounds were employed. The first column for 1952 and 1957 is rounded to the nearest first decimal place for grains and to the nearest second decimal place for the remainder; the second column for 1952 and 1957 is rounded to the nearest pound; percentages are rounded to the nearest first decimal place.

ing productivity targets appeared reasonably good at the end of 1955. The yield of 238 pounds per acre of ginned cotton was already above the 1957 target. The yield for all food grains was approximately 1000 pounds in the area north of the Yellow River, Tsinling Mountains and the Pailung River; 1400 pounds between the Yellow and Huai Rivers; and 2700 pounds south of the Huai, Tsinlings and the Pailung.[10] Progress had been very far from uniform. Thus in the case of rice in 1955, when output was over 95 per cent and average yield per acre nearly 97 per cent of the original 1957 targets, yields on nearly half the paddy land were still only a little higher than in 1949-1950. Double cropping raises rice yields per acre by the order of 60 per cent. Yet there was double cropping on only 8 per cent of the rice paddy area in the Yangtze Valley, a region in which the practice could be relatively easily adopted.[11] The 1957 target for rice yield per acre is only two-thirds of the Japanese yield in 1952.

With pacification the area under cultivation increased sharply from 1949 to 1950 and totalled nearly 267 million acres in 1952. The original First Five Year Plan goal for land reclamation was 6½ million acres. This meagre target was exceeded in 1956, but if the revised Five Year Plan total of approximately 13 million acres were to be achieved, around 5 million acres of virgin land would have to be brought under cultivation during 1957. The optimistic nature of the 1957 annual plan target is apparent from the fact that the preliminary draft of the Second Five Year Plan calls for the reclamation of 13-14 million acres, or roughly the same area as under the revised First Five Year Plan.[12]

The global average cultivated land per peasant household means even less than it normally does when the structure of agriculture is undergoing profound changes: on the basis of 110 million households and 267 million acres under cultivation, the 1952 figure for what it is worth works out at 2.42 acres.[13] There were considerable

[10] The respective targets for 1967 were: cotton, 534-638 pounds; food grains, 2700, 3340 and 5400 pounds (Draft Twelve-Year Programme for Agriculture, *People's China,* February 16, 1956, p. 10). For a map and summary description of the three main agricultural regions, see Chen Erh-shou, "China's Agricultural Regions," *People's China,* February 16, 1956, p. 29.

[11] *NCNA,* October 6, 1955.

[12] Liu Shao-chi, *Political Report,* p. 26.

[13] J. L. Buck found that for his sample of 16,786 farms in 22 provinces in 1929-1933 the arithmetic mean of crop area per farm was 3.76 acres and the median 2.37 acres (*Land Utilization in China,* Chicago, 1937, p. 268, Table 1). These figures have often been taken as representative for the 22 provinces but they

regional and crop variations, the averages for wheat, millet and kaoliang farms in the North, Northeast and Northwest being considerably higher and for the rice and wheat farms of the East and the rice farms of the Central-South and Southwest considerably lower.

With the growth of co-operation in production the average crop area per unit of *farm management* became increasingly important, and by the middle of 1956 it must have been of the order of 250 acres for the overwhelmingly preponderant co-operative sector. Larger

are hard to reconcile with subsequent information on rural population, the number of farms and the area under cultivation.

According to Kuomintang official data cultivated land in the 22 provinces totalled 198½ million acres in 1929-1933 and approximately 200 million acres in 1946 (see Yen Chung-ping and associates, editors, *Selected Statistical Material on Recent Chinese Economic History* (Peking, Chinese language, 1955), p. 356, and T. H. Shen, *Agricultural Resources of China,* p. 142). While the latter estimate may be somewhat too low, the former is probably not too far off and may even be a little too high. Dividing 198½ million acres by 3.76, Buck's arithmetical average, gives a figure of 52.8 million farms for 1929-1933, which is much too low on any plausible estimate of the population of the 22 provinces and of the relation of rural population to total population in that period. Their total population in 1953 was 544.8 million (this total includes the three leading cities and the Inner Mongolian Region for purposes of comparability; see p. 144 below, for details of population by province).

Any estimate of the population of the 22 provinces in 1931, the midpoint of Buck's survey, must necessarily be conjectural. But the only way to arrive at a figure of 52.8 million farms for 1931 is by postulating, first, annual rates of increase in the population for 1931-1937 and 1938-1949 far higher than can be supported by the available information; second, a ratio of rural to total population in 1931 inconsistent with the known facts; and third, an area under cultivation for the 22 provinces in 1931 significantly above 198½ million acres. The annual rate of increase in population *before* 1937 was around 10 per thousand (see p. 145 below); from 1938 to 1949 it was unquestionably lower, how much lower it is impossible to say with any assurance although in view of the acutely disturbed state of the country it is more likely to have been closer to 5 per thousand than to 10.

The ratio of rural to total population in 1953 was 86.74 per cent; in 1931 it was almost certainly higher. On the basis of the suggested hypothetical rates of increase in population and of a ratio of rural to total population similar to that in 1953, a by no means liberal probabilistic estimate of the number of farms in the 22 provinces in 1931 would yield a figure within the range of 80 million. If this range is a reasonable guide, the arithmetic mean of crop area per farm in the 22 provinces in 1929-1933 was far below that for Buck's sample and much nearer his median of 2.37 acres.

The representativeness of Buck's sample is distorted by the fact that its regional composition (*ibid.,* p. 271, Table 5) did not correspond to the regional distribution of the rural population and that the "Wheat Region" received a disproportionate weight. But even its representativeness for the "Rice Region" is to be questioned, since the arithmetic mean of the Rice Region farms in his sample (2.79 acres) would appear to have been well above the actual arithmetic mean for the Region, which was hardly likely to have exceeded Buck's regional median of 2.05 acres.

units of farm management immediately made more efficient land utilisation possible. Traditionally Chinese agriculture suffered severely from a high degree of fragmentation, "the ownership by individuals of scattered pieces of land. . . . Such fragmentation has the disadvantages of using up land in boundaries, increasing the number of boundary disputes, consuming time to reach the plots, increasing the difficulties of irrigation, limiting the size of fields and hence the use of machinery, and making crop protection difficult."[14] Mutual aid curtailed the incidence of fragmentation and co-operatives eliminated it entirely. According to Liao Lu-yen, co-operative farming will add 13 million acres to China's arable land by wiping out boundaries and unnecessary paths between fields.[15]

Co-operative farming also promotes the extension of double cropping. Crop acre area, of course, exceeds the area under cultivation. In 1952 crop acre area totalled approximately 350 million acres (see Table 18, p. 134 above), yielding an index of double cropping of around 130.[16] Projected crop acre area in 1957 was roughly 375 million acres, which, allowing for the projected increase in area under cultivation, would give an index of double cropping of about 137. The Twelve Year Programme set the following most ambitious goals for the index of double cropping in 1967: 230 for the tropical and sub-tropical areas south of the Wuling Mountains; 200 for the area north of the Wulings and south of the Yangtze; 160 for the area between the Yangtze and the Yellow River, the Tsinlings and the River Pailung; 120 for the area north of the latter and south of the Great Wall; and some expansion north of the Great Wall. It also called for increases in areas under rice, maize and potatoes — all crops with high yields per acre — of 60.9, 24.7 and 19.3 million acres respectively; most of this increase would involve a shift in the use of land already under cultivation, since it is larger than the projected area to be reclaimed, since paddy will remain the predominant form of rice cultivation and since, presumably, much of the virgin land to be broken will be dry.

Even with the rapid extension of co-operation in production

[14] Buck, *Land Utilization in China,* pp. 11-12. In Buck's sample of 16,786 farms in 22 provinces, the average number of parcels per farm was 5.6 (p. 183, Table 13).

[15] "Speech, January 25, 1956," *NCNA,* January 31, 1956, reprinted in *People's China,* February 16, 1956, p. 22.

[16] Buck gives an index of double cropping of 149 (*Land Utilization in China,* p. 216, Table 5). But the 1952 index was hardly likely to have been lower than twenty years previously and certainly not by so much.

Chinese agriculture remains phenomenally labour-intensive. Essentially, it still consists in the application of much labour to little land with less capital. Economic and technical progress are slowly bringing about an adjustment in these proportions. In the meantime tilling the soil is very far from absorbing the Chinese peasant's potential energy. In fact, a very large proportion of the peasantry does outside work in handicrafts, co-operative transport enterprises, and so on (the value of output of industrial crops, animal husbandry and subsidiary occupations amounts to half the value of gross agricultural output) and millions of peasants have been drawn off, particularly in the slack seasons, into large and small construction projects without in any way impeding current agricultural production. The Twelve Year Programme set a norm for collective farms of 250 working days per year for able-bodied men and 120 working days per year for able-bodied women to be attained within seven years, and according to Chou En-lai direct field work absorbs roughly two-thirds of the peasants' working days.[17] There should therefore be ample scope for at least the maintenance of rural side-occupations.

Curiously enough, there was some movement of labour from the city to the countryside. As in the case of the initial period of industrialisation in Russia,[18] urban unemployment survived and will probably not disappear completely until the expanding industrial base calls for the massive construction of new plants and new capacity during the Second Five Year Plan. But the future trend is undoubtedly for the agricultural work force to fall relatively to the industrial — this is an essential feature of the dynamics of industrialisation. But whether and how soon it will fall absolutely will depend on the extent to which the rate of increase in the demand for food and raw materials, resulting from a growing population, rising living standards and industrialisation itself, is matched by the rate of progress in agricultural technique and forms of production not only on existing farmland but on new areas brought into cultivation. The correct evaluation of these interacting forces, which will decisively affect the future agricultural pattern, is one of the fundamental problems in both the overall and detailed planning of Chinese economic development in the Five Year and longer-term plans.

[17] "Political Report, January 30, 1956," *NCNA*, February 1, 1956, Supplement No. 237, reprinted in *People's China*, February 16, 1956, Supplement, p. 9.

[18] See Maurice Dobb, *Soviet Economic Development Since 1917* (London, 1948) p. 189.

2 OTHER ECONOMIC PROGRESS

The line of demarcation between technical and economic and, for that matter, social progress is necessarily arbitrary. Better tools and equipment and improved methods of cultivation are both the cause and effect of higher standards of living and advances in literacy and public hygiene. The combined effect of all three types of change is cumulative, each tending to reinforce the other.

In assessing the impact of economic change on the peasantry, the most important immediate gain was the increase in rural per capita food consumption. Allowing for grain they repurchase from the State, the peasants consume over 80 per cent of the total production of grain, and average rural per capita consumption (gross) of grain was over 610 pounds in 1954 and 660 pounds in 1955, as compared with 420 pounds in 1949.[19]

No less important in the long run, investment by the individual peasant was encouraged both by the favourable general environment and by the creation and extension of institutions specifically designed to facilitate and promote such investment. The stimulus to investment is obviously much greater with co-operative forms of production.

The incidence of agricultural taxes was greatly reduced. Agricultural income is defined as normal yield for tax purposes. There was a remission of taxation when natural calamities reduced agricultural income. Virgin land brought under cultivation enjoyed 3-5 years' tax exemption and ordinary land reclaimed received 1-3 years' exemption. Newly irrigated land was classified as arid land, which is subject to lower rates for 3-5 years. Income from ancillary farm occupations was exempt. Maximum taxes paid by the national minorities are 10-30 per cent less than the standard rates. In 1949 the lowest rate of agricultural tax was 3 per cent and the highest 42 per cent. In June 1950, the minimum rate was raised to 5 per cent and the highest (paid by rich peasants) reduced to 30; at the same time the local surtaxes abounding in old China were limited to a maximum of 20 per cent of the regular tax, later reduced to 12 per cent.

Before socialisation, the schedule of agricultural taxation was 5-10 per cent for poor peasants, 15 per cent for middle and a maximum of 30 per cent for rich peasants. Agricultural taxes averaged 12 per

[19] Liao Lu-yen, "Report on Agriculture," *NCNA*, July 28, 1955.

cent of peasant income in 1952, when it was decided to keep their absolute yield stable up to 1955 even though production was rising. Taxes were allocated by village self-assessment. They were paid once a year at harvest time, mostly in kind, food crops making up 78 per cent of the total and cotton, tobacco, and the like 10 per cent. Peasants living near cities could pay in cash, but the money component was only one tenth of total agricultural tax collection. While the absolute yield of agricultural taxes had risen by over a third, the proportion of total receipts constituted by taxes on the peasantry fell from 27.6 per cent in 1950 to 13.7 per cent in 1952. The proportion continued to fall in the next three years with the growth of receipts from industry and trade; it was 12.4 per cent in 1954 and 10 per cent in 1955.

Agricultural taxes yielded 19.4 million tons of grain, or grain-equivalent, in 1952. Next year the Government decided that their yield should remain unchanged for three years. Actual collections totalled 17,550,000 tons in 1953 and 19 million tons both in 1954 and 1955, or, with local taxes, respectively 12.1, 12.9 and 11.5 per cent of the grain crop. The quota for 1956 was set at 20.7 million tons.[20]

Agricultural prices are fixed annually either at sowing or at harvest time, being worked out in consultations which take into account the cost of fertiliser, the amount of labour needed to produce a given crop and the past level of prices. The structure of agricultural prices, i.e., the relation between prices for different agricultural goods, was early rationalised to stimulate the production of industrial raw materials and encourage livestock farming. Whereas formerly one catty of cotton had an average purchasing power equivalent of 3.1 catties of wheat (maximum 5-6 catties), it now sold for between 6 and 9 catties, and similarly for tobacco, hemp and ramie.[21] But after 1952 the purchase prices of certain industrial crops, pigs and products of subsidiary rural occupations were sometimes set too low, which inevitably reacted on their output.

Commodity consumption in rural areas totalled the equivalent of £2250 million in 1952, £2775 million in 1953 and £3225 million

[20] Li Hsien-nien, "Report on the 1956 State Budget," in *New China Advances to Socialism* (Peking, 1956), p. 63.

[21] One catty equals approximately 1.1 pounds. See "Economic Development in Mainland China 1949-1953," U.N., *Economic Bulletin for Asia and the Far East* (Noyember 1953), p. 22, for changes in the ratio of exchange between cotton, on the one hand, and wheat and millet, on the other, in 1950-1952.

in 1954.[22] These totals clearly exclude by far the largest single item in peasant income, namely, food and subsidiary products produced and consumed on the farm; they are also misleading because the official exchange rate understates the Chinese currency's internal purchasing power. Nevertheless, they bring out the stark poverty of the Chinese countryside, a poverty on which the growth in rural commodity consumption since 1949 is only beginning to make a dent and which goes far to explain the pace of agrarian socialisation. At the beginning of 1956 Chou En-lai suggested that the next goal, if things went well in the first phase of the Twelve Year Programme, was an average *cash* income per peasant household of the equivalent of between £1 and £2 per week.

Credit facilities for the promotion of agricultural production have been expanded. Before 1949 as many as 56 per cent of all peasant households regularly borrowed money to pay taxes and rents, and 48 per cent borrowed grain to tide them over between seed-time and harvest; these debts were generally contracted on usurious terms which directly contributed to the further subjection of the peasant to the landlord and rich peasant, to increases in tenancy and to rural pauperisation. Apart from the relief of distress due to natural calamities, peasants now borrow not to eke out a precarious subsistence but primarily to expand production, and State loans to farmers rose over six times between 1950 and 1953. In the latter year they totalled the equivalent of £175 million.[23] These loans financed the acquisition of water wheels — 160,000 were provided on loan in 1953 — farm implements and modern farm tools, fertilisers, and so forth. Through its network of more than 15,000 branches and agencies the People's Bank advanced over £400 million to the peasantry in a period of four years. The budgetary allocation for agricultural loans in 1956 was over £300 million, or more than twice as much as in 1955. But the scale of rural credit facilities and the volume of rural loans fall very far short of demand.

Credit co-operatives, agricultural producers' co-operatives and rural supply and marketing co-operatives form the three prongs of the fork of rural co-operation. As such they have facilitated the integration of agriculture into the national economic plan in the transition period towards socialism.

[22] Liao Lu-yen, "Report on Agriculture," *NCNA*, July 28, 1955.

[23] Excluding loans to State agricultural enterprises or for water conservancy works, and loans extended by local governments. See State Statistical Bureau, *Communiqué*, Annual Economic Summary for 1953.

Poor peasants, both individually and in groups, could now borrow at rates of interest which were ridiculously low by old Chinese standards and indeed by current standards in other Eastern countries. They were the main recipients of rural credit, having received as much as 80 per cent of the total, the remainder having gone to the middle peasantry. Loans at long term are usually made at an interest of 1 per cent per month, special loans for water-conservancy projects or to supply and producers' co-operatives at 0.4 per cent per month and loans to national minorities at a zero rate of interest. The State also encourages the production of industrial crops by contracting ahead for their purchase and by making partial advance payments.

The banditry which formerly infested the Chinese countryside has been extirpated. Natural calamities are no longer unmitigated catastrophes, "acts of God" bringing famines, epidemics and enormous loss of life in their train.[24] Negatively, the Government remits all the obligations of the stricken area. Positively, it institutes large-scale relief, mobilising its food reserves — accumulated not only from agricultural tax yields but also from its heavy purchases of food — and all available transport facilities to send supplies immediately to focal points for local distribution. Wherever possible, production of substitute crops is started to reduce the length of the emergency. To tide over the longer run effects of crop failures, it advances seed to the destitute to enable them to recommence production as soon as conditions permit. On a humanitarian level no contrast could be sharper than that between the helplessness of the old regime when confronted with natural disasters and the planned provision of rapid relief which has increasingly become standard practice. It is the difference between the "nasty, brutish" state of anarchy and social order.

The poverty of the Chinese village has hitherto been proverbial. In spite of the great advances made in the space of a few years, the heritage of backwardness, ignorance and superstition is very far from having been liquidated, and the peasant's standard of life is still

[24] Under the Kuomintang, many disasters were transformed into famines by the insistence of the landlords on the collection of rents and of the central, provincial and local Government officials on the collection of land and other taxes, and by unrestrained speculation and profiteering in acutely scarce foodstuffs. Numerous instances of an extreme degree of social disintegration and decay can be quoted from war and post-war famines. See T. H. White and Annalee Jacoby, *Thunder Out of China* (New York, 1946), Chapter 22, and J. Franklin Ray, Jr., "UNRRA in China" (mimeographed, Institute of Pacific Relations, Stratford-on-Avon Conference, 1947), p. 52.

very low on any objective criteria. But if he has taken only the first step on the road to modernity, it is these beginnings which are the hardest.

3 THE POPULATION PROBLEM

The population problem has aroused much interest among foreign demographers and other social scientists concerned with current Chinese economic developments. Prior to the publication in November 1954 of the summary results of the Census of June 30, 1953, firm data on the size of China's population were not available. Estimates ranging from 400 million to 550 million generally tended to err on the low side. The organisation of a modern enumerative census for so huge a country with so widespread a population at such different stages of economic development was itself a major undertaking, which only became possible with effective economic unification.

As of June 30, 1953, the population of China was 601,938,035. Over 95 per cent of the total, or 574,205,940, were counted by direct enumeration; 8,397,477 inhabitants of remote border regions, mostly minority areas, were counted by indirect methods. The population of Taiwan (Formosa) was estimated at 7,591,298 and the number of Chinese abroad at 11,743,320.[25] The Census data on the distribution and ethnic composition of the population are given in Tables 19 and 20.

Over 2½ million people were employed in the taking of the Census. A careful sample recheck in different areas with a total population of 53 million revealed a duplicated registration of 0.139 per cent and omissions of 0.255 per cent. Szechwan, with 62 million inhabitants — more than any European country excluding Russia — is the province with the largest population and Chinghai, with under 2 million, the smallest. The Han nationality constitutes some 94 per cent of the total population, excluding Taiwan and Chinese abroad. The ten other largest nationalities are listed in Table 20.

[25] The Taiwan estimate, which is based on Kuomintang figures for 1951, appears conservative. The *registered* population of Taiwan in 1952 was 8.1 million (see G. W. Barclay, *A Report on Taiwan's Population*, Princeton, 1952, Table 1, p. 15). The actual population of Taiwan was probably greater, but "there is not, at present, the statistical material in Taiwan to make possible a sound estimate of the size of the total population" (*ibid.*, p. 17). The magnitude of the People's Government's achievement in completing a modern census on the mainland stands out all the more in view of the fact that Taiwan is a compact area with a dense population and that the Japanese apparently left behind the best registration system in the Far East.

Table 19

GEOGRAPHIC DISTRIBUTION OF POPULATION 1953

Peking	2,768,149	Chekiang	22,865,747
Tientsin	2,693,831	Fukien	13,142,721
Shanghai	6,204,417	Taiwan[c]	7,591,298
Hopei	35,984,644	Honan	44,214,594
Shansi	14,314,485	Hupeh	27,899,693
Inner Mongolian		Hunan	33,226,954
Autonomous Region	6,100,104	Kiangsi	16,772,865
Liaoning	18,545,147	Kwangtung	34,770,059
Kirin	11,290,073	Kwangsi	19,560,822
Heilungkiang	11,897,309	Szechwan	62,303,999
Jehol[a]	5,160,822	Kweichow	15,037,310
Shensi	15,881,281	Yunnan	17,472,737
Kansu	12,928,102	Sikang[a]	3,381,064
Chinghai	1,676,534	Tibet Region and	
Sinkiang[b]	4,873,608	Changtu Area	1,273,969
Shantung	48,876,548	Chinese abroad[c]	11,743,320
Kiangsu	41,252,192		
Anhwei	30,343,637	TOTAL	601,938,035

[a] On July 30, 1955, the National People's Congress abolished Jehol and Sikang Provinces, incorporating the former into Hopei, Liaoning and the Inner Mongolian Autonomous Region, and incorporating the latter into Szechwan.

[b] On September 13, 1955, the Standing Committee of the National People's Congress changed the status of Sinkiang Province, which became instead the Sinkiang Uighur Autonomous Republic.

[c] Estimated.

Source: State Statistical Bureau, *Communiqué on the Census,* November 1, 1954.

Of the total counted directly, 51.82 per cent were male and 48.18 per cent female. With respect to age-composition, 15.6 per cent of the population were children up to 4 years of age, and 11 per cent were between 5 and 9; all told, 41.08 per cent were under 18. The rural population formed 86.74 per cent of the total and the urban 13.26 per cent. According to an article by Pai Chen-hua of the Census Department of the Ministry of the Interior in the *People's Daily* (*Jen Min Pao*) of November 1, 1954, the number of permanent urban dwellers was 40 per cent higher in 1953 than in 1950. In cities

such as Anshan, Fushun, Tangshan and Taiyuan the increase was as much as 100-300 per cent. Both the distribution by age-group and the distribution between town and country are obviously those of a predominantly agrarian country.

Pai Chen-hua cites figures of 35, 25 and 10 per thousand respectively for the annual birth rate, death rate and rate of increase before 1937. A Census Survey of over 30 million people in 1953 indicated an annual birth rate of 37 and a death rate of 17 per thousand,

Table 20

ETHNIC COMPOSITION OF POPULATION 1953[a]

Han	547,283,057
Mongol	1,462,956
Hui	3,559,350
Tibetan	2,775,622
Uighur (Turki)	3,640,125
Miao	2,511,339
Yi	3,254,269
Chuang	6,611,455
Puyi	1,247,883
Korean	1,120,405
Manchu	2,418,931
Other nationalities	6,718,025
Total	582,603,417

[a] Excluding Taiwan and Chinese residing or studying abroad.

Source: State Statistical Bureau, *Communiqué on the Census,* November 1, 1954.

or an annual rate of increase of 20 per thousand. The main cause of the increase in the rate of increase was thus the drop in the death rate.

Many Western writers on China's population have been haunted by the Malthusian bogey. The Chinese themselves seem to be curiously unperturbed by it, presumably because they subscribe to the Marxist thesis that the laws of population for any given society are determined by "its mode of production."

There should be little need at this stage to point out the errors in Malthus' theory of population, whether in the first or second edition of his *Essay on Population,* although unfortunately many of his assumptions and conclusions underlie most of the non-technical

and even some of the more professional writing on this subject.[26] The Malthusian analysis, written on the eve of unprecedented technical progress in Western agriculture and industry, was completely falsified as a short-run prediction for the West. Its inadequacy as a long-run prophecy is, if anything, more apparent.

There are strong grounds for holding that the Malthusian devil is not an *immediate* menace to Chinese economic progress. First, the annual rate of increase of output as a whole is much greater than that of population. The former is around 10 per cent per annum and the latter was about 2 per cent per annum in 1952-1953.[27] The annual rate of growth in grain output is 4 per cent and output per head is rising in agriculture as well as in industry. There would appear to be small cause for fearing that the rise in per capita output will fail to exceed the fall in the death rate or that this rise will not be accompanied by significant social changes. Second, there is still great scope for agricultural improvements requiring little sizeable capital investment, which are relatively easy to apply, and are in fact being applied in China on a wide scale (see p. 117 above). Agricultural progress at this stage does not perceptibly encroach on the demand for investment in heavy industry and is sufficient to cover domestic needs and to yield an annual export surplus of the order of a few hundred million sterling. Advances in agriculture and in light industry have so far been sufficient to enable living standards to be raised to an extent which is small enough by Western if not by Chinese standards. And, in view of the more favourable position of China as compared with Japan in 1885-1915, it should be possible to sustain the expansion in productivity both in agriculture and light industry while at least the foundations for heavy industry are being constructed. Third, China is very far from having reached the *extensive*

[26] See J. A. Schumpeter, *Capitalism, Socialism and Democracy* (2nd edition, London, 1947), p. 115, n. 6, where he asks with reference to attempts by various economists to resuscitate Malthus: "Will economics never come of age?" See also his *History of Economic Analysis* (New York, 1954), pp. 578-584.

[27] Forecasts of the Chinese population based on an extrapolation of the rate of growth now prevailing for years ahead are idle exercises. When the rate of economic and social change is as rapid as it is in China there is little point in embarking on such predictions *unless* one believes that population is an independent variable as far as the process of economic growth is concerned; the relationship between population and economic growth may be complex, but it is not non-existent. Further, extrapolators should remember that "Forecasts of future populations, from those of the seventeenth century on, were practically always wrong" (Schumpeter, *Capitalism, Socialism and Democracy*, p. 115, n. 6).

margin of cultivation, since anywhere up to 200 million acres of new land, or around three-quarters of the area now being tilled, is available for eventual agricultural development.

Finally, it is necessary to stress that the Chinese family has adjusted its size fairly readily to the economic milieu in the past, so that the burden of proof rests with those who claim that the Chinese philoprogenitive urge is cast in the Malthusian mould.[28]

The real problem in China is not that a rising population may match rising output but rather that it may retard the *pace* of industrialisation and economic progress. A spectacular fall in infant mortality unaccompanied by a fall in the birth rate leads to a change in the age-composition of the population and a relative increase in the under-15 age group. The proportion of the population not engaged in productive work rises, an increasing share of output must be allocated to its support and the rate of economic growth tends to slacken. The Chinese Government had consciously decided on a rapid rate of economic growth. Sooner or later, therefore, it would have to commit itself on family planning.

Timing depended on two considerations. First, the advocacy of radical innovations in the most intimate of personal habits during a period of successive revolutionary changes might alienate the popular support needed to carry these changes through. Second, the process of social and economic transformation had itself to reach the point where people had acquired at least some sense of control over their environment in general before they might become receptive to propaganda in favour of their practising control over the size of their families in particular.

In fact, the dissemination of information on birth control was permitted and was becoming more easily accessible before any formally announced public approval was given to family planning.[29] In September 1954 Shao Li-tze, the Kuomintang veteran, advocated family planning at the First Session of the First National People's Congress. But these were still only straws in the wind. The first prominent

[28] The common notion that Chinese families are inordinately large is refuted in Fei Hsiao-tung's classical study of the social and economic structure of a Yangtze village under the *ancien régime*, in which he shows that family size was determined by the economic requirements of Chinese agriculture (*Peasant Life in China*, London, 1939, p. 33); see also his "Peasantry and Gentry," *American Journal of Sociology* (July 1946), and Olga Lang, *Chinese Family and Society* (New Haven, 1946), pp. 147-154.

[29] See Peter Townsend, *China Phoenix* (London, 1955), pp. 360-361.

governmental endorsement came in June 1956 when the Minister of Health in a speech to the National People's Congress emphasised the need for wider publicity and knowledge about birth control. Finally, at the Eighth Congress of the Communist Party in September 1956, Chou En-lai stated that "we agree that some measure of birth control is desirable."[30]

[30] *NCNA,* June 20, 1956, and Chou En-lai, *Report on Proposals,* p. 99.

VIII

Transportation and Commerce

1 RAILWAYS

THE RAILWAYS are a crucial sector of the Chinese industrialisation programme. Without an efficient and growing railway system the expansion of heavy and light industry and the general widening and deepening of the national market would be impossible. The record of rehabilitation, reconstruction and growth in 1949-1952 was part of the general process of cleaning up.[1] Administration, planning and practice had previously been as diverse as the auspices under which the railways were originally constructed. The centralisation of administration and the rationalisation of practice contributed greatly to increased efficiency. Aberrations such as the narrow-gauge railways of Shansi, built at Yen Hsi-san's behest in such a way as to make effective junction with national lines impossible, were eliminated and many other essential technical reforms were introduced. Anomalies in freight and passenger rates were wiped out and railway rates discriminating against luxuries and in favour of industrial raw materials

[1] The Kunming-Haiphong Railway, which now ends short of the Indo-China border, is the chief pre-war line not yet fully in operation. It would be a great help in the development plans for the Southwest, as Yunnan is rich in mineral resources, and water transportation up the coast from Hanoi and Haiphong would be relatively cheap.

and necessaries instituted; the turnover of such agricultural raw materials as cotton from the countryside to the city and of fertilisers from the city to the countryside and, of course, of coal, iron and steel, minerals, construction materials, and the like, consequently rose sharply. Total traffic, freight and passenger combined, increased by a half in the three years 1950-1952 and by roughly as much again in the following two years.[2] (The endpaper map inside the back cover shows the railways and waterways of China.)

The Chinese railways had several basic deficiencies, all arising from China's weakness as a power and its internal decay. In the period of initial construction they were originated by foreigners, and for a considerable period afterwards they remained under foreign control and management as a result of the loan agreements. Consequently "each line was built and operated as a separate unit. Thus, no railway *system* came into being — only a number of lines, 'each as distinct as if existing on separate islands.' "[3] Further, since the railways were continually mulcted by the various cliques controlling the territories through which they ran, the provision of elementary maintenance became almost impossible and current operating costs were unduly swollen.

Secondly, railway mileage was woefully inadequate and such railways as existed were most unevenly distributed. The lines were almost exclusively confined to the eastern half of the country, one half of the total mileage being located in the Northeast. There were virtually no railways of any consequence west of a line drawn from Manchouli in the Northeast to Kunming in the Southwest. Thus Szechwan, a province containing the very fertile Red Earth basin, the biggest salt mines in China, coal, natural gas, iron and other minerals, had no railways at all and was dependent on the waterways and a limited number of unsatisfactory roads for its heavy transportation; and similarly in the Northwest.

Consequently, the first efforts of the People's Government after existing railways had been restored were devoted to the erection of key trunk lines, particularly in the West. The overall rate of progress is shown in Table 21. The first major lines to be completed were the

[2] Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 120.

[3] See G. C. Allen and A. D. Donnithorne, *Western Enterprise in Far Eastern Economic Development* (London, 1954), p. 140, and Wayne Altree, "A Half-Century of the Administration of the State Railways of China," *Papers on China*, Vol. 3, J. K. Fairbank, editor (mimeographed, Regional Studies Seminar, Harvard, 1949), pp. 120-121.

300-mile Chungking-Chengtu and the 215-mile Lanchow-Tienhsui, linking up with the Lunghai. Both these lines came into operation in 1952 and quickly stimulated industry and commerce in Szechwan, Kansu and adjacent areas in other provinces. The former gives its hinterland a direct water connection with the coast via the Yangtze at its Chungking terminus, the latter provides the springboard for the further advance of railways into the more remote Northwest.

The First Five Year Plan allocation for investment in capital construction projects in transport, mostly in railways, totalled the equivalent of £1200 million, or nearly one-fifth of all projected expenditures on capital construction. Eight new trunk lines and a number of new

Table 21

LENGTH OF OPERATING RAILWAY LINES 1949-1956

YEAR	MILES
1949	13,494
1950	13,819
1951	14,331
1952	15,058
1953	15,424
1954	15,940
1955	16,708
1956 (projected)	17,950

Source: State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*) for 1952-1955; the figures are as of the end of each year.

branch lines with a total length of 2500 miles were to be built. Over three-fifths of this mileage had been laid down by the end of 1955, and the 1956 target of 1240 miles of new line entailed fulfilling the railway construction plan more than a year ahead of schedule. As the bulk of the increasing traffic moves over existing railways, it is essential to restore and reconstruct lines in operation, to extend station spurs and to add industrial, narrow-gauge and other special lines. Hence half the projected capital investment in railway construction was allotted to strengthening and rebuilding an additional 3750 miles of existing railways.

The economic significance of the most important new lines can be briefly reviewed.

The 500-mile Chengtu-Paochi line will make possible travel by

rail from Chungking to Peking via Paochi and the junction of the Lunghai and the Peking-Hankow at Chengchow in Honan and will break down the north-south isolation of Szechwan by land. Starting from Chengtu in 1953, construction proceeded at the rate of 100 miles per annum, and by the end of 1955 Liuyang in Shensi had been reached. Building was begun from the northern end early in 1955, and the whole line was completed before the end of 1956. A projected line to run northwest from Sian to Wuwei, by-passing Lanchow, and southeast from Sian to Hankow via Laohokow will at the same time improve connections between the Northwest and Central China and relieve congestion at Lanchow.

The 500-mile Chengtu-Kunming line will run through Szechwan, and Kweichow, with its large iron, bauxite and mercury deposits, into Yunnan. Originally, it was intended only to complete the survey of this line during the First Five Year Plan, but the stretch from Neikiang, on the Chungking-Chengtu, to Ipin, up river from Chungking, was later added to the Five Year Plan schedule. Other additions to this schedule in the Southwest included the Szechwan-Kweichow, the Kweichow-Kwangsi, the Hunan-Kweichow and the restoration of the Kunming line to Laokay. The Chengtu-Paochi, the Chungking-Chengtu and the Chengtu-Kunming, together with the Kunming-Haiphong and the inter-provincial lines, will make a vast difference to Central China and the Southwest, as a glance at the map will show. The whole area is very mountainous, Kunming being 6500 feet above sea level, and much of Szechwan, Kweichow and Yunnan is high tableland. River communications exist and are of great economic value, but they do not constitute an adequate network for the region as a whole.[4] The most ambitious railway project is the vital Lanchow-Sinkiang, which will be 1750 miles long and will link up with the Turksib at Aktogai over the Soviet border. Track laying started in 1952 and Yumen, 500 miles to the northwest of Lanchow, was reached in July 1956. Construction to the Russian frontier is being carried out with Russian technical assistance, the Russians being responsible for construction from Aktogai to the Chinese border.[5] The line will immensely facilitate the exploration of the mineral wealth of Kansu

[4] Szechwan means "Four Rivers."

[5] Sino-Soviet Communiqué on Construction of Lanchow-Urumchi-Alma Ata Railway, October 12, 1954, *People's China*, November 1, 1954, Supplement, p. 9; and Sino-Soviet Communiqué (concerning further technical assistance), April 7, 1956, *NCNA*, April 9, 1956.

and Sinkiang. If building proceeds according to plan it will be in operation in 1960.

Sinkiang (now an Autonomous Republic) was the largest province in China — it is nearly seven times the area of Great Britain — but has a population of under 5 million. The area the railway will serve is poor in water transport facilities. As recently as twenty years ago, distances in Sinkiang were measured in stages, i.e., not in uniform units of length but in what could be travelled in a day by camel or horse. Camels can be used for only eight months in the year, carts are even more costly than camels,[6] and automobile transport is bound to be an expensive necessity until the oil distribution system is improved. For millennia the integration of Sinkiang into Chinese society was impossible because the only goods it paid to transport over such huge land distances were commodities such as silk, tea and jade, which were light in relation to their value (hence the famous Silk Road traversed by Marco Polo and other travellers over the hazardous east-west land route), and the jurisdiction of the Central Government over the "New Dominion" was often nominal.[7] Kansu is likewise poor in water transport, and while the Yellow River crosses the southern half of the province in its first loop, its upper reaches present serious difficulties to navigation by large and medium-sized vessels.

Sinkiang is a treasure-house which is still only partially explored. It is known to have coal, iron, oil, copper and other minerals strategic to economic development.[8] The Sino-Soviet Petroleum Company and the Sino-Soviet Non-ferrous and Rare Metals Company were inaugurated in 1950-1951 to carry out geological surveying and prospecting as well as the production of minerals.

> In the hands of Soviet industrial planners, Sinkiang has changed beyond recognition. They have opened up mines, sunk colliery shafts, drilled oil wells, built two large refineries, completed a cracking plant last May [1954], and a number of ancillary works including power stations . . . it is not so much the plough and the tractor as the oil-

[6] Owen Lattimore, *Pivot of Asia* (Boston, 1950), p. 172.

[7] Owen Lattimore, *Inner Asian Frontiers of China* (New York, 1940), pp. 506-510, and *Pivot of Asia,* pp. 5-17.

[8] Lattimore, *Pivot of Asia,* Appendix VII, pp. 278-279, gives the then available information on Sinkiang oil resources. Promising petroliferous structures have since been discovered in the Tarim and Dzungaria basins south and north of the Tienshan Range. According to preliminary surveys, Karamai, in the northeastern tip of the province, may turn out to have larger reserves than Yumen.

> drilling rig, the bulldozer and the Geiger counter which are the contemporary instruments of China's advance into her northwest. Where only tools of stone, copper and iron were wielded, steel and electricity are now shaping a new industrial landscape.[9]

Eight metals were being mined in 1954 and prospecting for tin, copper, tungsten and molybdenum had made some progress. The output of Sinkiang crude oil was twenty-five times higher in 1954 than in 1951. The United Nations Economic Commission for Asia and the Far East reported early in 1955 that the Non-ferrous and Rare Metals Company was continuing to prospect for radioactive minerals in Sinkiang, which was reported to be one of the three Chinese provinces with uranium deposits.[10] At the end of 1954 the Soviet shares in both companies were transferred to the Chinese Government.[11] Sinkiang's agricultural possibilities too should prove considerable, once its present oasis basis of cultivation and livestock capacity are extended by water conservancy works, which are indispensable in an area where mean annual rainfall is 4 to 10 inches.

The biggest established oil reserves in China are in Kansu at Yumen in the desert on the northern panhandle, where the Great Wall ends and where Lao Tse, according to legend, disappeared from ken riding a donkey backwards. Yumen already has "a dense concentration of oil derricks."[12] Kansu is also rich in coal and copper. The expansion of the oil industry is impeded by difficulties in getting capital and consumer goods and even water to the right places in the absence of a railway. While it will eventually prove feasible, no doubt, to construct pipelines from Yumen south, the railway will make the growth of both production and utilisation of oil much more economical.[13]

The Lanchow-Chinghai will also contribute to expanding oil

[9] "Developing China's Interior," *Financial Times,* December 6, 1954, which states that in Urumchi, the provincial capital, "the skyline has become a forest of tall factory chimneys and scaffoldings."

[10] *New York Times,* March 6, 1955. According to the Commission survey, there are also uranium-bearing minerals in Haicheng in the Northeast and Papu in Kwangsi and monazite deposits in Kwangsi and Taiwan.

[11] Sino-Soviet Communiqué on Transfer of Soviet Shares in Joint Stock Companies in China, October 12, 1954, *People's China,* November 1, 1954, Supplement, pp. 7-8.

[12] *Financial Times,* December 6, 1954.

[13] In 1946-1947 an American oil syndicate was interested in a project for building a pipeline from Yumen to Hankow, which indicates that it was convinced on the basis of preliminary wartime surveys that there was sufficient oil in northwest Kansu to justify the substantial capital outlays needed.

production. It will run from Lanchow to Sining, the capital of Chinghai, and thence, skirting Kokonor, to the Tsaidam Basin, where rich oil finds have been reported. Chinghai also has non-ferrous and precious metals. The railway will have to climb over 5000 feet from Lanchow.

Another important new railway — the only Chinese line on the broad Russian gauge — runs from Chining on the Peking-Suiyuan through Erhlien to the Outer Mongolian border and thence through Chamu Ut to Ulan Bator, the capital of Outer Mongolia, from which there is a railway linking up with the Trans-Siberian at Ulan Ude, east of Irkutsk. The 210-mile line from Chining to the frontier was finished by the Chinese in December 1954; the Outer Mongolians and Russians jointly completed construction from Ulan Bator to the Chinese frontier in April 1955. This railway, which was built under a tripartite agreement between China, Outer Mongolia and Russia, cuts the distance from Peking to Moscow by 630 miles, and will, no doubt, accelerate the development of Paotow as one of China's three main steel centres. Paotow is eventually to be linked up with Lanchow by a projected 600-mile railway.

All these projects have to overcome many natural obstacles, since mountainous West China abounds in plateaus and rugged terrain. But, according to the Board of Trade Report, "history has proved the ability of the Chinese to build railways under the most adverse conditions, and the need is such that within a few years China may well contrive to build a large additional mileage in spite of all the difficulties."[14]

In Southeast China the line from Laipin to Munankuan on the Indo-China border was built in Kwangsi, and early in 1955 through railway connection was re-established with Indo-China for the first time since 1940 with the Viet-Nam Government's repair of the line from Hanoi to Dong Dang and its extension to Munankuan; both the repair and extension were carried out with Chinese technical and material assistance. The year 1955 also saw the completion of the railway from Litang in Kwangsi to Tsamkong in the southernmost Luichow peninsula and the beginning of the construction of a railway to join Amoy with its Fukien and Kiangsi hinterland. Another line being built in Fukien, which previously had no railways at all, runs from Nanping to Foochow.

[14] Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948; hereinafter *Board of Trade Report*), p. 40.

In addition to the larger projects, a number of smaller lines and developmental systems and facilities were built or rebuilt, including a spur from the Tsinan-Tsingtao to Chefoo in Shantung, the short but important Fengtai-Shacheng in Hopei and several hundred miles of narrow-gauge forest lines. Railways with heavy traffic loads, such as the Peking-Mukden and Harbin-Changchun, were double-tracked and 185 miles of new line laid for the Fuhsin coal-mining complex. The three-mile-long Yellow River Bridge on the Peking-Hankow, which was destroyed in the Sino-Japanese War, was rebuilt and is now crossed in five minutes in contrast with the three hours it formerly took. With the completion of the ambitious engineering project of a steel bridge over the Yangtze at Hankow, which was started in 1953 and will be twice the length of the Sydney Harbour Bridge, through traffic from Peking to Canton and Hong Kong will be possible without ferrying or changing.

The Chinese Changchun Railway, which has a staff of 100,000 employees and had been under joint Sino-Soviet management, unconditionally reverted to China in December 1952 in accordance with the Sino-Soviet Agreement of February 1950. The reversion was effected without compensation and twenty-three years before the date set at Yalta. During its period of joint operation the Chinese Changchun trained 20,000 administrative and technical workers in railway construction and operations.

There was a rapid and sustained increase in the extent and efficiency of railway operations after 1949. By 1952 freight tonnage reached 131 million tons, or over one-fifth more than that handled by the larger Indian system, and ton-mileage over 38,000 million ton-miles.[15] The Five Year Plan targets call for an increase of 100 per cent in total freight ton-miles and of 60 per cent in passenger-miles; these targets should be easily surpassed, since in the first two years of the Plan the former increased by nearly 55 and the latter by 45 per cent.

Railways are "the industrial revolution incarnate." When it is recalled that "railroadisation," to use Schumpeter's term, opened up and transformed the American West, with which the Chinese West with all its potentialities may well turn out to be comparable, the importance of the railway expansion now taking place becomes immediately apparent.

[15] See the U.N. *Economic Bulletin for Asia and the Far East* (November 1953), p. 21, Table 1, and see also Table 23, p. 164 below. For other indices of railway efficiency, see China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), pp. 211-212.

The title of Lattimore's book on Sinkiang, *Pivot of Asia,* may be considered as geopolitical hyperbole insofar as it refers to the past, but it may turn out to have been a brilliant prophecy. Nor is it difficult to visualise the future role of Lanchow as the Chicago of Northwest China. It is to be the junction of the Lanchow-Sinkiang, Lanchow-Paotow, Lanchow-Paochi and Lanchow-Chinghai; and its population grew from 200,000 in 1949 to over half a million in 1955.

The filling in of the main outlines of a well-articulated system must necessarily take time and demand heavy investment. Even with all the currently projected lines, China's total mileage will have increased

Table 22

FREIGHT INDICES 1950-1955

	Freight Ton-Miles	Freight Tonnage
1950	100	100
1951	131	111
1952	153	133
1953	199	161
1954	237	194
1955	249	N.A.

Source: SSBC for 1952-1955.

from 15,000 miles in 1952 to around 25,000 miles in 1962, or about two-thirds that of India and only a little over one-tenth that of the United States. The rate of progress has increased yearly since 1952, the projected growth under the 1956 annual plan being higher than the annual average of 1000 to 1130 miles envisaged in the preliminary draft of the Second Five Year Plan.[16]

The extension of the railway system demands a parallel accumulation of rolling stock, workshops and accessories as well as of capacity to turn out some of the inputs essential to the physical construction of

[16] The current pace of railway construction is, of course, far far slower than that in the United States in the second half of the nineteenth century. But the development of the American railway system furnishes the outstanding case history of economic growth recorded in the Western world. The United States had access to huge amounts of foreign capital — British investments in American railways were worth £600 million on the eve of World War I. Furthermore, "In every decade from 1850 to 1890, investment in railroads exceeded that in *all manufacturing industries put together* (including hand and neighborhood industries), and in the fifties, sixties, and seventies, it was more than twice as great" (Paul M. Sweezy, *The Present as History,* New York, 1953, p. 155, italics in the original).

track. China is already manufacturing many items from heavy rail steel (110-pound) and locomotives to semaphores and signalling equipment which it invariably used to import; output of rolling stock, which consisted of 20 locomotives, 5792 freight cars and 6 passenger coaches in 1952, is scheduled to rise to 200, 8500 and 300 respectively in 1957. Additions to rolling stock in 1953-1955 included 284 locomotives, 18,800 freight cars and 1390 passenger coaches. But, given the magnitude of China's requirements, there will be a vast demand for specialised railway equipment from the Soviet bloc and elsewhere, if obtainable, for years to come.[17]

2 WATER AND OTHER TRANSPORTATION

Before 1937 there were 1,300,000 tons of modern shipping — i.e., excluding junks — engaged in Chinese coastal and river trade, of which only 580,000 tons were Chinese-owned. The war and the Civil War took their toll of shipping. In November 1946 tonnage was barely half the pre-war total, and though by the end of 1947 it had risen to one million tons, the growing diversion of shipping to military purposes during the Civil War rendered the addition nugatory. Before taking off for Taiwan, Chiang Kai-shek expropriated a large part of the outstanding tonnage and sank as much of the remainder as he could. Ports up to 1949 were in a state of disrepair. Gangsters and racketeers from the Shanghai underworld dominated the docks. Unloading freight at Shanghai cost as much as it had to move it westward a few thousand miles across the Pacific Ocean, and then the consignee was lucky if he received it intact; Taku Bar and Whampoa, the gateways to Tientsin and Canton, were becoming less usable owing to the lack of lighterage, dredging and maintenance facilities. Inland shipping was in no better shape. The Government bought from abroad or received from UNRRA gratis large numbers of river ships consuming oil and needing some foreign technicians for their operation, so that much of what tonnage was not over-age was ill adapted to river and coastal trade.[18] The internal transit duties of the

[17] See *Board of Trade Report*, Annex V, pp. 180-181. In view of the subsequent pace of industrialisation this list needs to be revised sharply upwards even after allowing for the substantial increase in China's domestic capacity.

[18] From beginning to end, the story of the trawling fleets allocated by UNRRA to the Kuomintang epitomises a society in the last stages of dissolution, with tragedy, melodrama, comedy and farce all thrown in for good measure. To begin with, Dr. Tsiang Ting-fu, then head of CNRRA and later Chiang Kai-shek's representative on

old *likin* system, though nominally prohibited, became more common and made the cost of water transport exorbitant.

The People's Government soon put an end to gangsterism, larceny and sub-contracting on the docks and in the Junkmen's Union and simplified the organisation of maritime and dock labour. A single special commission to consolidate all Shanghai navigation and harbour affairs was created. The important harbour of Hsinkang, which was started but left unfinished by the Japanese, was completed in fifteen months. It already has a wharf capable of simultaneously handling four 10,000-ton and five 3000-ton vessels. As a result Tientsin, which used to handle 30 per cent of the nation's exports and 20 per cent of its imports, now handles 60 per cent of its exports and 40 per cent of imports. The existing harbours of Shanghai, Tsingtao, Yingkow, Foochow and Tsamkong have been improved. But there is still lack of co-ordination between harbour work and shipping, too much red tape in entering and clearing ports and a low level of efficiency in loading and unloading.

The Sino-Soviet Shipbuilding Company, which became wholly Chinese at the beginning of 1955, greatly extended the shipbuilding facilities of Dairen. The company can now repair ocean liners of 10,000 tons, freighters and a wide variety of modern vessels. In 1954 it launched a 3700-ton tanker and an ocean-going 1200-horse-power tug. Shanghai shipyards were also expanded. An additional 111,000 tons of sea-going steamship tonnage and 289,000 tons of inland steamship tonnage are scheduled to be built in 1953-1957, with a marked rise in total annual output from 21,500 tons in 1953 to a projected 179,000 tons in 1957. China's shipbuilding capacity remains exiguous and cannot even begin to fill the vacuum. The general economic advantages of water transport and China's specific natural advantages in the form of coastal and inland waterways make this vacuum doubly abhorrent.

Inland waterway facilities were simultaneously extended and improved and now amount to over 60,000 miles of usable rivers, lakes

the United Nations Security Council at New York, asked for an extremely high number of coastal and deep-sea fishing vessels. His request was drastically "cut to size," but even the modest fleet eventually allocated went to waste. The modern trawlers, bought and brought at considerable expense from the Pacific coast of the United States, had strictly to curtail delivered catches to hungry Shanghai in order not to encroach on the monopoly of Tu Yueh-sheng, the master of the Shanghai underworld, Chiang Kai-shek's senior in the notorious Green Gang and his indispensable collaborator in the Shanghai massacres of April 1927.

and canals, of which about 20,000 miles are navigable by steamers. The General Inland Navigation Bureau, which is a branch of the Ministry of Transport, has three special administrative organs to handle traffic on the Pearl, Yangtze and Sungari Rivers.

An interesting example of efficient utilisation is furnished by the more rational internal distribution of food supplies through down-river shipping on the Yangtze. In 1950 East Coast dependence on imports of foreign cereals was terminated by the institution of the "grain shuffle" from surplus areas; hundreds of thousands of tons of grain were shipped from Szechwan down the Yangtze to Shanghai alone, incidentally severely taxing the latter's storage capacity. The "shuffle" became a regularised procedure and the problem of storage was solved. The People's Government has transported grain on a scale unparalleled in a country in which the large-scale movement of grain was an essential function of major public works such as the Grand Canal.[19]

The Huai River Project will facilitate the use of the Huai River and the Grand Canal. Traffic on the Grand Canal, which is over 620 miles long, had been steadily falling. The Canal is now being renovated, and in 1953 900-ton vessels were already traversing the 190-mile stretch between the Yangtze and Hanchuang in north Shantung. A new 290-mile canal is to link the Han, a tributary of the Yangtze, with the Huai and Yellow Rivers, thus providing an additional north-south transportation route.

Well over 1250 miles on the Yangtze are now navigable between Shanghai and Suifu, west of Chungking, and the whole stretch from Shanghai to Chungking through the bottleneck near Ichang at the entrance to the Yangtze Gorges is open day and night seven months in the year. The Yangtze up to Hankow is now re-opened to 10,000-ton vessels. The initial prospecting of the 430-mile span between Paotow and Ninghsia City on the upper reaches of the Yellow River has been completed; when the Yellow River navigation system comes into operation, 500-ton vessels will be able to travel as far up river as Lanchow.

There are over 300,000 junks with a total tonnage of nearly 4 million tons engaged in river transport both on large and small waterways. All told, water-borne freight increased six times between

[19] See Chi Chao-ting, *Key Economic Areas in Chinese History* (London, 1936), pp. 65-66 and 125-127. For a historical parallel to the grain "shuffle," see C. P. Fitzgerald, *Revolution in China* (London, 1952), pp. 176-177.

1949 and 1952, and has continued to increase since. Although the full potentialities of the Yangtze, Yellow and Pearl Rivers and of the Han, Hsiang, Huai and the Szechwan tributaries plus the Sungari and other Northeastern rivers are still very far from being realised, water transportation has shared prominently in the expansion of trade and in the execution of construction projects big and small. In 1952 the State owned 60 per cent of the coastal and Yangtze shipping and by 1954 State and joint concerns handled 91 per cent (in terms of ton-nautical miles) of coastal and inland shipping.

Modern highway building in China did not start until the '20s and location of roads was largely determined by military considerations. In 1948 the length of highway open to traffic was under 50,000 miles, of which nearly two-thirds were impaired or put out of commission by military destruction in the later stages of the Civil War. By the end of 1949 much of the damage done had been made good. The length of roads open to traffic rose to over 62,000 miles in 1950, 66,500 miles in 1951 and over 74,500 miles in 1952. The First Five Year Plan called for the building of 6500 miles of highways by the Central Government and 7850 miles by the regional and provincial governments. This highway plan was implemented by the end of 1955. According to the Draft Twelve Year Programme for Agriculture, "Local networks of roads throughout the country are to be completed in the main in 5, 7 or 12 years beginning from 1956 in accordance with the varied local conditions."

The Southwest, which had 5000 miles of highway open to traffic in 1950, had over 13,500 miles early in 1954, and the net rate of addition was well over 600 miles per annum. Szechwan now has 5000 miles of highway and 7500 of navigable waterway; one difficult road runs 325 miles from Chengtu to Ahpa in mountainous northwestern Szechwan, which has coal, copper and antimony deposits. The existing rail, road and water transport facilities of Szechwan, although patently insufficient, are still a great improvement on 1949. The transformation in the Northwest is equally notable. The Lanchow-Sinkiang highway, over which some of the military assistance provided by Russia during the first half of the Japanese War was moved, was repaired and rebuilt. Between 1949 and 1953 the highways in use in the Northwest rose from 3000 miles to 11,800 miles, and an additional 1000 miles were planned for 1954. In 1952 alone the volume of freight moved over Northwestern and Southwestern roads increased by over 80 per cent. The highway programme

is a necessary step in the economic development of the minority and border areas, where so much road-building has been carried on since 1949. Lanchow is the nodal point of a series of arterial roads to such areas and is especially equipped to handle their traffic.

As feats of construction, the two most impressive roads built under the People's Government are the Sikang-Tibet and Chinghai-Tibet Highways, both completed in 1954 after three years' work. The former is 1400 and the latter 1300 miles long. Both traverse mountainous territory throughout, crossing plateaus 10,000 to 16,000 feet above sea level and running through thinly populated areas. The *Times* editorial "A Barrier Crumbles" described "hundreds of thousands of men working for months in temperatures of 20° below zero, hacking out the living rock in the precipice face, bridging snow-fed torrents, spanning mighty glaciers."[20] The physical isolation of Tibet — which inspired the Shangri-La visions of romantics — is at last being broken down. Formerly it took several months to travel from Ya-an to Lhasa; now the journey can be completed in a couple of weeks. The *Realpolitiker* have stressed the strategic and political significance of these roads rather than their economic value. Actually, Tibet may turn out to have a high economic potential. Its hydroelectric possibilities are obvious. In addition, it is geologically a most promising area, the existence of coal, iron and other minerals in workable quantities having already been established. But its development requires the solution of almost insuperable transportation problems, to which the construction of the two main highways to Lhasa is a major first contribution. The People's Government is therefore giving top priority to transport, to which it allocated the equivalent of over £30 million. The two roads to Lhasa were to be extended to Shigatse, the second largest town in Tibet, and to Gyantse; the Tibet Transport Bureau was to be equipped with a fleet of 750 lorries in 1955-1956, for the handling and maintenance of which a motor repair works was to be set up at Lhasa; and in 1956 work started on the Sinkiang-Tibet Highway. The wheel had hitherto been solely a liturgical instrument in Tibet. Initial plans for economic development were modest. Agricultural improvements and new crops such as the potato were introduced, partly under the auspices of the People's Liberation Army. Chinese technicians were to build a hydroelectric power station at Lhasa, utilising the waters of the Kyitchu River, and to investigate the erection of another at Shigatse on the Brahmaputra. The first

[20] *The Times* (London), December 30, 1954.

factory in Tibet, a small engineering works for the manufacture of agricultural implements, was to be set up in Lhasa.[21]

There were over 17,000 miles of scheduled domestic civil aviation passenger and freight lines in 1956, including a line from Peking to Lhasa. While the movement of freight by air is necessarily small absolutely, the ability to transport indispensable light items and parts rapidly when they are desperately needed is a great asset to an industrialising country. Similarly, the process of political unification is facilitated by the availability of air transport. The operations record of the civil aviation lines is excellent. The civil airlines also participate in locust extermination and in control of forest fires.

The Sino-Soviet Civil Airlines Company became wholly Chinese at the beginning of 1955. It had functioned for four and a half years without a single accident. Soviet staff outnumbered Chinese in the main technical departments in 1950, but by 1954 the ratio of Chinese to Russians had become four to one. The four services it operated are being continued. These comprise the Peking-Chita line via Mukden; the Peking-Moscow line via Ulan Bator and Irkutsk; the Peking-Urumchi line via Sian; and the Urumchi-Kashgar line. Kashgar, which is one big oasis, had the largest concentration of population in Sinkiang prior to industrialisation. The sole land road from Urumchi to Kashgar makes a big detour southeast through Turfan to the junction with the Southern Silk Road. An airline from Urumchi to Khotan was later added.

The successful implementation of the Five Year Plan depends, among other things, on a very sharp expansion of the volume of traffic. Table 23 shows the prescribed targets in the different branches of transport.

The rates of growth are in all cases large, in some very large. But an eruptive expansion of the volume of transport is an integral feature of industrialisation. Though the transport and communications system was handling two-thirds more freight in 1955 than in 1952, it was still severely overloaded.

Nowhere was the backwardness of old China more apparent than in transportation. "In addition to some 153,000 railway and 27,000 postal workers, there are dock labourers, labourers carrying wares by pole, labourers loaded with wares on their shoulders, an unnumbered army of wheelbarrow men, muleteers, and for the transport of per-

[21] "Chinese Scheme for Developing Tibet," *Financial Times*, March 17, 1955.

Table 23

TRAFFIC TARGETS 1957

	1952 (Actual)	1957 (Projected)	Projected Percentage Increase
Railway freight (million ton-miles)	38,200	76,400	100
Railway passenger traffic (million passenger-miles)	12,500	20,000	60
Inland shipping freight (million ton-miles)	2,300	9,600	320
Inland shipping passenger traffic (million passenger-miles)	1,200	2,200	80
Coastal shipping freight (million ton-nautical-miles)	2,000	5,750	190
Coastal shipping passenger traffic (million passenger-nautical-miles)	100	240	140
Motor freight transport (million ton-miles)	425	2,000	370
Bus passenger transport (million passenger-miles)	1,185	3,550	200
Civil airline freight (thousand ton-miles)	32	106	230
Postal routes (thousand miles)	850	1,230	45

Source: Li Fu-chun, *Report on the First Five-Year Plan,* p. 37. All figures rounded, percentages being rounded to the nearest five points.

sons, rickshaw pullers, estimated to amount in seven cities alone to over 130,000 not to mention sedan-chair carriers."[22] This was the situation in 1932. Since 1949 the rickshaw and sedan-chair have been abolished and human transportation, which had hitherto provided the bulk of China's carrying capacity, has begun to diminish. But many of the older forms of transport persist, though their relative importance will gradually decline. Progress in China takes the form of the increasing use not only of railways, steamboats and airplanes but also

[22] R. H. Tawney, *Land and Labour in China* (London, 1932), p. 120.

of junks, carts and wheelbarrows,[23] often improved by the substitution of rubber tyres for iron and wooden wheels, and of draught animals to replace human labour. There are more than 1200 joint transport centres, which link up the areas served by the more backward means of transport to those with more modern facilities. Agricultural producers' co-operatives are not allowed to indulge in separate commercial enterprises but are allowed to establish transport co-operatives, since transport is not considered commerce. Village transport co-operatives which mainly use carts add to farm income and, of course, promote the internal circulation of goods. Such grass roots progress is a net gain both because it enriches the national market and because it helps to level up inter-regional economic progress.

3 COMMERCE

The emergence of a national market and the growth of commerce are mutually interdependent. A national market requires an increase in commodity production, a larger turnover of trade and exchange and a greater circulation of goods. Commerce both follows and interacts on the organisation of production — "the division of labour is limited by the extent of the market."

It is not surprising, therefore, that great changes have occurred in both the dimensions and structure of Chinese domestic trade. The growth of aggregate output and the extension of transport facilities are accompanied by the diffusion and broadening of markets on a local, regional and national level. The increase in industrial production — and, particularly, in large-scale industrial production — is directly associated with an increase in intra-urban and inter-urban trade and in trade between town and country on a national basis. Similarly, the increase in the cultivation of industrial crops and in the output of agricultural side-occupations directly entails an increase in rural trade and in trade between country and town; and while the proportion of grain output consumed on the farm without entering the market is still very high, its tendency to fall is reinforced by growing industrialisation and urbanisation and by growing grain produc-

[23] Milton knew of the Chinese use of sails on their barrows:

> ". . . the barren Plaines
> Of *Sericana*, where *Chineses* drive
> With Sails and Wind thir canie Waggons light."
>
> *Paradise Lost*, Book III, lines 437-439.

tion and productivity. The rising volume of foreign trade both stimulates and depends on the rising home market. The fostering of production in the minority areas requires the organisation of regional and in many cases even local markets.

All these factors have made for a rapid growth in both wholesale and retail trade. The basic data on the volume of retail sales are contained in Table 24. They increased by 55 per cent between 1950 and 1952 and by a further 40 per cent in the next two years. Retail transactions rose by only 3 per cent and were 6 per cent below the annual plan target in 1955, as the volume of rural purchasing power and the

Table 24

VOLUME OF RETAIL SALES
(£ million)

1950	2,635
1952	4,035
1953	4,740
1954	5,715
1955	5,885
1956 (projected)	6,705
1957 (projected)	7,260
1962 (projected)	10,900

Source: For 1950 and 1953, Chou En-lai, "Report on the Work of the Government, September 23, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 94; for 1952, 1954 and 1957, Li Fu-chun, *Report on the First Five-Year Plan,* pp. 38 and 120; for 1955, *SSBC* for 1955; for 1956 and 1962, Chou En-lai, *Report on the Proposals for the Second Five-Year Plan* (Peking, 1956), pp. 44 and 81, reprinted in *People's China,* November 1, 1956, Supplement. All yuan figures converted at 6.859 to the pound sterling and rounded to the nearest £5 million.

supply of agricultural raw materials to light industry were both adversely affected by the poor harvest in the previous year. The projected increase of 14 per cent in 1956 was partly predicated on the bumper crops of the previous year and would bring the volume of retail sales well within reach of the original 1957 target, which called for an increase of 80 per cent on 1952.

Fulfilment of the First Five Year Plan goal would entail a rise of the order of 150 per cent in per capita retail sales between 1950 and 1957. But this phenomenal increase would still leave them at under

the equivalent of £12, an eloquent commentary on the extremely low level of Chinese living standards even after due allowance is made for the fact that the urban per capita average is well above the national, that rural sales cover only a small part of rural food consumption and that the exchange rate significantly understates the yuan's internal purchasing power. The preliminary draft of the Second Five Year Plan calls for a further increase of about 50 per cent in the total volume of retail sales between 1958 and 1962, but this target would appear to be cautious as well as tentative.

Even before the adoption of the general line of socialist transformation the trend in the organisation and structure of commerce was towards greater State control and greater State and co-operative penetration. There were about 7 million merchants, including over 2 million small traders and pedlars.[24] But their concentration and efficiency were most uneven. In the past, there was a disproportionate amount of merchandising and a proliferation of middlemen in the treaty ports and the bigger cities and in the urban areas generally, but commercial facilities were relatively poor in the countryside and often only embryonic in the minority areas. Insofar as an incipient national market had emerged before 1949, it was largely dominated by foreign trade and by a small group of commercial and financial manipulators; and rural markets tended to be at the mercy of the landlord and his agents. In general, the terms of trade were turned sharply against the countryside and still more sharply against the minority areas, where irrational barter systems were prevalent. The years of anarchy from 1937 to 1949 and the hyper-inflation accentuated this state of affairs.

In the initial period of *Sanierung,* the situation would have required state intervention and participation, whatever the government's ideological preconceptions. The task of stabilising prices and unifying the currency devolved directly on the State. In their turn, prices could not have been stabilised without the State's actively taking a hand in commerce. Thus, State trading agencies replaced the so-called State monopolies of the Kuomintang which had obstructed the channels of trade. Centralised purchasing and selling policies were consciously used as instruments to stabilise prices and supplies, to damp down seasonal fluctuations and to promote exchange between town and country. The more flagrant forms of anti-social speculation, which

[24] Curiously enough, the number of people per merchant is not very different from that in the United Kingdom, the United States and Canada. But this is a pure statistical coincidence.

engrossed so much of the activities of traders and producers in the period of hyper-inflation, were wiped out and more constructive outlets found for trading energies.

The State trading organisations assumed a prominent position in wholesaling. State wholesaling agencies placed large orders and contracts with private manufacturers and made bulk purchases of rural products in order to facilitate recovery and to promote orderly markets. Already before the end of 1950 the State-owned China Cotton Yarn and Cloth Company was purchasing 75 per cent of all cotton cloth produced in factories, and the China Grain Company, likewise State-owned, strengthened its hold over the wholesale grain market by requisitioning several million tons of grain from the Ministry of Finance's agricultural tax collections. In addition, State and municipal shops, which were concentrated in a few large cities and dealt mainly in a few vital commodities, greatly helped to combat private retail hoarding and speculation in the critical stabilisation period.[25]

Table 25

STATE-OWNED ENTERPRISES, OVERALL COMMERCIAL ACTIVITIES 1951-1954

	1951	1952	1953	1954
		(1950 = 100)		
Purchases	240	459	592	841
Sales	234	429	682	921

Source: SSBC for 1952-1954.

The "responsibility of adjusting supply and demand, stabilising commodity prices and assisting the people's co-operatives," which was vital during the emergency, was assigned to the State trading agencies as a continuing task under the Common Programme. Furthermore, the State's increasing role in modern industry and foreign trade, not to mention the adoption of the Five Year Plan, inevitably resulted in an expansion of its commercial activities, the key data on which for 1950-1954 are given in Table 25. By 1952 State commercial organisations employed just under half a million people and the co-operative commercial organisations 640,000.

All in all, there were over 20,000 State trading agencies managed by a dozen great central organisations, each having its own provincial

[25] R. Hsia, "Price Control in Communist China" (mimeographed, New York, Institute of Pacific Relations, 1953), pp. 34-37.

and county branches. They not only bought and sold but exercised a potent influence on private trading concerns, both through their direct transactions with the latter and through their impact on and supervision of general market conditions. As for retail trade, the State set up modern department stores and municipal shops in the larger cities in order to improve commercial facilities and to help maintain effective control over prices. No less important, it established retail shops in areas where there was a deficiency of distributive media, such as People's Liberation Army centres, newly developed or rapidly growing industrial sites and minority and backward areas; the growth of private commerce was deliberately encouraged in the latter. There were 35,000 State shops in March 1954. In the main, however, the State relied on rural marketing and supply and urban consumer co-operatives for the spread of socialist or semi-socialist forms in retail trade.

Table 26

SUPPLY AND MARKETING CO-OPERATIVE TRANSACTIONS
1951-1954

	1951	1952	1953	1954
	(1950 or 1952 = 100, as indicated)			
Purchases (1950 = 100)	341	775	1,124	1,585
Retail sales (1950 = 100)[a]	214	617	1,010	1,768
Sales of consumer goods[a]	N.A.	100	169	N.A.
Sales of farm implements and supplies	N.A.	100	156	N.A.

N.A. = not available

[a] Including consumer co-operative sales.

Source: SSBC for 1952-1954.

With the expansion in the activities of agricultural supply and marketing co-operatives (see Table 26), a network of trading centres was systematically spread through the countryside, while urban consumer co-operatives facilitated price control and the reduction of distribution costs.[26] The distributive co-operatives are intimately linked with the State trading agencies. By the end of 1955 the supply and marketing co-operatives embraced one-third of the rural population and furnished the peasants with 80 per cent of their purchases of means of production. The rural co-operatives play a vital part in the planned purchase of grain and of cotton.

[26] See p. 43 above.

In the meantime the volume of private retail trade increased absolutely each year until 1953. Private commercial enterprise, which was so vulnerable to the economic disorder prevailing before 1949, recovered quickly after the transition. The number of private shops and commercial enterprises in the cities of Shanghai, Tientsin, Peking, Wuhan, Chungking and Canton rose in 1950, the decline during the period of stabilisation in the first half of the year being far more than compensated by the growth in the latter half. In 1951 the number increased by a further 15 per cent.[27] The year 1952 witnessed the carrying out of the San Fan and Wu Fan movements — the so-called

Table 27

SHARE OF STATE AND CO-OPERATIVE ENTERPRISES IN DOMESTIC COMMERCE

	Wholesale[a]	Retail
	(Percentage)	
1952	63	34
1953	69	41
1954	89	58
1955	95	82[b]
1957 (original target)	Under 100	55

[a] Not including transactions and transfers between State trading companies.

[b] Including joint commercial enterprises. The comparable figure in 1954 was 64 per cent.

Source: SSBC for 1952-1955, and Li Fu-chun, *Report on the First Five-Year Plan,* p. 38.

"Three-Anti Movement" against corruption, waste and bureaucratism and the "Five-Anti Movement" against bribery, tax evasion, theft of State property, cheating on Government contracts, and theft of economic information for private speculation. During their course the State systematically increased both its own commercial operations by placing larger orders with private firms and its control over private commerce by readjusting prices and fixing price differentials. Nevertheless, the volume of private trade, both wholesale and retail, did not fall, and in 1953 it rose by 16 per cent. Not until 1954 did a slight decline occur in private retail trade.[28]

[27] China Committee, *New China's Economic Achievements 1949-1952,* p. 229.
[28] *SSBC* for 1952-1954.

This is not to under-estimate the extent of change in the organisation of commerce after 1950. By 1952 State and co-operative enterprises occupied a commanding position in wholesale trade, and it was clear that private wholesaling would be absorbed in a relatively short time. As for retail trade, until 1953 the State was more interested in creating new markets and using and supplementing existing private markets than in "restricting and transforming" them. Thus, the share of State and co-operative enterprises in total retail trade in the eight leading cities, where commercial facilities were comparatively well developed, was 32 per cent in 1952 and 38 per cent in 1953 or in each case slightly below the combined sector's share of the national total. But such was the scale of expansion in 1955 that the original 1957 target was actually surpassed. The socialist transformation of commerce received a new impetus with "the high tide of socialism" in December 1955-January 1956. The State already virtually monopolised wholesale trade in the major commodities, and the chief change was the conversion of private into joint concerns. The major mistake committed "in the days when cymbals and drums were struck to celebrate the transformation" was a tendency towards blind amalgamation, to which a halt was called by a decision of the State Council on February 8, 1956.[29]

The more variegated pattern of retail trade presented greater difficulties. The handling of the big retail shops in the cities was fairly straightforward, once the abuses of excessive fusion were corrected. As for the 2,400,000 small traders and pedlars, 60 per cent of whom were still unorganised in June 1956, Chen Yun proposed that they should gradually join loose co-operatives to be provided gratis with wholesaling and credit facilities by specially designated State and co-operative shops. This measure, it was hoped, would not disturb the distributive services they provide and would ameliorate the lot of the 350,000 or so who had suffered during the change-over. Since market economy has by no means completed its penetration of the minority areas, socialisation of commerce would be premature for them. The Chinese Communists would be succumbing to an unaccustomed and bookish dogmatism if they moved precipitately in regions such as Tibet, where they can well afford to be patient.

[29] Chen Yun, "On the Socialist Transformation of Industry and Commerce," *NCNA*, July 5, 1956, Supplement No. 246, reprinted in *New China Advances to Socialism* (Peking, 1956).

4 PLANNED PURCHASE AND SUPPLY

Soon after 1952, the exigencies of planning pushed the State to extend its participation in and control over trade on a more ambitious scale. With the stabilisation of prices and an increase in the output of the capital-goods sector greater than that in output as a whole, the volume of purchasing power rose more rapidly than did the supply of consumer, and particularly agricultural, goods. The production of agricultural and consumer goods was increasing, but not so fast as that of capital goods.

Li Fu-chun posed the problem in classically orthodox terms in his *Report on the First Five-Year Plan*:

> . . . over a fairly long period the situation will exist where the rate of growth of the people's purchasing power will be higher than that of the production of consumer goods, while the rate of growth of purchasing power will rise quicker in the countryside than in the city. This is because of the constant improvement of the people's livelihood, the rapid growth of the people's purchasing power, the fact that a large number of industrial enterprises . . . will only be able to make great increases in supplies of commodities after the lapse of a certain period of time, and because of the relatively slow increase in the production of industrial crops . . . (P. 87.)

This situation is a characteristic feature of the earlier stages of industrialisation. One method of coping with it is to leave things to the free forces of the market. This approach is obviously incompatible with planned economy, since it would lead to uncontrolled price rises, acute local and regional shortages, speculation, and the development of capitalism as an independent force.

Another alternative is to bring about a controlled rise in the prices of consumer goods by means of fiscal policy and, at the same time, to institute rationing of certain essentials in order to ensure equity in distribution. This alternative, which was essentially the one adopted by Russia when this problem arose, had certain disadvantages as far as China is concerned.[80] In the first place it presupposed a degree of

[80] See Maurice Dobb, *Soviet Economic Development Since 1917* (London, 1948), pp. 260, 350-352 and 360-374. The Russians also combined rationing with differential prices. As indicated by Dobb (pp. 369-370), a differential "on-" and "off-ration" pricing system, though workable as a temporary emergency measure, has serious drawbacks over the longer run — drawbacks, it may be added, which would probably be greater in China than they were in Russia.

effective control over the economy, and particularly over the rural sector and retail trade, which China was moving towards but had not yet achieved. In the second place, extensive and rigorous rationing might place an inordinate burden on the official administrative apparatus. In the third place, even *controlled* rises in prices might have unfortunate psychological repercussions when memories of inflation and hyper-inflation were still fresh.

The only other feasible alternative is the planned State purchase and supply of a few key commodities, plus the rationing of some of these commodities and their products in urban areas. This was the alternative China adopted. It rendered possible the prevention of speculation and of the recrudescence, or rather growth, of capitalism in the villages. It facilitated the maintenance, for the time being, of reasonably stable prices, the achievement of a planned balance in supply and demand and, not least, more effective overall planning. Indeed, it was part of the process of attaining centralised direction of the economy.

As against these assets its main drawback is that it does not directly affect the accumulation of excess purchasing power resulting from rising wage disbursements in the investment sector. This excess may be absorbed for a while by increased savings, whether in the form of rising savings deposits in the banks, acquisitions of Government bonds, or larger private cash balances. But sooner or later it will exert an upward pressure on prices unless there is an eventual commensurate increase in the total output of consumer goods. The magnitude of this excess purchasing power depends on the scale of investment and, therefore, on the pace of industrialisation, which in this context determines the level of wage disbursements, and on the rate of increase in the output of consumer goods. The faster the pace of industrialisation and the lower the rate of increase in consumer goods, the larger the accumulation of excess purchasing power. Both the scale of investment and the proportion of investment to total output are increasing, but so is the output of consumer goods produced by industry, if not by as much.[31] The real bottleneck is the pace of increase in agricultural production. Presumably, the Government is confident that it can keep the gap between the rates of increase in investment and in output of consumer goods within manageable proportions, that in the short run it can handle the excess purchasing power

[31] See p. 82 above.

generated by this gap on the lines indicated and that eventually the increase in agricultural production and in the output of consumer goods will largely take care of the difficulties. Otherwise, it might ultimately become necessary to have recourse to fiscal measures on the Russian model, although by such time there should be less need to fear adverse psychological repercussions ensuing from controlled price rises and the machinery of centralised direction would most probably be stronger. In any case, it will be interesting to see how far Chinese experience diverges from or recapitulates the Russian in this respect.

The planned purchase and supply of grain and then of edible oils was instituted in the autumn of 1953 under the general pressure of the First Five Year Plan and the immediate pressure of a shortfall in the harvest. The State became the sole wholesale buyer and seller of these commodities outside the more remote areas and fixed the prices at which they were bought and sold. In September 1954 the planned purchase of cotton and the planned purchase and supply of cotton cloth were introduced; both Chou En-lai and Chen Yun indicated that the planned supply of the principal consumer goods would probably be extended as an interim measure and that, as part of the process of socialisation, planned purchase would gradually cover more staples on a permanent basis.

The rationing of certain commodities accompanying planned purchase and supply was generally based on the average per capita consumption at the time of the system's inception. The quota for edible oils was only 10 ounces per person per month in Peking, in Canton substantially more, in other cities and towns less. At the same time, meats and fats were not rationed at all. Similarly, wheat flour was rationed in the North, but all other grains were unrationed. In August 1955 the State Council promulgated new measures concerning urban food rationing to come into effect in the following November. The ration in terms of wheat flour per capita per month was fixed at 38.5 pounds for light work, 48.4 pounds for heavy and 60.5 pounds for very heavy work; 34.1 pounds for teachers, office workers, and the like; 38.5 pounds for college and high school students, and 30.25 pounds for general residents. Children under ten were divided into three categories according to age. The ration for other grains was the same as for wheat, except in the case of rice, which was slightly smaller because of its higher food-equivalent. Unused portions of rations were transferable or resalable to the State. Meat, eggs, vege-

tables, and so on, remained unrationed.[32] The prescribed grain rations were tolerably adequate, and the extension of urban rationing presented no insuperable administrative problems.

The per capita cloth quota was set at 29 feet in 1954, or nearly double the pre-war average, but woollen, linen and silk fabrics were unaffected and, as in the case of grain, cotton cloth ration cards were transferable. In 1956 ready-made cotton clothes were taken off ration in the cities.

Thus, the rationing system is not unduly inflexible and allows some degree of latitude to consumers. The gravest deficiency is undoubtedly in edible oils especially in certain rural areas where they appear to be the sole case involving an "iron" ration. While, according to Chen Yun, exports of edible oils are below the pre-war level, their maintenance imposes a painful sacrifice of the present to the future which only the projected expansion of production during the Second Five Year Plan can relieve or alleviate.

The organisation of the planned purchase and supply of grain worked well both in town and country in the year 1953-1954. But after the 1954 harvest, the State purchased 3½ million tons of grain over and above its minimum needs, a serious mistake which naturally engendered some rural discontent. Accordingly, it reduced its purchases of grain in the calendar year 1955 to 90 per cent of their 1954 level and a further reduction was planned in 1956.[33]

Until the beginning of 1956 the emphasis in official policy was inevitably on greater centralisation of control over commerce. But soon after the basic transformation of industry, agriculture and commerce the emphasis shifted towards decentralisation of control, particularly with respect to relations between State, regional and local authorities and to the production and distribution of consumer goods. As already indicated, it was soon learned that bigness of scale is no end in itself. Factories producing general consumer goods were allowed to make their own annual production plans in the light of market conditions

[32] *NCNA*, August 26, 1955. The State Council's measures also included a tripartite classification of rural households into grain-surplus, grain-self-sufficient and grain-deficient households, with provisions for the purchase of grain from the first and sales of grain to the third category. But the subsequent upsurge of agricultural producers' co-operatives to a great extent rendered these aspects of the State Council's measures supererogatory.

[33] See *SSBC* for 1955; Liu Shao-chi, *Political Report of the Central Committee*, September 15, 1956, reprinted in *People's China*, October 1, 1956, Supplement, p. 8; Chou En-lai, *Report on Proposals*, p. 48; and Li Hsien-nien, "Report on the 1956 State Budget," in *New China Advances to Socialism*, p. 64.

and to take the targets in the State plans only for reference. Greater initiative on the part of factories and shops engaged in the production and distribution of less standardised consumer goods was encouraged by centralised sales and purchases of raw materials and finished products and by unfreezing prices in order to allow for differences in quality. Independent production and marketing operations by small factories and handicraft co-operatives and in the sphere of agricultural subsidiary occupations were facilitated. It was decided to establish free purchase and sale of minor local goods, selective purchase by the State and direct sale by the producers of handicraft goods and selective purchase of general consumer goods. The "controlled" free market was to cover over a quarter of total retail sales.[34]

[34] Chen Yun, "On the Socialist Transformation of Industry and Commerce," *NCNA*, July 5, 1956, Supplement No. 246 (reprinted in part in *New China Advances to Socialism*), and "Speech to the Eighth National Congress of the Communist Party of China," September 20, 1956, *NCNA*, September 24, 1956.

IX

Finance

1 CURRENCY AND PRICES

THE YUAN, the uniform standard currency, circulates throughout the country and has displaced all the local and foreign currencies and gold and silver previously performing monetary functions. Monetary order succeeded monetary anarchy. The note issue is concentrated in the hands of the People's Bank of China and since 1950 has not been used to finance budgetary deficits. The only criterion for changes in the supply of currency is the needs of industry and trade, and such increases as have since occurred have been determined by the pace of economic development and not by budgetary pressures. China now has a modern unitary monetary system over which she herself exercises sole control.

The crazy state of affairs in which large blocks of foreign exchange were dissipated in ordering Chinese currency notes from foreign printing companies, when the depreciation was so rapid that the denominations were never large enough and the money was eventually worth less than the paper it was printed on, was terminated in 1949 once and for all.

The year 1949 involved heavy military expenditure and during the process of cleaning up immediately attendant on liberation prices rose several fold, note issue continued to increase and orderly fiscal pro-

gramming was impossible. Steps were taken to put a brake on the rate of increase in prices and to stop the giddy hyper-inflation.[1] Perhaps the most important was the introduction of a parity unit with stable purchasing power; this unit measured the value of bank deposits. The first issue of Government bonds in January 1950, amounting to the equivalent of £35 million and with a maturity of 5½ years, also contributed to the restoration of confidence.[2] It was an unprecedented event that their repayment commenced in mid-1951, in accordance with their terms of issue; it may be noted in passing that 70 per cent of the issue had been redeemed by December 1954 and that redemption of the remainder was to be completed in 1955. These measures achieved their limited but nonetheless essential ends.

By March 1950, when the Draft Budget for the year was introduced, the time was ripe for definitive stabilisation. The Government's "Decisions on the Unification of the Financial and Economic Work of the State," promulgated on March 3, 1950, comprised three fundamental measures.[3] First, control over national revenue and expenditure was centralised, so that Government receipts were concentrated to meet Government expenditures as soon as they became available. Second, the utilisation of materials and resources was centralised on a nation-wide basis and Government-owned supplies were effectively mobilised and controlled, making possible the reduction of waste, bottlenecks and excessive stocking. Third, the People's Bank of China established unified control over the currency on a national scale and was made the sole depositary of all Govern-

[1] See pp. 18-19 above. For first-hand observations by foreign observers, see, among others, O. B. van der Sprenkel, editor, *New China, Three Views* (London, 1950), p. 38; Derk Bodde, *Peking Diary* (New York, 1950), pp. 138 and 277; and Ralph and Nancy Lapwood, *Through the Chinese Revolution* (London, 1954), pp. 55-59, and particularly their confession that they expected that "Inflation was one of the monstrous disorders which might take many years to cure. Events proved us wrong."

[2] The bond issue amounted to 200 million *fen*, the *fen* being defined as the weighted average price in six cities of 6.6 pounds of rice (millet in Tientsin); 1.65 pounds of wheat flour; 1.6 yards of cotton cloth; and 17.6 pounds of coal. In the weighting Shanghai counted for 45, Tientsin for 20, Hankow, Chungking and Canton for 10 each and Sian for 5. The bonds were, of course, redeemed in *fen* equivalent.

[3] The "Decisions" were reprinted in *China Wins Economic Battles* (Peking, 1950), pp. 47-58. For fuller details of the "Decision on Budgeting and Expenditures," see Chao Kuo-chun, *Source Materials from Communist China*, Vol. 3 (mimeographed, Center for International Studies, Massachusetts Institute of Technology, and Russian Research Center, Harvard, 1952), pp. 4-9. The editorial comment is frequently tendentious.

ment funds, which enhanced the Government's liquidity and imposed an immediate curb on currency inflation.

These simple reforms, the first and third of which are standard practice in the West, tackled age-old problems inherent in the loose structure of the Chinese economy. The Kuomintang had never been able to cope with these evils and had, in fact, intensified them. The haphazard connection between fiscs for receiving revenues, on the one hand, and disbursement offices and arrangements, on the other, had depended upon transportation facilities and the interplay of party, army, provincial and personal politics, and there had been far too many gaps to permit a smooth flow in the circuit of income and outgo.

As for Government stocks of materials, the propensity to hoard goods characteristic of a poorly articulated society subject to violent fluctuations in supplies was accentuated under the Kuomintang by greed, ignorance and the multiplicity of conflicting sectional interests. To quote one or two examples. During the disastrous retreat into Kweichow in the face of the Japanese advance of the summer and autumn of 1944, hoards of unused military and civilian stores were discovered and had to be destroyed to prevent their falling into Japanese hands; a rational utilisation of the medical supplies alone, after allowing for allocation to reserves for meeting emergencies, would have saved countless lives. In 1946 UNRRA had to ship flour to Tientsin at a time when the warehouses there were bulging with supplies captured from the Japanese, which the army refused to release and hoarded for so long that they began to rot.[4]

To implement the "Decisions on the Unification of the Financial and Economic Work" in this sphere, the Government set up a National Committee for Checking and Distributing Warehouse Materials as well as provincial and regional committees. Chen Yun was appointed Chairman of the National Committee, which was responsible to the Government Administrative Council. It was found that over 10,000 railway cars, nearly a third of them freight cars, over 20,000 pieces of machinery, 7900 automobiles and large amounts of consumption goods were not being used. The national and subordinate committees quickly rectified this waste.[5]

The third measure put an end to a situation which encouraged graft

[4] See T. H. White and Annalee Jacoby, *Thunder Out of China* (New York, 1946), pp. 186-187, and J. Franklin Ray, Jr., "UNRRA in China" (mimeographed, Institute of Pacific Relations, Stratford-on-Avon Conference, 1947), p. 51.

[5] See R. Hsia, "Price Control in Communist China" (mimeographed, New York, Institute of Pacific Relations, 1953), p. 26.

and misuse of Government funds for speculation and market manipulation. It had been common practice for Government departments to invest public moneys available between time of receipt, on the one hand, and time of turnover to the Ministry of Finance or time of authorised disbursement, on the other, in commodity speculation or loans at exorbitant rates of interest, which of course aggravated the inflation and benefited only the individuals who pocketed the profits. Another anomaly of Kuomintang finance was Chiang Kai-shek's secret account.[6]

The lack of systematic accounting and auditing in traditional China not only led to gross financial inefficiency but immeasurably widened the opportunities for large-scale abuses. These cancers were finally eradicated.

The new Government's currency unit was unduly small in terms of command over goods in ordinary retail transactions, which undoubtedly caused some inconvenience. But this must have appeared trivial in relation to the experiences of 1937-1949, when there was an increasingly acute shortage of notes of sufficiently large denomination to make normal buying and selling a routine matter. The question of the size of the unit of account was now neither urgent nor fundamental; business entailing the direct use of paper currency was rendered more cumbersome but was not seriously impeded. As long as the purchasing power of money is stable, people readily get accustomed to the currency unit. The problem had to be dealt with sooner or later but was primarily one of timing, in which the general economic situation and the availability of banking and post office facilities had to be taken into account. The monetary attitudes of the minority peoples, many of whom had existed outside or at the periphery of a pecuniary economy and whose habituation to a paper currency was a recent phenomenon, required special consideration, but even here it was easy to exaggerate the problem, as is proved by the history of the replacement of silver coinage by paper currency in China in 1935 and in India during the war.

The decision to introduce a new currency unit was finally taken by the State Council in a decree of February 21, 1955, the purpose of

[6] As the inflation was primarily a paper currency inflation, a very rough clue to the size of Chiang's secret account is provided by the gap between the annual excess of expenditures over receipts and the annual increase in note circulation during the Sino-Japanese War. Chiang himself was notoriously irresponsible in matters of financial policy. If the regime treated the Ministry of Finance as the department of internal plunder, Chiang treated it as his private war-chest.

which was "to improve China's currency system so as to facilitate transactions and accounting." All existing notes of 10,000 yuan and over were to be withdrawn from circulation and exchanged by the People's Bank of China at the rate of 10,000 old yuan for 1 new yuan within two months beginning from March 1. The final date for the withdrawal of smaller notes — at the same exchange rate — was to be announced later. The currency denominations under the new decree are notes of 1, 2, 3, 5 and 10 yuan; 1, 2 and 5 chiao (10 chiao = 1 yuan); 1, 2 and 5 fen (10 fen = 1 chiao). Thus the largest denomination is roughly the equivalent of £1. 9. 0. and the smallest just over one-third of a penny. The new currency is printed in four languages, Han, Mongolian, Tibetan and Uighur (Turki). All cash payments, contracts, bookkeeping and international accounts were to be calculated and redeemed in the new currency as of March 1. The foreign exchange rate was to be recalculated on the same basis, i.e., by the division of the existing exchange rate by 10,000, so that the official exchange rates for the pound and the dollar are now 6.859 and 2.343. Consequently, overseas remittances and holdings of bonds as well as internal holdings of bonds and other assets were unaffected. Prices were likewise adjusted downwards. Thus the net effect of the currency reform was to cancel four zeros in all monetary calculations and bookkeeping. The reform was carried out quite smoothly, and savings deposits rose by the equivalent of about £40 million, or roughly 20 per cent, in the succeeding nine months.[7]

Several factors accounted for the sharp fall in prices in 1950: the March stabilisation measures; the price control mechanisms which were largely operated by the State trading agencies and the co-operatives; the building up of adequate stocks of essentials at key centres; and the dishoarding and deflation automatically following on the ending of inflation. The State trading companies were a big factor in the establishment of effective price controls. Given the rise in output and fiscal and currency stabilisation, the ability of the State trading agencies to mobilise and concentrate supplies so as to meet local deficiencies, to defeat speculative raids and to lead in settling both buying and selling prices made price control relatively straightforward. A Chinese student writing in the United States arrived at the conclusion that "the approach of the Central People's Government to

[7] Chen Hsing, Assistant Minister of Commerce, "The Home Market Is Doing Well," *People's China,* January 16, 1956, p. 12.

price control differs from that of its predecessors essentially in its determination and sense of realism."[8]

Largely under the impact of the Korean War, wholesale prices rose in 1951 but fell again in 1952, during the course of which foodstuffs (excluding grain) fell 14.9 per cent, fuel 13.2, industrial equipment and materials 12.5, cotton cloth 0.8 and building materials 9 per cent. The market price of grain was raised 1.9 per cent in order to ensure reasonable profits to the peasants. Retail prices in the four leading cities rose 7 per cent in 1951 but were stable in 1952. Wholesale prices in the leading cities varied within a range of less than 1 per

Table 28

WHOLESALE PRICE INDEX 1950-1955
(March 1950 = 100)

December 1950	85.4
1951	96.6
1952	90.6
1953	91.7
1954	92.3
1955	92.2

Source: U.N., *Economic Survey of Asia and the Far East 1955*, and State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*) for 1954-1955.

cent from December 1953 to December 1955.[9] Retailers' margins then averaged 10-18 per cent but are being progressively reduced.

Banking policy must be reviewed in desperate brevity. First, it is designed to incorporate the banking system into the State sector. Second, it aims at the greater diffusion of banking facilities; such diffusion is essential for a high level of economic unification. Third, the banking system must adequately function as the Government's fiscal and foreign exchange agent. Fourth, the banking system must help to centralise and mobilise the social surplus so that finance as such should not obstruct the growth of investment; banks should facilitate both the inflow of the surplus and its outflow into particular spheres marked for expansion. The real and monetary gears of

[8] R. Hsia, "Price Control in Communist China," p. 70.

[9] For data on retail prices in 1951-1952, see U.N., *World Economic Report 1951-1952*, p. 53, Table 32. For 1955 see Chen Hsing, "The Home Market Is Doing Well," p. 13. Attention should be called to the absence of marked seasonal fluctuations in what is still largely an agricultural economy. In the past there were sharp seasonal swings at New Year (debt settlements) and sowing and harvest time.

accumulation must mesh without serious friction, and the banks contribute to this end through their control over currency and credit. Finally, by providing the means for independent auditing of the plans and budgets of particular enterprises and so constituting the core of the economic accounting system, the banks are becoming an integral part of the mechanism for carrying out economic planning.

2 THE BUDGET

Fiscal policy is an instrument of general economic policy. It is a means not an end. In the first years after 1949 the Budget was part of the New Democratic programme of rehabilitation. It was drawn up and carried out within the terms of reference of Article 40 of the Common Programme (see Appendix I, p. 243 below).

The emphasis later shifted to accelerating the pace of industrialisation and socialisation. In a transitional economy a well-conceived budget simplifies the task of co-ordinating those sectors of the economy which are least susceptible to centralised direction and control. Under the Constitution it is the function of the State Council "to put into effect the national economic plan and provisions of the State budget" and of the National People's Congress "to examine and approve the State budget and the financial report" (see Appendix II, p. 246 below).

The Budget stresses the development of industry, the encouragement of agriculture and the expansion of social, cultural and educational activities on the expenditure side and an equitable distribution of the tax burden and increasing the profits of State undertakings on the revenue side. In the past much the larger part of revenues was derived from highly regressive indirect taxation; payment of progressive individual and corporate income taxes was minute;[10] usually not less than 40 and as much as 70 per cent of expenditures were for military purposes and much of the remainder was neither socially nor economically productive. Under the People's Government the traditional peculation and malversation were drastically reduced and corruption became negligible in comparison with the past.[11]

Revenues and expenditures increased sharply after the stabilisation

[10] In old China the rich lost face if they had to pay taxes.

[11] The absence of corruption is one of the first features to impress Old China Hands revisiting China. No systematic campaign against corruption was needed after the San Fan and Wu Fan movements of 1952 (see p. 170 above). "During these movements, 4.5 per cent of the government workers [investigated] were found guilty in varying degrees of corruption, waste and bureaucratism" (Po I-po, "Three

period. The former doubled from 6900 million yuan in 1950 to 14,200 million yuan in 1951, while the latter rose by 75 per cent.[12] On the eve of the Five Year Plan revenues were approximately 175 per cent and expenditures 140 per cent above the level of the first People's Government's Budget, and there was a substantial surplus to carry over into 1953. Actual revenues and expenditures for 1953-1955 and the budget estimates for 1956 are presented in Table 29.[13]

There are several features of the budgetary system calling for comment.

(1) The Budget covers a wider part of national economic activity than Western budgets and — in spite of the swift expansion of the State sector — a narrower part than the Russian. This fact, taken in conjunction with the general economic recovery and the pace of development, explains the increase of over 250 per cent in income and outgo between 1950 and 1954. Expenditures in 1955 were 4.3 times 1950 and approximately 65 times 1936 expenditures — or adjusting for changes in the value of money, roughly 25 times; even after allowance is made for the inclusion of the Northeast the change is most striking. Budgetary revenues formed 27.6 per cent of the national income in 1952 and averaged 31.4 per cent of the national income in the next four years. It is envisaged that the Budget will form not less than 30 per cent of the national income during the Second Five Year Plan.

The socialisation of the economy is reflected both in the growth of receipts from State enterprises and in expenditures on economic construction. The combined profits and tax payments of State enterprises and tax payments of co-operatives constituted one-third of total receipts in 1950, two-thirds in 1953 and three-quarters in 1955 (estimated). Their composition, including payment of taxes, is shown in Table 30. There was a concomitant decline in the fiscal importance of taxes paid by private enterprise in industry and commerce. In 1950 these constituted nearly one-third of total revenues, in 1954 less than one-sixth.

Needless to say, in a transitional economy a well-conceived budget

Years of Achievement of the People's Republic of China," in China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952*, Peking, 1952, p. 152).

[12] All yuan figures are in 1955 yuan and all sterling figures are conversions at the official exchange rate.

[13] See also Appendix III, Table 3, p. 250 below, for percentage composition of current receipts and expenditures and for their growth from 1953 to 1956.

Table 29

REVENUES AND EXPENDITURES 1953-1956
(thousand million yuan)

	1953	1954	1955	1956 (ESTIMATED)
A. *Revenues*				
Receipts	21.55	26.24	27.20	29.73
State enterprises	7.55	9.96	11.19	14.33
Taxes	12.16	13.22	12.75	13.98
Other	1.85	3.06	3.26	1.43
Carry-over	4.12	4.51[a]	3.15	1.01
Total revenues	25.67	30.75	30.35	30.74
B. *Expenditures*				
Current expenditures	21.39[b]	24.63	29.35	29.95
Economic construction	10.35	12.36	13.76	16.06
Culture and education	3.48	3.46	3.19	3.92
Defence	5.23	5.81	6.50	6.14
Administration	2.38	2.16	2.15	2.41
Other	0.36	0.84	3.75	1.43
Surplus and reserve	4.28[a]	6.12[c]	1.01	0.79
Total expenditures	25.67	30.75	30.35	30.74

[a] There is an inconsistency between Teng Hsiao-ping's figure for the 1953 surplus and Li Hsien-nien's figure for the 1954 carry-over (see Source), presumably because the former's data for 1953 were not final.

[b] The sum of the separate items exceeds the total. According to Teng Hsiao-ping, 1953 expenditures on all items except defence were not as high as indicated. See also the preceding note.

[c] According to Li Hsien-nien, that part of the 1953 surplus which was not carried over to 1954 was allocated to the liquidation of outstanding debts to banks.

Source: Teng Hsiao-ping, "Report on the 1954 State Budget," *New China News Agency Bulletin* (hereinafter *NCNA*), June 24, 1954, Supplement No. 204; and Li Hsien-nien, "Report on the 1955 State Budget," *NCNA,* July 14-15, 1955, Supplement No. 229, and "Report on the 1956 State Budget," *NCNA,* June 19, 1956, Supplement No. 240. All figures rounded to the nearest second decimal place and therefore not always additive.

simplifies the task of co-ordinating those sectors of the economy which are hard to integrate into a single plan.

(2) China's national finances are sound. A small deficit was antic-

ipated in 1950, to be met primarily by the sale of Government bonds; in fact, bond sales more than covered the gap.[14] Since 1950 total revenues, including the carry-over of the previous year's surplus, have invariably exceeded current expenditures.[15] In fact, *current* receipts exceeded *current* expenditures in each year until 1955, when in-

Table 30

CONTRIBUTION OF STATE ENTERPRISES TO RECEIPTS
1953-1955

	1953	1954	1955 (Estimated)
	(Percentage of Total Receipts)		
State enterprises	62.6	65.2	69.5
Co-operative enterprises	2.5	3.7	4.8
Joint enterprises	1.2	1.7	2.0
Total	66.3	70.6	76.3

Source: For 1953, Chu Chi-hsin, "Budget for Peaceful Construction," *People's China,* August 1, 1954; for 1954 and 1955, Wang Ching-chih, "China's 1955 Budget," *People's China,* August 1, 1955.

sufficient allowance was made for the lagged impact of the bad 1954 harvest on rural purchasing power and therefore on light industry and commerce; but even so the gap was smaller than the carry-over from 1954. Estimated current expenditures exceeded estimated current revenues in 1956 by less than 1 per cent. The fiscal record is thus fundamentally one of balancing current outgo by current income.

Besides instituting unitary control over receipts and allocations of expenditure the Government wiped out provincial and local anomalies

[14] There is an inconsistency between Po I-po's statement in September 1952 that revenues and expenditures "approached a balance in 1950" ("Three Years of Achievement," *New China's Economic Achievements,* p. 160) and his statement in February 1953 that revenues exceeded expenditures in the same year ("Report on the 1953 State Budget," February 17, 1953, Hsinhua News Agency, Peking, *Daily News Release,* February 20, 1953). Apparently, he excluded receipts from bond sales from revenues in his first statement but not in his second. The U.N. *Economic Survey of Asia and the Far East 1954* also suggests that it may be due to "a difference between final and preliminary returns" and "to changes in accounting practices, such as the transfer of 1950 tax arrears collected in 1952 to 1950 revenue" (p. 95, n. 2).

[15] The purported annual deficits indicated in Rostow's and Eckstein's discussion of the 1950-1952 budgets are difficult to reconcile with the annual carry-overs included in their Table (*The Prospects for Communist China,* New York, 1954, pp. 246-249).

in taxation and expenditure.[16] All receipts from taxes, including Customs duties, the salt tax, commodity and industrial and business taxes and excluding only authorised local taxes, whose scope and incidence are narrowly restricted, must be paid into local branches of the National Treasury under the sole authority of the Ministry of Finance. The Ministry was to have direct responsibility for and control over roughly 75 per cent of total State income and expenditure under the 1956 Budget.

A bond issue for the equivalent of £85 million paying 4 per cent per annum and to be redeemed within eight years was floated and over-subscribed in 1954. The amount involved was less than 2½ per cent of the year's current receipts or expenditures. There was a further bond issue for the same amount early in 1956, which was also over-subscribed.

The need for economy and frugality is a constant theme of official propaganda. The costs of administration have not risen as much as might have been anticipated from the trend of expanding Government activity, the rate of increase in expenditures on administration up to 1956 (estimated) amounting to under 30 per cent of the rate of increase in current expenditures as a whole. Costs of administration absorbed one-fourteenth of total expenditures in 1954 as compared with nearly one-fifth in 1950. The high proportion in 1950 was partly due to the retention of Kuomintang soldiers and Government employees on the payroll even when they were performing no useful function.[17] But the excess of 15 per cent in estimated over actual expenditures on administration in 1952, for example, clearly reflected greater Government efficiency.

(3) The incidence of the tax burden was made more equitable and rational.

Agricultural taxes constitute a declining proportion of Government revenue and they have also tended to decline as a proportion of peasant income. In value terms their yield increased by less than a half between 1950 and 1955, whereas total receipts more than quadrupled

[16] For further details, see Chao Kuo-chun, *Source Materials from Communist China,* Vol. 3, pp. 9-11 and 32-35.

[17] By December 1949 the number of Government workers, including military, administrative, educational and other personnel, was seven million and was still increasing. In 1950 it was estimated that the Government would have to feed nine million workers not engaged in actual production, though it was hoped that a considerable number of former army and Government personnel would eventually be absorbed into economic construction. See China Committee, *New China's Economic Achievements 1949-1952,* pp. 33 and 41.

in the same period. In physical terms the amount of grain collected as tax fell slightly between 1952 and 1955 despite the increase in agricultural output.[18] The agricultural surplus makes an indispensable contribution to the accumulation of capital during the process of industrialisation. But this contribution has not resulted in deteriorating living standards. Peasant income has risen and the peasant tax burden has fallen.

The rate of the salt tax was halved in 1950. The number of commodities subject to tax was progressively cut from 1136 to 358, with a consequent saving in red-tape and an increased freedom of commerce without loss of revenue. Excise taxes are collected at the factory. Taxes on tobacco, cotton cloth and wine yield over 60 per cent of commodity tax receipts.

Business and income taxes on private enterprise were set at fixed rates and were surprisingly low. According to the schedules established at the end of 1950, there were two categories of tax, the business tax calculated on transactions or gross commissions and income tax on net profits. The tax on transactions was 1 to 3 per cent and on gross commissions 6 to 15 per cent. The income tax on net profits (income tax on interest and dividends was only 5 per cent) ranged from 5 per cent on income under 3 million yuan (pre-1955) to 30 per cent on incomes of 100 million yuan or more. Petty merchants without any permanent place of business paid 4-6 per cent on turnover. There were special tax reductions for essential industries, iron and steel and chemicals respectively paying 40 and 30 per cent less than the standard rates.[19] The San Fan and Wu Fan movements in 1952 involved some temporary dislocations, but their net effect was vastly to reduce tax evasion, to raise the resilience of tax receipts and to keep down expenditures.[20]

(4) The Budget was designed from the beginning to encourage production. On the revenue side, revisions in tax structure, tax incidence and tax rates giving preferential rates to industry and agriculture over commerce and to co-operative over individual enterprises were designed to heighten incentives to increase output. On the expenditure side, the early prominence of outlays on economic construction was the financial expression of the Government's role in de-

[18] For further details on the incidence of agricultural taxes see pp. 139-140 above.

[19] See Chao Kuo-chun, *Source Materials from Communist China*, Vol. 3, p. 20.

[20] Investigations of over 450,000 private firms in the major urban centres revealed that 75 per cent had engaged in illegal transactions (Po I-po, "Three Years of Achievement," in *New China's Economic Achievements 1949-1952*, pp. 152-153).

termining the scope and direction of new investment and allocating the required resources in a transitional economy. This prominence is also an indicator of the rate of industrial expansion. Expenditures on economic construction rose from the equivalent of roughly £250 million in 1950 to over £1050 million in 1952 when actual outgo on this item was 25 per cent above estimates.

Expenditures on cultural and educational activities trebled between 1950 and 1952. They increased again by over 50 per cent in 1953 but fell somewhat in the next two years. However, 1956 budget estimates provided for an expansion of over 20 per cent on 1955. Their indirect as well as direct contribution to economic growth needs no comment.

Expenditures on defence necessarily impinge on the pace of industrialisation.[21] While there was a rise of 80 per cent in military outgoes in 1951, chiefly as a result of the Korean War, they fell absolutely as well as relatively in 1952, when defence cost one-seventh less than in 1951 and constituted over a quarter of total current expenditures. Military expenditures in 1953 increased by 23 per cent on 1952 but their percentage of total outlay fell slightly. They continued to rise absolutely but not relatively to total current expenditures until 1955, when they amounted to the equivalent of under £950 million, which was nevertheless nearly 10 per cent below estimates. But in 1956 budget estimates called for a reduction of over £50 million.

During the First Five Year Plan the annual cost of defence should average around 22½ per cent of total current expenditures (see Appendix III, Table 3 (1)). This ratio is on a lower level than the defence quota of most of the other major powers and gives no support to the view that China is engaged in building up an aggressive war machine. The preliminary proposals for the Second Five Year Plan envisage a reduction in the annual average proportion of total current expenditures constituted by outlays on defence and Government administration combined, from roughly 32 per cent in 1953-1957 to around 20 per cent in 1958-1962. This would appear to entail a reduction in the ratio of military to total current expenditures to a range of 12-15 per cent, or between a little over a half and two-thirds of the 1953 1957 ratio. On this basis, the annual defence burden would amount to roughly 4-5 per cent of the national income during the Second Five Year Plan.

[21] For the army's role in the construction of transport facilities and public works and in land reclamation, and the like, see p. 21 above.

(5) The budget is geared to the First Five Year Plan. Planned expenditures on economic construction in 1953-1957 were of the order of £8500 million. The 40 per cent jump in this item in 1953 and the further increase of 55 per cent between 1953 and 1956 (estimated) are an index of the speeding up of the march towards industrialisation. Unless there was a serious shortfall in 1956, expenditures on economic construction in the four years 1953-1956 would reach 90 per cent of the original projected total for the First Five Year Plan.

Disbursements on capital construction account for roughly three-quarters of total expenditures on economic construction. They formed 29.9 per cent of total expenditures in 1952 and 35.6 per cent in 1955 and were to constitute 46.7 per cent in 1956. All in all, they amounted to under £3400 million in the first three years of the Plan. In 1955 alone new capital construction increased existing fixed assets by one-sixth. Further outlays of around £1770 million were to be made in 1956. This would bring the sum spent on capital construction to 83 per cent of the original target for 1953-1957. In September 1956 it was estimated that Government investments in capital construction during the First Five Year Plan would probably exceed this target by 10 per cent and thus amount to £6850 million.[22]

The aim in the Second Five Year Plan is to raise the annual average proportion of budgetary expenditures constituted by outlays on economic construction and education from approximately 56 per cent during the First Five Year Plan to 60-70 per cent. Economic construction and education would thus absorb not less than 18 and as much as 21 per cent — or possibly more — of the national income. With respect to capital construction, the proposals envisage an increase from 35 per cent of budgetary expenditures in 1953-1957 to not less than 40 per cent in 1958-1962.

[22] Po I-po, "How Much to Invest, How Much to Consume," *People's China*, November 1, 1956; Li Fu-chun, "Report, June 18, 1956," *NCNA*, June 21, 1956, Supplement No. 241, reprinted in *New China Advances to Socialism* (Peking, 1956); Liu Shao-chi, *Political Report of the Central Committee*, September 15, 1956, *People's China*, October 1, 1956, Supplement, p. 16; and Chou En-lai, *Report on the Proposals for the Second Five-Year Plan* (Peking, 1956), p. 42, and *People's China*, November 1, 1956, Supplement. In June 1956 Li Fu-chun estimated that 87.6 per cent of the 1953-1957 capital construction programme would be completed within four years. Liu Shao-chi's downward revision of this figure to 83 per cent in September suggests that 1956 expenditures on economic and capital construction would fall below budgetary estimates.

X

Living Conditions, Education and Health

1 GENERAL

THE STATISTICS pertaining to living standards all indicate progress since 1949. Prices were stabilised. Purchasing power rose. The turnover of retail and urban-rural trade increased year by year. Real wages are higher and hours of work lower, and unemployment has declined. Between 1950 and 1952 urban and rural consumption increased at an annual rate of around 20 per cent. In 1954 rural purchasing power was more than double that in 1950.[1]

The betterment of the lot of the peasantry through the land reform and the increase in agricultural production were of prime significance in a country where five out of every six people are directly dependent on the land for their livelihood. The New Democratic stage of the Chinese Revolution was in essence a peasant revolution, and the peasants were rightly its main beneficiaries.

In the city the working and middle classes gained from the

[1] See Chou En-lai, "Report on the Work of the Government, September 23, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 103, and see pp. 26 and 140 above.

general economic recovery and the specific steps taken to ameliorate their position, and small business men profited from the recovery in production and trade. Sun Yat-sen often pointed out that China consisted of a preponderant majority of small people and a tiny minority of big people. With few exceptions the small people are better off. As for the big people, genuine industrialists were able to devote their energies to increasing production without having to worry about inflation and the size of the market; and even with the socialisation of industry they retain their managerial and technical functions and will continue to draw fixed interest on their capital for a limited number of years.

But the quantifiable economic data are far from complete in themselves. The measuring rod of money cannot gauge the eradication of landlord oppression, the wiping out of famines in which millions of people lost their lives, the rationalisation of conscription and army life, the drastic reduction in the incidence of epidemic and disease, the elimination of poppy cultivation and of the opium traffic, the diffusion of education and public hygiene, the emancipation of women and the liberation of the minority people. These landmarks defy pecuniary valuation. Yet they all raise the standard of living, qualitatively as well as quantitatively.

The fatalism and despair of old China have given way to the confidence and self-reliance of the new. This change in social temper is perhaps the deepest of all. Standards of living are still extremely low by Western although not by Eastern criteria, and, moreover, the achievement of industrialisation entails deferring the *immediate* enjoyment of much though not all of the current increase in output until the Second and possibly the Third Five Year Plans are implemented. During much of this time-interval some rationing and a certain degree of austerity are inescapable. But there is all the difference in the world between standing permanently up to one's neck in water — to use Tawney's phrase — with the ever-present threat of total submergence, and enjoying an essential modicum of economic security with confidence in the prospect that things are going to keep on getting better.

2 WAGES AND WORKING-CLASS LIVING CONDITIONS

Working-class conditions in Kuomintang — or for that matter pre-Kuomintang — China were among the most backward on record.

Factory legislation, when it existed, was a conventional obeisance to the impotent printed word. The barbarous exploitation of child labour was a commonplace. Hours of work ran to as much as 14 and even 16 hours a day. There were no occupations from which women and children were barred or in which their conditions of labour were adequately regulated. The British Economic Mission to the Far East reported in 1931 that two shifts of 12 hours each were worked in Shanghai cotton mills by adults *and* children. Hours per week on the day shift were 72 and on the night shift 84. In some factories there was no weekly day of rest, and the only break was half an hour daily for lunch. Women constituted more than 50 per cent of the labour force and children 6 per cent; the children were supervised by overlookers with canes.[2] The labour contracting system practised in Shanghai by which workers and particularly juvenile workers were recruited into factories, often from areas devastated by famine, involved a form of peonage. Conditions in the mines were generally even worse. D. K. Lieu, a Chinese economist now in the United States, wrote in 1931:

> Many competent observers report to the effect that the conditions of industrial workers in most of China are with few exceptions bad, and in many cases atrocious, even by comparison with other Asiatic countries. Not many persons claim that the Chinese urban industrial worker has reaped any of the benefits which ought to flow from the introduction of modern industrial processes. When allowance is made for the higher cost of living in the cities, for the unwonted rigor of factory discipline, and for the risk of industrial accident and disease, there is little to suggest that the factory laborer fares better than his peasant brother.[3]

As recently as 1946, the Board of Trade Mission to China noted cases where women and children 12 to 14 years old worked 10, 10½ and 11 hours per day. In one Government-controlled textile mill which the Mission inspected there was a three-shift system of eight

[2] British Economic Mission to the Far East, *Report of the Cotton Mission* (London, 1931), pp. 53-54 and 58.

[3] In Bruno Lasker, editor, *Problems of the Pacific* (Chicago, 1932), Part II, p. 153; also cited by G. E. Hubbard, *Eastern Industrialization and Its Impact on the West* (2nd edition, London, 1938), p. 216. See also Hubbard: ". . . the Chinese workman stands near the bottom of the scale for wage-earners in any part of the world"; L. K. Tao, who rated Chinese industrial wages as being at a "bare subsistence" level; and H. D. Fong, who described wage costs in Chinese industry as being "*at or below* subsistence level for the workers" (Hubbard, *ibid.*, pp. 212-215, italics ours).

hours each in which all workers, including juveniles, worked the whole shift without a break for a meal. Unbroken shifts of 12 hours were not uncommon in silk filatures. There were no effective provisions for preventing accidents. Wages were abysmally low, often as little as the equivalent of 100 catties of millet a month, and inflation reduced them to starvation levels, compelling many to undertake double jobs to keep body and soul together; when the movement of goods broke down under the strain of advanced hyper-inflation, some workers received their wages in the form of the goods they turned out and had to spend much time and effort in barter. Housing conditions were unbelievably wretched. Unemployment was widespread, particularly in the final years of collapse. Genuine trade unionism had been forcibly suppressed.[4] Mobility between town and country served to swell the poverty in both, and a growing *Lumpenproletariat* with roots in neither drifted into casual coolie employment, begging and prostitution, petty gangsterism and banditry.

Given the low level of economic development and the legacy of industrialism in its newest and most untamed form, it was inevitable that the first objectives formulated in Article 32 of the Common Programme should be modest and simple (see Appendix I, p. 240 below). An eight-to-ten-hour day would sound retrogressive to us, but to the Chinese worker, accustomed to 12, 14 and 16 hours a day, it was a tremendous leap forward. Articles 92 and 93 of the Constitution go beyond Article 32 of the Common Programme; nevertheless the Constitution cannot legislate into existence the enjoyment of the rights to work and to rest and leisure, it can only provide "that the State shall, step by step, extend the material conditions, which are now still inadequate, to guarantee to citizens the enjoyment of these rights."[5] By 1954 workers in State enterprises and the larger privately owned factories enjoyed the eight-hour day, which, for example, prevailed throughout the textile industry, and in 1956 the Minister of Labour indicated that the six-day week and eight-hour day had become general.

Since 1949 wages have risen substantially if not uniformly. The minimum rate was immediately raised to the equivalent of 200 catties of millet a month (240 in Peking) in terms of units of stable purchasing power. Between 1949 and 1952 average wages increased

[4] Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948), p. 174.

[5] See Appendix II, p. 247 below, p. 39 above, and Liu Shao-chi, "Report on the Draft Constitution, September 15, 1954," *Documents of the First Session of the First National People's Congress* (Peking, 1955), p. 48.

60 to 120 per cent, the pace of advance being fastest in the North-east.[6] The Five Year Plan target for the increase in wages per head was 33 per cent. Average money wages in the socialist industrial sector rose 14 per cent in the two years 1953-1954, but the next year, even with adjustments in wages of lower-paid Government workers, they rose by only 0.6 per cent despite a concurrent 10 per cent increase in productivity. According to Li Fu-chun, the main reason for this exorbitant discrepancy was the failure to adjust annual plan targets in the light of over-fulfilment in productivity. This error was rectified in 1956 when under the annual plan general average wages were to be raised by 14.5 per cent, with increases of 15, 18 and over 32 per cent respectively in the wages of workers in heavy industry, highly skilled workers and primary school teachers. With the 1956 wage raise the average real income of workers and employees would have risen by just over a quarter since 1953. It would appear from official data that the general average weekly wage of workers and employees after the planned 1956 wage increase will be of the order of £1. 15. 0.[7] In this context it is essential to reiterate that the official exchange rate gravely understates the yuan's internal purchasing power for comparative purposes, and particularly with respect to the cost of living. While no precise figures for the extent of this understatement can be given where institutional divergences are so great, a range of between a third and a half may be taken as a very rough guide. As in Russia, scientists and engineers are especially favoured, top-level scientists and technicians in Peking receiving an increase of 36 per cent. The *Proposals for the Second Five-Year Plan* recommend an increase of 25 to 30 per cent in average wages between 1958 and 1962.

Factory housing is sometimes rent-free and, when not, rents are fixed at 3 to 5 per cent of wages. With fulfilment of the 1956 annual plan nearly 550 million square feet of housing for workers and employees will have been constructed since inception of the First Five

[6] China Committee for the Promotion of International Trade, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 278.

[7] Po I-po, "How Much to Invest, How Much to Consume," *People's China*, November 1, 1956; Li Hsien-nien, "Report on the 1956 State Budget," *New China News Agency Bulletin* (hereinafter *NCNA*), June 19, 1956, Supplement No. 240; Li Fu-chun, "Report, June 18, 1956," *NCNA*, June 21, 1956, Supplement No. 241; Ma Wen-jui, Minister of Labour, *NCNA*, July 2, 1956; and Liu Tzu-chu, Vice-Minister of Labour, "Wage Reform in China," *People's China*, October 16, 1956. Liu states that a miner or steel worker of average skill earns £10. 5. 0 to £11. 13. 4 a month and that a family of six "is not too badly off" on this wage.

Year Plan. But there is an acute shortage of housing especially at new industrial sites and in rapidly growing cities, such as Mukden, which are bursting at the seams.

The wage structure before 1949 was badly out of kilter. Taking earnings in iron and steel as 100, those in mining were 90 and in cotton textiles 135; women's wages in textiles were only two-fifths of men's. Now the order as between light and heavy industry has been reversed and the principle of equal pay for equal work has been gradually extended.

Again like the Russians, the Chinese Communists reject egalitarianism and subscribe to the principle "From each according to his ability, to each according to his work." The wage system allows for differences in skills and for payments of bonuses in order to encourage labour initiative and the acquisition of technical skills and in order to raise the level of labour productivity. In the larger-scale enterprises production workers are classified in eight grades with the highest grade earning 3.2 times the lowest in heavy industry and 2½ times the lowest in light industry. Of industrial workers 40 per cent are on piece rates and average monthly earnings run at 20 per cent above standard rates. Norms for piece rates, once set, cannot be altered for a minimum of six months.

In the Yenan period and during the Civil War many Government enterprises and institutions adopted the so-called supply system, under which employees and their families received food, housing accommodation and basic necessities plus a small payment in cash from the State. This method of remuneration may have been appropriate and indeed essential under "war communism" or in situations in which commodity production was either insufficiently developed or had broken down, but it obviously becomes anomalous under more normal conditions and so was gradually discarded in those spheres in which it had survived.

Unemployment declined after 1949 but still remained significant in the period of adjustment, as a result of the deflation intervening between inflation and stabilisation and of the Kuomintang blockade and bombing of Shanghai. While the Government has instituted a system of labour bureaus to help those seeking work, unemployment still survives. But it is becoming largely confined to a residue of unemployables and in the winter of 1955-1956 a labour shortage was reported in the cities.

In 1955, labour insurance, including unemployment, old age,

health, accident and maternity insurance covered 5,700,000 workers. Women are allowed 8 weeks off with pay before and after confinement. There is regular inspection of factories and mines to ensure enforcement of child labour and accident legislation, although, of course, safety equipment falls below Western standards. Most State-owned coal and non-ferrous metal mines now have mechanical ventilation in contrast with 30 per cent in 1949.

Trade unions are actively encouraged and at the end of 1955 had a membership of 12½ million, including not only modern industrial workers, but teachers, Government personnel, industrial workers in smaller establishments and co-operatives and some handicraft workers. Before the socialisation of private industry the unions negotiated collective contracts with the employers. In State-owned enterprises they have participated in the administration of industry under "the leadership of management." Recent discussions emphasised a system of leadership combining the factory manager's personal responsibility with the collective leadership of the factory Communist Party Committee, and it was suggested at the Eighth Congress of the Communist Party of China that a congress of workers and employees be elected annually in each enterprise to replace the existing plant conference of workers and employees sponsored by the trade unions. Here again there would appear to be a trend away from excessive centralisation and towards greater delegation of initiative.

The trade unions do their best to raise their members' productivity-mindedness in the emulation campaigns to practise economy and raise production, which embrace over 80 per cent of the modern industrial workers. Bonuses and awards are made to workers for achieving labour records — by the end of 1955 there were 280,000 "model workers" — and for making technical and organisational suggestions and improvements. Between September 1949 and April 1953, more than 120,000 workers had risen to posts of managerial and technical responsibility in industry.

The status of workers has been transformed beyond recognition.[8] They are considered the key group in the constellation of political power and are treated and act accordingly. Special steps are taken to provide educational facilities for them and for their children and to keep the ladder to technical, intellectual and managerial advance-

[8] A correspondent of *The Economist* revisiting Shanghai in 1956 thus concludes his impressions: "And the Shanghai proletariat, one suspects, never had it so good" (*The Economist*, July 28, 1956, p. 329).

ment open. Since China's ability to industrialise depends in large part on the industrial working class's discipline and initiative, it is not surprising that priority is given to its problems and welfare.

3 EDUCATION

There are no reliable data on the extent of illiteracy in China in the past, but it was at least 80 per cent. Education was the prerogative of the chosen few, and the power of tradition together with the emphasis on the classics and on the stylised and stilted literary conventions reinforced the mysteries of the written language, mastery of which was barred to the multitude.[9] The Chinese Renaissance, which came to a climax in the May 4th Movement of 1919, pushed the dissemination of *pai-hua* — the vernacular — for written purposes and made a beginning in breaking down the monopoly of learning. But as the Kuomintang ossified, there was a reversion from *pai-hua* to archaic official forms, so that Government departments had to employ special clerks to draft official documents in the appropriate style, which many of their superiors and not a few of the top ministers did not command. The regime, having no definite educational programme, attempted to fill its place with glorification of a long-dead Confucianism.[10] True, it made some feeble attempts to introduce

[9] See Owen Lattimore, *Inner Asian Frontiers of China* (New York, 1940), p. 48, n. 30: "Without the experience of the unwieldiness of a non-alphabetic writing it is difficult to realise the gulf between the man of letters and the illiterate peasant in China. A man must have money to live and time to work for years in order to master the written symbols without which it is impossible to rule and administer. The tradition has always been to preserve the Egyptian obscurity of writing, and advocacy of simplification has by no means yet broken down the traditional resistance of the elect. For this one reason it is much harder to be a 'self-made man' in China than in Western countries." The stories of poor boys brilliantly passing the Imperial examinations and entering the Mandarinate at one bound are mostly legends; usually it took three generations plus the time and money mentioned by Lattimore to break in. While some Western Sinologists maintain that Lattimore's views are exaggeratedly one-sided, the writer would, with all due deference to expert opinion, side with Lattimore.

[10] One may compare Mao Tse-tung and Chiang Kai-shek in this respect. Chiang deifies the classics without knowing them and had to employ a discredited academician, Lao Hsi-sheng, as his ghost writer when he aspired to become a Confucian sage. Mao knows his classics without deifying them, is a poet in his own right and is the leading theorist of the Communist world. Even in the military sphere Chiang was a warlord-politician manipulating his rivals and their armies rather than a soldier, his interventions in actual war operations being disastrously inept (see Joseph G. Stilwell, *The Stilwell Papers*, T. H. White, editor, New York, 1949, *passim*). General Marshall is reported to have said that Chiang was militarily the worst advised head of state in the world; if so, it was not because of the un-

modern higher technical education, but in the prevailing social climate many professional graduates inevitably ended up in the traditional desk jobs and in commerce. Higher education was a syncretism with the advantages of neither the old nor the new. Primary and secondary education touched only the fringe of the population and like the universities were regimented in the senseless chauvinism of Chen Li-fu's straitjacket. There were some half-hearted local experiments to combat illiteracy, but on the most generous assessment their net effect was infinitesimal.

The years of inflation deeply affected the educational system, eventually converting most teachers and virtually the whole student body to the cause of the new regime. The support of the intelligentsia is one of the foundations of the new regime, for in no country has the intelligentsia been so highly revered for so long as in China.

The educational objectives of the People's Government are formulated in Articles 94 and 95 of the Constitution (see Appendix II, p. 247 below). Great strides have already been made in extending educational facilities. Illiteracy has been tackled both by widespread adult education and by the use in newspapers and popular literature of a minimum number of characters and their simplification, wherever feasible. The drive to spread rapid methods of acquiring Chinese characters has assumed vast proportions. The long history and ideographic nature of the written language raise unique social as well as linguistic difficulties in the way of alphabetisation, since respect for the traditional writing remains a powerful force. An experimental Chinese alphabet, basically a phonetic and slightly modified Latin alphabet, was adopted early in 1956. It was to be used on a small scale and on a trial basis for not less than five years before its final revision and popularisation.

There are now over half a million primary schools in China, and it is hoped that universal compulsory education will be established

availability of technically competent advisors — he had an abundance of professional experts, first German and later American, not to mention the Kuomintang's elite staff officers — but because of his own opinionatedness and obtuseness. Mao was with Chu Teh the twin architect and originator of Communist tactics and strategy in the Civil Wars and the Sino-Japanese War, on which he wrote a number of pioneering monographs (see especially "Strategic Problems of China's Revolutionary War," *Selected Works*, London, 1954, Vol. 1, pp. 175-253, "Strategic Problems in the Anti-Japanese Guerrilla War" and "On the Protracted War," *ibid.*, Vol. 2, pp. 119-243). For a vivid first-hand account of Mao in the early Yenan period, see Edgar Snow, *Red Star Over China* (London, 1937; New York, 1938), Part Three, 1, and Part Four.

during the course of the Third Five Year Plan. Teaching staff at all school levels is being rapidly expanded, and there were over a million primary and 160,000 secondary school teachers in 1956.

There are 194 colleges and universities, all public. By 1957 there will be 208. The older colleges and universities were reorganised and new higher educational institutions established. The technical departments of the older universities and colleges were fused and reorganised into twenty polytechnic institutions, and twenty new ones were founded specialising in steel, mining and geology. In the past

Table 31

NUMBER OF PUPILS AND STUDENTS

	1950	1952 (Actual)	1955	1956[a]	1957 (Original Target)
Primary schools (million)	28.9	51.1	53.1	57.7	60.2
Middle schools[b] (thousand)	1,502	3,140	3,900	5,860	4,707
Higher educational institutions (thousand)	139	194	290	380	434

[a] Preliminary.

[b] Roughly corresponding to secondary schools.

Source: State Statistical Bureau, *Communiqués,* Annual Economic Summaries (hereinafter *SSBC*) for 1952-1955; Liu Shao-chi, *Political Report of the Central Committee,* September 15, 1956 (Peking, 1956), p. 30; and Li Fu-chun, *Report on the First Five-Year Plan* (Peking, 1955), p. 38.

nearly half the colleges were concentrated in seven cities, but they are now much more evenly distributed. All living expenses in colleges and universities, secondary technical schools, teachers' training schools and workers' and peasants' middle schools are borne by the State. The number of college students rose from 139,000 in 1950 to 290,000 in 1955 and was expected to reach 470,000 in 1957; the provisional goal for 1962 is a college enrolment of 850,000.

Higher, and particularly higher technical, education is a critical bottleneck in industrialisation. According to Vice-Premier Kuo Mo-jo, of the 100,000 "highly trained intellectuals" in China in 1952,

31,000 were engineers and 25,000 doctors, of whom more than half had been trained since 1949. Early in 1956 work began on drafting a Twelve Year Plan to raise the number of such intellectuals to one million.

Meanwhile, the desperate shortage of technicians is an acute problem. The current distribution of students among the various faculties (see Appendix III, Table 4(1), p. 252 below) reflects the need for engineers, doctors and teachers in an industrialising society in which educational opportunity and medical care had both been woefully circumscribed. The Five Year Plan called for the graduation of 95,000 engineers (including geologists) with the annual number of graduating students rising sharply to over 25,000 in 1957. During 1955, over 18,000 engineering students graduated. Such a rate of growth necessarily entailed some sacrifice of quality to quantity in this as in other educational fields.[11] Nevertheless, the rate of growth can be assessed from the fact that by the third year of the First Five Year Plan the number of engineers qualifying in China was 30 per cent of that in Russia, around 80 per cent of that in the United States and six times that in Great Britain, and that it was scheduled to rise by 66⅔ to 100 per cent in the next two years.[12]

As for teaching and medicine, the Five Year Plan goal was the graduation of 70,000 university-trained teachers and nearly 27,000 modern doctors. Similarly, engineering was to account for over a fifth, teaching for over a half, and public health for over a tenth of the nearly 900,000 students to graduate from the technical middle schools during the five years.[13]

The overriding emphasis on engineering, teaching and medicine does not, however, entail neglect of the other sciences and the humanities. The systematic republication of Chinese classics is a symptom of the sustained interest in China's inherited culture.

A number of technologists and advanced students are sent for further training to Russia and Eastern bloc countries, between which and China there is constant academic interchange. During the Five Year Plan, 10,000 students were to study abroad, mostly in Russia:

[11] See Li Fu-chun, *Report on the First Five-Year Plan*, pp. 94-95. The distribution of engineering students by field of specialisation is given in Appendix III, Table 4(2), p. 253 below. The two leading categories are machine and tool making and construction engineering.

[12] *The Times Educational Supplement* (London), March 23, 1956, p. 372.

[13] State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 123.

this number, while not so large as might have been anticipated, should be compared with the 600 or so who were studying abroad in 1952. Perhaps it is not too much to hope that British universities may once again attract Chinese specialists and research students.

Educational work among the minorities receives special encouragement. Since well over half the minorities had no written language, the progress registered is all the more striking. The College of National Minorities in Peking is devoted solely to the study of minority languages, institutions and culture; one of its leading faculty members is Professor Fei Hsiao-tung, the distinguished anthropologist who studied under Malinowski at the London School of Economics and who had to flee for his life from Kunming to England via Hong Kong in 1946, when the Kuomintang gendarme then ruling Yunnan had Professors Li Kung-po and Wen I-to assassinated for their Democratic League affiliations.

Official policy with respect to the creative arts and to science is summarised in the classical quotation: "Let the flowers of all seasons blossom and let diverse schools of thought contend." Its successful application should mitigate the dangers of excessive stereotyping in literature and art and of dogmatic political intrusions into scientific research.

Great significance is attached to raising the general cultural level. One of Mao Tse-tung's major works, *New Democracy,* is largely concerned with an analysis of the scope and content of New Democratic culture. This is defined as *national,* i.e., not "cosmopolitan" and not denying China's own heritage; *scientific,* i.e., rational and experimental in temper as opposed to the mystical and chauvinistic Pan-Hanism preached by Chiang Kai-shek and Chen Li-fu; and *popular,* i.e., not confined to a small elite but embracing the whole nation. Literature, the theatre and the films are all promoted.

Art forms which were becoming obsolescent or insipid, and jocularly known among connoisseurs as late Kuomintang, have been revitalised. The influence of Kollwitz on Chinese woodcuts has been aesthetically most productive, which is more than can be said for that of Russian poster art on Chinese painting.[14] If the didactic tone and content of much of the popular literature and art is not to all

[14] The indigenous tradition of painting is so far superior to the Russian that it would be unfortunate if the great prestige of all things Russian should prevail in a sphere where the "elder brother" has more to learn from the "younger brother" than vice versa.

tastes, the conscious urge to reach the eyes and ears of a people emerging from illiteracy must be given due weight. "Our primary duty . . . is not 'to paint flowers on the embroidery' but 'to bring coal to the snowbound.' "[15] One intriguing facet of the industrialisation of China is the extent to which Chinese craftsmen will be able to preserve their superb artistic taste, which, in some spheres, has never been excelled, and at the same time find outlets for their expression in new forms growing out of the old.

4 MEDICINE, PUBLIC HEALTH AND HYGIENE

Old China had the highest death rate of any large nation. Mortality rates for children in the first year of life were around 160 to 200 per thousand and for mothers in childbirth 15 per thousand. Life expectancy was not more than 35 years, which goes part of the way towards explaining the traditional cult of age and the bias towards gerontocracy. Disease affected probably 500 out of every thousand people per year. Three-quarters of the diseases and deaths were preventable by the application of modern medical and public health practice. At least a quarter of the deaths were due to fecal-borne diseases. Tuberculosis was responsible for 10 to 15 per cent with a strikingly high incidence among the middle classes during the war and post-war inflation; diseases directly communicated by persons for 8-12 per cent; insect-borne diseases for 3-5 per cent; diseases associated with childbirth for 3-5 per cent; respiratory diseases, excluding tuberculosis, for 6-8 per cent; and the venereal diseases for 2-5 per cent.[16] Epidemics and plagues were part of the established order of things. There were over 30,000 *reported* cases of plague in 1947; and reported cases of smallpox totalled 54,000 and deaths from smallpox 15,000 in 1946.[17] The coastal strips of Fukien and Chekiang were reservoirs of bubonic plague, cholera epidemics swept up the rivers and lines of communication, and a whole group of worm diseases, dysentery and typhus were endemic in the countryside. Modern medical facilities, including the missionary medical schools and hospitals, had touched only the fringe of Chinese life. There were

[15] Mao Tse-tung, *Problems of Art and Literature* (Bombay, 1952), p. 22.

[16] See G. F. Winfield, *China: The Land and the People* (New York, 1948), pp. 105-110. The figures, of course, are very approximate and should be treated solely as indicative of orders of magnitude.

[17] It is ironic that variolation was first discovered in China.' See J. Needham, *Science and Civilisation in China,* Vol. I (Cambridge, 1954), p. 135.

at most 8000 to 9000 modern doctors in the whole country, and the majority of these gravitated to the large cities to serve the wealthier strata of the population. The very few modern hospitals were also concentrated in the larger cities, and there were even fewer nurses than doctors.[18] For ordinary people treatment of illness was confined to visits to the old-style doctors and to medicaments prescribed by superstition and folklore. Much of the fearful mass of suffering was relatively easily avoidable.

Here was one field in which comparatively small investments would yield large and quick returns. The immediate problem was not to turn out a sufficient number of highly trained doctors, however important this was in the longer run, since their education would take too much time and absorb too many resources. It was the introduction of elementary public hygiene and public health on a wide scale, which in turn demanded the rapid dissemination of simple knowledge — knowledge that could be easily acquired once practice had knocked the bottom out of the accretions of superstition. Such measures would drastically reduce the toll of fecal-borne, insect-borne and directly communicated diseases, the diseases of childbirth and, to some extent, tuberculosis.

Preventive medicine was therefore both more feasible and more effective than therapeutic medicine. The People's Government was well equipped to perform this task, since reaching the peasantry was nine-tenths of the problem. The People's Liberation Army was a major protagonist in this campaign; it instituted crude yet efficient sanitary measures in the areas it entered and, by raising the health consciousness and practice of its peasant recruits, turned them into proselytisers throughout the countryside when they were demobilised. The nation-wide battle against insect and animal pests has been astonishingly successful and is a notable example of the power of mass propaganda in the struggle against sickness. Who can forget the open sewers and enormous malevolent rats of Chungking, the fly-infestations of Peking and Chungking, the flagrantly unhygienic foodshops of Shanghai, *et les autres douceurs de la vie sous l'ancien régime*?

The organisation of anti-plague teams and stations narrowly limited the incidence of plague epidemics and went far towards eradicating the bubonic plague previously endemic on the southeast coast and in Inner Mongolia. China has virtually eliminated cholera. "It can

[18] Winfield, *China: The Land and the People*, pp. 142-143.

positively be asserted that cholera epidemics will continue to occur in China for a good many years — until education, expanding medical and public health services and a rising standard of living make possible the modifications of the conditions favouring cholera and the supplying of services for prevention and control."[19]

The first part of this prediction has been refuted, and the second part fulfilled "a good many years" before it was widely believed to be capable of realisation. Between 1949 and 1952 most of the population of China was vaccinated against smallpox. Progress has also been made in reducing the incidence of malaria, schistosomiasis, hookworm, venereal disease and kala azar.

The organisation of public health facilities in the more isolated and minority areas was a major social innovation. Some of the minorities were so riddled with disease that their populations had become stationary or were even declining. The conventional picture of glamorous Tibet, for instance, is belied by the prevalence of the syphilis which seems to have accompanied lamaistic Buddhism in its theocratic form; a few active public health centres will work wonders in this respect.[20]

More advanced therapeutic institutions and methods have not been neglected. There was a great expansion in higher medical education and in the manufacture of pharmaceuticals and medical equipment. China can now produce enough rigorously standardised vaccines and sera to meet its own needs. There were 279,000 hospital and sanatorium beds available in 1954. Small as is the number of hospital beds in relation to needs, it is several times the pre-1949 maximum figure. But medical and ancillary services are not free except for the workers, employees and other groups covered by health insurance, and medical facilities are bound to remain scarce.

Such is the shortage of doctors that there would be no point in discarding the services of the several hundred thousand old-style doctors. At the same time they are required to undertake some minimum training; while the reverence for traditional Chinese medicine as such condoned or indulged in by several senior Kuomintang

[19] *Ibid.*, p. 135.

[20] For early testimony on the prevalence of venereal disease in Tibet, see Ippolito Desideri, *An Account of Tibet*, Filippo de Filippi, editor (London, 1937), p. 187; and for more topical testimony, Heinrich Harrer, *Seven Years in Tibet* (London, 1953), p. 176: "Venereal disease is very common in Tibet." For Outer Mongolia, the other centre of theocratic lamaistic Buddhism, see Ma Ho-t'ien, *Chinese Agent in Mongolia* (Baltimore, 1949), p. 128.

members is incompatible with the current rationalist bias, there is still some temptation to make a virtue of necessity. There is also a big training programme for medical field workers, who are given a 2½-year basic education.

The details of the 1953 Census should provide valuable information on mortality, morbidity and birth rates, although in the absence of previous reliable censuses the results will no doubt have to be interpreted with care.

XI

Foreign Trade

1 INTRODUCTION

THE OPENING up of China by the West, which was largely the work of Englishmen in the pursuit of commercial gain, was in retrospect one of the decisive developments of the nineteenth century. China was reluctantly shaken from its dogmatic Confucian slumber to find itself no match for the citizens or governments of modern nation-states. The latter supported their nationals in their demands for concessions and in the decades preceding World War I were only prevented from swallowing the country whole by its indigestibility and their own internecine rivalry. International trade was actively promoted by foreigners who in the last resort could appeal to the armed might of their governments to extract passive Chinese acceptance. China was compelled to sign a long list of unequal treaties, under which she surrendered, first, territory, spheres of influence and railway concessions, second, substantial extraterritorial rights and, third, effective autonomy with respect to tariffs and other taxation involving foreigners, foreign exchange, customs and debt service, and the like.

The internal economic impact of foreign trade was most uneven. Some sectors were absorbed into, and became dependent on, the world market with a concomitant rapid growth of commodity, pro-

duction and market relations; this was particularly true of the treaty ports and their hinterlands, the ports becoming the main foci of modern industry, commerce and finance — enclaves within the economy and polity not subject to Chinese jurisdiction. Other sectors were exposed to the blast of foreign competition, against which some branches of handicraft production found it hard to survive, with disastrous consequences both to many full-time handicraftsmen and to large sections of the peasantry, whose handicraft side-occupations provided an essential supplement to their agricultural income. Still others were less immediately affected and more remote areas were hardly affected at all.

The regional nature of the Chinese economy was profoundly influenced by the growth of foreign trade. But it was not destroyed and a full-fledged national market failed to emerge. Lacking a national market, the economic basis of a modern nation-state, China lacked the political power to obtain equality in economic bargaining. Lacking political and military power, she could not resist foreign economic and other encroachments. While the traditional balance between agriculture and handicrafts was disrupted, nascent Chinese modern industry, a very late comer on the scene, had a hard struggle to obtain a foothold.

Opium was the leading single import item for over fifty years.[1] The balance of trade became unfavourable in the late 1870's and remained so until 1951, the import surplus being covered mainly from the growing volume of emigrant remittances from overseas Chinese in southeast Asia and the Western Hemisphere.[2]

Shanghai became one of the world's leading ports and financial centres. As late as 1930 foreign banks financed "at a very conservative estimate 90 per cent of the imports and exports between China and foreign countries,"[3] and China had not passed the stage reached

[1] For the story of opium in China's international economic and political relations, see Michael Greenberg, *British Trade and the Opening of China 1800-1842* (Cambridge, 1951), and David E. Owen, *British Opium Policy in China and India* (New Haven, 1934).

[2] For the refutation of the view that foreign loans and business investments yielded a net plus in China's balance of payments, see C. F. Remer, *Foreign Investments in China* (New York, 1933), p. 171: "The conclusion seems unavoidable that these transactions [i. e., transactions arising from government borrowing and business investments] have brought about a net outflow of funds from China."

[3] R. C. Feetham, *Report to the Shanghai Municipal Council* (Shanghai, 1931), Vol. 1, p. 306, cited by Rhoads Murphey, *Shanghai, Key to Modern China* (Cambridge, Massachusetts, 1953), p. 6.

by Japan in the 1890's.[4] The foreign banks constituted the organised foreign exchange market in Shanghai and derived large profits from their exchange arbitrage and speculation operations.[5] In one depression year the National City Bank, Shanghai, is reputed to have made half the net profits of the whole National City Bank system, almost entirely from exchange and bullion speculation.

China's retention of the silver standard until 1935 was another sign of her backwardness. She recovered partial tariff autonomy in 1928, but the process was not completed until 1933. Similarly, the abandonment of extraterritoriality and therefore of the treaty port system came only in 1943.

Britain, together with Hong Kong, had occupied the leading place in China's foreign trade throughout the nineteenth century. By the eve of World War I, Japan had outstripped Britain, and in the '20s and '30s Britain fell to fourth place in China's foreign trade, behind Japan, the United States and Hong Kong. Japan not only absorbed Taiwan and Manchuria into her economy but also became the chief foreign trader with the mainland. The United States took the place of Japan immediately after World War II. According to the Maritime Customs Returns, in the three years 1946-1948 the United States took between one-quarter and one-third of China's exports and supplied over 50 per cent of her imports. These returns, however, covered only part of China's total foreign trade.[6]

China had a large reserve of foreign exchange in 1945, since disbursements abroad had been small during China's isolation and receipts substantial as a result, first, of the United States $500 million loan and, second, of United States military expenditures in China. Between 1946 and 1948 most of this reserve was squandered in covering the huge import surplus, excluding items received as gifts or loans from the United States. Despite massive American aid, China's international economic position underwent catastrophic deterioration. By 1948-1949 foreign trade had fallen sharply. The Civil War and hyper-inflation disrupted the normal channels of

[4] The proportion of foreign trade directly handled by Japanese merchants independently of foreign agents constituted 11 per cent of total foreign trade in 1880, 19 per cent in 1890 and 38 per cent in 1900. See Yukimasa Hattori, *The Foreign Commerce of Japan Since the Restoration 1869-1900* (Baltimore, 1904), p. 29.

[5] G. C. Allen and A. D. Donnithorne, *Western Enterprise in Far Eastern Economic Development* (London, 1954), pp. 50 and 110-113.

[6] See Appendix III, Table 5, p. 254 below. Five of the last six items in Table 5 are for imports exclusively from the United States, while UNRRA imports were preponderantly from the United States.

communication and trade, curtailed the production of commercial crops and stimulated speculation. Absurd official exchange rates grossly overvalued the external value of Chinese currency, in effect granting lavish subsidies to authorised imports and imposing prohibitive penalties on legal exports.[7] The bureaucratic apparatus was corroded by corruption and a relatively large volume of luxuries entered the country either through smuggling or through the falsification of customs and exchange control returns. One of the unforgettable impressions of Shanghai after 1945 is of streets full of Cadillacs and Buicks, of bazaars laden with California Sunkist oranges (Szechwan produces the best tangerines in the world), Max Factor cosmetics and the latest foreign gadgets. There was a substantial flight of capital, facilitated by the systematic overvaluation of authorised imports and the undervaluation of authorised exports, by the smuggling of other exports, by the official sales of gold and by the acquisition and transfer abroad of foreign currencies.[8] The flight of capital was estimated by the Central Bank to have amounted to U.S. $50 million in 1947 and U.S. $80 million in 1948 but was probably nearer treble these sums.[9]

2 THE PATTERN OF FOREIGN TRADE SINCE 1949

Trade recovered rapidly from the low point of 1949. In 1950 it exceeded U.S. $1000 million and the 1951 level was double that of 1950. The year 1952 probably registered a slight fall as a result of the United Nations embargo on strategic goods instituted in 1951, but there was a further increase in 1954 and a jump of 30 per cent in 1955.

China does not publish her trade returns, and the estimate of the turnover of her foreign trade in Table 32 is constructed from the United Nations data on her trade with the "Rest of the World" and from Chinese data on the percentage breakdown of her total trade

[7] The official exchange rate was once defined as that rate at which no foreign exchange transactions, excluding official outpayments, were consummated.

[8] Between 1943 and early 1947 the Kuomintang Central Bank sold U.S. $150 million, or nearly 4.3 million ounces of gold, in China. This was a gross dissipation of national assets. At no time did the receipts from the sale of gold make a dent on the mounting budgetary gap. For some background on the gold sales policy, see U.S. Department of State, *United States Relations with China* (Washington, 1949), pp. 487, 503, 507, and 786-787.

[9] See U.N., International Monetary Fund, *Balance of Payments Yearbook 1948 and Preliminary 1949*, p. 116, where the tentativeness of these estimates is stressed.

Table 32

ESTIMATE OF CHINA'S FOREIGN TRADE 1950-1955
(U.S. $ million)

Year	Total	Eastern Bloc	Rest of the World
1950[a]	1,197	311	886
1951[a]	2,351	1,434	917
1952	2,300	1,735	635
1953	2,900	2,175	725
1954	3,100	2,480	620
1955	4,000	3,200	800

[a] The estimates for 1950-1951 are rounded to the nearest U.S. $1 million not to give an impression of precision but to preserve consistency with the data cited in the following sources.

Source: For 1950 and 1951, U.N., *World Economic Report 1952-1953,* p. 137, Table 67, and Yeh Chi-chuang, "Three Years of China's Foreign Trade," in China Committee, *New China's Economic Achievements 1949-1952* (Peking, 1952), p. 240; for 1952 and 1953, U.N., *Economic Survey of Europe 1954,* p. 113, Table 64, adjusted on the basis of the data for Chinese trade cited on p. 293; for 1954 and 1955, U.N., *Direction of International Trade,* Monthly Issues 1955-1956, and State Statistical Bureau, *Communiqué,* Annual Economic Summary (hereinafter *SSBC*) for 1954. The use of U.N. data for Rest of the World trade with China as the basis of computation necessarily involves a conjectural element, since besides the usual differences in methods of valuation, etc., between different countries an additional difficulty arises because the U.N. counts Chinese exports as Rest of the World imports, i.e., c.i.f., and Chinese imports as Rest of the World exports, i.e., f.o.b.

by regions. The estimate has a downward bias particularly for the earlier years since the United Nations coverage for Rest of the World trade with China was incomplete; the figure for 1952 would also appear to be conservative. The annual turnover is now around £1400 million and is likely to increase. Already in 1955 China ranked eleventh among the leading trading nations of the world, ahead of Australia and India and barely behind Japan.

Specific data on the relation of imports to exports are not available. Chinese officials stressed the equality achieved between the two in 1951 and have since frequently lauded the merits of bilateral balancing, which indicates that they try to avoid a sizeable import surplus.

In the absence of a breakdown of foreign trade by quantities and values of commodities imported and exported it is impossible accurately to measure the total current *volume* of trade as compared with pre-war. But, after allowing for price changes, it is very substantially in excess of the 1935-1937 average turnover for China and the Northeast combined, which was U.S. $850 to $900 million by value.[10] The target for 1957 was a turnover of foreign trade two-thirds more than in 1952, a target which was probably exceeded in 1956.

The change in the *direction* of Chinese foreign trade is no less striking than its growth. Before 1949 Russia's share in Chinese trade was insignificant, and commerce between China and other Eastern bloc countries virtually non-existent.[11] Since the United States preponderance in the Chinese market after 1945 was abnormal, since there were mounting tensions between the two countries after the creation of the People's Government and since Japan's commercial role was negligible, some shift in the direction of China's foreign trade was bound to take place after 1949. This shift followed the line of least political resistance and was accentuated by the Korean hostilities. Political interest coincided with economic, since Russia and other Eastern European countries not only provided outlets for traditional Chinese exports of agricultural goods and mineral ores and products but could also meet the expanding Chinese demand for investment goods. The shift involved neither quixotic benevolence on the one side nor subordination on the other as, apart from the Russian credits, it was immediately self-financing and self-liquidating.

The proportion of total Chinese trade conducted with the Eastern bloc and primarily with Russia rose to 26 per cent in 1950, 61 per cent in 1951, 75 per cent in 1953 and 80 per cent in 1954. The increase in Russian trade is particularly marked. "The position of the U.S.S.R. as the leading trader of the region . . . is not surprising in view of the great size of the Soviet economy."[12] But if Russia's

[10] According to the U.N. *World Economic Report 1951-1952,* "the quantum of exports of mainland China in 1951 was 60 per cent higher than in 1936, and trade was approximately balanced" (p. 129); the conclusion that exports in 1951 were higher in volume than in 1936 is also borne out by Table 34 on p. 221 below.

[11] For the percentage distribution of China's foreign trade in 1937-1948, see Appendix III, Table 6, and Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948), p. 60.

[12] U.N., Economic Commission for Europe, *Economic Survey of Europe 1954,* p. 112. But at the same time, if the Commission's estimate of total Russian trade

share of total Chinese trade would appear to be over half and if Russian trade is increasing absolutely, beginning with 1951 there has also been a big absolute and relative increase in trade with other Eastern bloc countries. Eastern German trade with China quadrupled between 1951 and 1952.[13] According to the Economic Commission for Europe's estimates, Eastern Germany and Czechoslovakia were responsible for a little over half of the China trade of Eastern Europe, excluding Russia, in 1952 and a little under half in 1953, the Eastern German trade with a turnover of around U.S. $170 million a year now exceeding that of Czechoslovakia. East Germany, Czechoslovakia, Poland and Hungary are supplying China with a broad range of industrial goods and Rumania is supplying specialised oil equipment as well as providing the services of oil technologists. In return, China exports some of the minerals and non-ferrous metals these countries need for their own industrial programmes, cotton for their textile industries, other industrial raw materials and food and animal feed.

In its discussion of the pattern of Eastern bloc trade the U.N. Economic Commission for Europe calls the growth of trade between China and Eastern Europe "the most impressive development of all in recent years."[14] This development was due as much to the Western push as to the Eastern pull. The restraints on trade with China imposed by the West, under, first, the informal restrictions on trade with the whole Eastern bloc instituted in 1949, then the United Nations General Assembly embargo of May 18, 1951, and finally the Battle Act (Mutual Defense Assistance Control Act) of October 26, 1951, covered a wide range of goods, including many urgently needed by an industrialising country. Consequently, China had no alternative but to buy these goods from the East. Similarly, since the kinds of goods China could get from the West were mainly very low in priority or entirely dispensable in terms of her immediate needs, there was nothing to be gained by exporting more to Western countries than was needed to finance her limited imports from them and the services incidental thereto. Finally, China speeded up the development of domestic production of certain items, agricultural as well as in-

in 1953 is correct, its estimate of Russian trade with China cannot be reconciled with the Academy of Science *Textbook of Political Economy* statement (Moscow, Russian language, 1954, p. 615) that trade with China constituted 18 per cent of total Russian trade in 1953.

[13] U.N., *World Economic Report 1951-1952*, p. 129, n. 6.

[14] *Economic Survey of Europe 1954*, p. 114.

dustrial, for which she would otherwise have remained dependent on the Rest of the World for some time.

Chinese officials did not hide their motives for buying capital goods from the Eastern bloc. In 1953, Lei Jen-min, the Vice-Minister of Foreign Trade, expressed them clearly in an interview with the first group of British business men to visit China since 1949. "Because abnormal conditions exist we can only purchase equipment from reliable sources," he told them. "The only exception can be those unimportant items for which we can find space from time to time within our overall purchasing plan. Therefore, I say again that the future volume of trade depends on the normalcy of our commercial relations with your country."

It is hard to explain the retention of the restraints on trade *after* the cessation of hostilities in Korea in mid-1953 except in terms of the paramountcy of non-economic considerations, a factor which must serve to inhibit the growth of Chinese trade with the West. No less important, established commercial connections tend, other things being equal, to be self-sustaining and to develop a momentum of their own. If China has bought equipment for one steel mill from Russia, not only will it almost inevitably buy replacements from the original source of supply, it will also be predisposed to buy the equipment for the next steel mill from Russia too.[15] Consequently, the longer these restraints are maintained, the harder it will become to change the Eastern bloc orientation of Chinese foreign trade. The net effect of Western commercial policy was to make China more economically independent of the West without any perceptible detriment to China, and China's economic as well as political ties with the Eastern bloc were cemented more closely.

The Rest of the World shared in the recovery of Chinese trade in 1950 and 1951. Hong Kong benefited most, its exports to China increasing by 140 per cent and its imports from China by 50 per cent in 1950 as compared with 1949. But the commercial restrictions imposed in 1951 led to a contraction of 1952 Rest of the World trade with China by as much as one-third. Hong Kong's losses were as dramatic as its previous gains, its exports to China falling by over two-thirds.[16] With the relaxation of tensions in 1953 there was some

[15] It is not being suggested that established channels of trade are immutable, China's own experience since 1949 constituting graphic evidence to the contrary. There is always some flexibility, especially under "necessity's sharp pinch."

[16] Sir Alexander Grantham, the Governor of the Crown Colony, registered a very strong protest against the operation of the embargo: "Hong Kong traders feel about

increase in non-Eastern-bloc trade with China, although it was still substantially below 1950-1951 levels and Hong Kong's trade with China remained stationary. Hong Kong exports to China fell sharply in 1954 and 1955, the fall in the latter year being particularly severe. Despite the big increase in Rest of the World trade with China in 1955 and 1956, its exports were below even their 1938 level and a mere 11-12 per cent of their 1950-1951 average. This fall was due to the stabilisation of the existing channels of trade and to the reduced attractiveness of Hong Kong as an entrepot to the Chinese with the continuance of the commercial restrictions.

The main country data on China's trade with the Rest of the World are given in Table 33. The ten countries listed account for by far the largest part of Chinese non-Soviet-bloc trade.[17] In 1955 they absorbed 85 per cent of Chinese exports to, and contributed 70 per cent of Chinese imports from, the Rest of the World.

China's trade with the Rest of the World has shown a reasonable degree of flexibility. Thus, the disappearance of the United States as an outlet for Chinese exports did not prevent a fairly smooth readjustment. Similarly, the loss of imports from Malaya in 1952 and 1953 was made good by a roughly equivalent increase in imports from Ceylon. The fact that no country occupies a dominating position in China's trade with the Rest of the World simplifies the problem of adaptation to swings in trade with individual countries.

Six of the ten countries listed are members of the sterling area. The relative importance of the sterling area in the China trade may be maintained in spite of the recovery of trade with Japan and West Germany, in view of her growing needs for industrial raw materials and of her plans for expanding her Southeast Asian turnover.

Hong Kong's leading position in the trade of non-Eastern-bloc countries is the immediate product of its entrepot role, and its hypersensitivity to annual fluctuations in such trade has already been commented on. China's exports to Hong Kong are much more stable than imports because Hong Kong is largely dependent on China for its food supplies; as Hong Kong's indigenous exports are chiefly light industrial products, Hong Kong can only balance its accounts

the embargo much as a man feels when you give him a knife and tell him it is in the interest of the community at large that he should cut his throat; for that, in effect, is what Hong Kong has done by implementing the United Nations embargo" (*Newsweek*, November 2, 1953).

[17] There is probably some duplication in the addition of the imports of the countries listed as a result of Hong Kong's entrepot position.

Table 33

CHINA'S TRADE WITH THE REST OF THE WORLD 1950-1954

(U.S. $ million)

	1950		1951		1952		1953		1954	
	EXP.	IMP.	EXP.	IMP.	EXP.	IMP.	EXP.	IMP.	EXP.	IMP.
Hong Kong[a]	152	257	162	305	145	91	150	95	121	68
United States	150	46	51	—	28	—	9	—	—	—
Ceylon	1	—	1	8	7	26	44	51	33	47
Pakistan	19	8	17	45	2	84	3	7	2	26
Japan	38	20	22	6	16	1	30	5	41	19
United Kingdom	29	10	22	8	8	13	29	18	25	19
Switzerland	13	18	13	26	10	18	16	26	11	23
West Germany[b]					18	3	33	25	36	22
Malaya[b]					39	—	34	2	29	6
India	2	5	29	13	32	7	2	3	2	4
Total for 10 countries	404	364	317	411	305	243	350	232	300	234
Per cent of trade with Rest of the World[c]	85	89	65	93	90	97	79	80	85	87

EXP. = exports from China; IMP. = imports into China; all figures rounded to the nearest U.S. $1 million.

[a] 1950 includes trade with Taiwan.

[b] 1950 and 1951 figures not included for West Germany and Malaya. Trade with Malaya would appear to have been of the order of U.S. $40 million each way in both these years.

[c] The percentages for 1950 and 1951 were obtained by relating total for 10 countries to the corresponding total for the Rest of the World in the U.N. *World Economic Report 1952-1953*, p. 137, Table 67; the percentages for 1952-1954 were obtained by relating the total for 10 countries to total Rest of the World turnover of trade (Table 32, p. 211 above) split in the same ratio between exports and imports as in U.N., *Direction of International Trade,* Annual Issue 1953 and Monthly Issues 1954-1955.

Source: U.N., *Economic Survey of Asia and the Far East 1951,* p. 163, and *Economic Bulletin for Asia and the Far East* (November 1953), p. 26; U.N., *Direction of International Trade,* Annual Issue 1953 and Monthly Issues 1954-1955.

with China by its profits on the entrepot trade and the service earnings incidental thereto.[18] The United States' second place in the list reflects the extent of trade in 1950-1951; America made heavy purchases of tung oil, bristles, and the like in 1950 and continued to buy Chinese goods *after* promulgating its December 1950 embargo. Curiously enough, United States turnover in the single year 1950 exceeded British turnover in the period as a whole. United States trade with China ceased in 1954, but the economic potentialities for its rapid expansion in the event of a change in Sino-American political relations are clear from the 1950 returns.

The high place of Ceylon is due to the conclusion in 1952 of a Five Year Agreement under which Ceylon was annually to export 50,000 tons of rubber against 270,000 tons of rice at prices to be set by mutual agreement each year. The arrangement was only possible because of Ceylon's autonomy as a Dominion. The prices at which business was done favoured Ceylon, which made the agreement when there was a buyers' market in rubber and a sellers' market in rice. Pakistan is a large exporter of jute and the cheaper grades of cotton to China, which in return has exported grains and coal. China has no problem in covering her import surplus with sterling balances earned in trade with other sterling area countries or accruing from emigrant remittances. Malaya buys substantial amounts of foodstuffs from

[18] The importance of the China trade to Hong Kong can readily be seen from the proportion of such trade to total Hong Kong trade. While Hong Kong's trade has shown a certain resilience, the permanent loss of the entrepot trade with China would be a blow to Hong Kong's economic *raison d'être.*

HONG KONG TRADE WITH CHINA AS PERCENTAGE OF TOTAL TRADE
1938-1954

Year	Percentage of Total Imports	Percentage of Total Exports	Balance of Trade with China (£ *million*)
1938	37.7	45.0	−0.2
1948	20.7	17.7	−9.3
1949	21.5	25.6	0.4
1950	22.6	39.2	37.5
1951	17.7	36.1	45.7
1952	22.0	17.9	−19.4
1953	22.1	19.8	−19.8
1954	20.8	16.2	−18.9
1955	24.1	7.1	−44.8

Source: Hong Kong, Department of Commerce and Industry, *Trade Statistics,* 1954-1955, and Colonial Office, Colonial Reports, *Annual Report on Hong Kong,* 1948-1952.

China and exported rubber in return until the embargo went into effect in 1951. Malayan exports of rubber were resumed late in 1956.

Japan is the most striking case in which Western commercial policy worked against the forces of the market. Japan and China are natural trading partners. And if Japan will never resume its previous dominant position in Chinese foreign trade, the fact that China is industrialising makes her an especially attractive market for Japanese heavy industry. So far, Japanese trade with China has been negligible in relation to the immediate potentialities, and Japan had to import more raw materials from the dollar area and pay more for them than if she could have procured them from China.[19] It is absurd for Japan to go on importing American coking coal, for example, when North Chinese coking coal is available. With the running down of American special dollar expenditures in Japan and with the relaxation of the embargo by means of the exceptions procedure in 1956 it became only a matter of time before Japan abandoned the embargo and resumed large-scale trade with China. Furthermore, the inhibitions on Sino-Japanese trade intensify Japanese competition with Western countries in third markets, a competition which would become doubly severe in the event of a recession. In economic terms, therefore, the restraints on trade with China make least sense of all in this case, since it was not only Japan but its chief trade rivals which suffered.

Japan grew increasingly restive under these restrictions, which became a major internal political issue. Formal relaxations of the prohibited list covering many items affected the scope of trade only peripherally. In spite of the Sino-Japanese trade agreements of 1952 and 1953, recovery from the nadir of 1952 was slight in relation to the possibilities of expansion.[20] The 1955 Sino-Japanese agreement contributed to a 75 per cent increase in turnover over 1954 and there was a further increase in 1956.

Over the period 1950-1954 Swiss trade with China almost equalled that of Britain, and Swiss exports to China exceeded British in both 1954 and 1955. Western Germany would seem to be regaining its

[19] Thus in 1934-1936 Japan obtained 68 per cent of its coal imports, 36 per cent of its iron ore imports and 78 per cent of its soya bean imports from China, and *none* from the United States. In 1954 the respective percentages obtained from China were 3, 1, and 9 and from the United States 90, 9, and 88. The c.i.f. prices of iron ore and coking coal from China were respectively 25 and 40 per cent below American prices (*The Oriental Economist,* Tokyo, March 1955).

[20] The agreements were private on the Japanese side, as was the case with the 1955 agreement.

pre-war position as the leading Western European exporter to China. It outstripped Britain in 1953, partly by accepting contracts British firms had to turn down, although the restrictions on exports to China were theoretically uniform as between the countries participating in their operation.

The Indian and Chinese economies are similar rather than complementary. Nevertheless, both countries have a large volume of trade and each is sufficiently diverse in its output to permit of a steady and possibly expanding volume of exchange such as was envisaged in the 1954 trade agreement. China's trade with Southeast Asia which is not confined to Ceylon, India and Malaya, has grown both in volume and diversity and trade agreements with Indonesia and Burma were signed in 1954.[21] In 1955 China concluded trade agreements with a number of Middle Eastern and smaller Southeast Asian countries; the agreement with Egypt envisaged an annual turnover of £20 million.

3 THE COMPOSITION OF CHINA'S FOREIGN TRADE

A. Exports. Chinese exports consist mainly of foodstuffs and animal feed and other agricultural products such as raw silk, bristles, hides and skins and vegetable oils. These, together with mineral products and certain cognate items, accounted for well over 75 per cent of total exports in 1935-1937.[22]

Some agricultural staple has invariably headed the export list. First it was tea, then silk, then soya beans and finally and to a lesser extent tung oil. In the years before the Sino-Japanese War domestic consumption absorbed 90 per cent of current tea production, and annual exports averaged less than 50,000 short tons. Similarly, between one-half and two-thirds of the annual output of 225,000 to 300,000 bales of silk were internally consumed (the bale is 132 pounds).

Soya beans displaced tea and silk as the main Chinese export after the turn of the century. The loss of Manchuria to Japan in 1931 also entailed the loss of soya bean exports as a principal source of foreign exchange. No commodity succeeded in taking the place of the soya bean, although there was a big increase in the export

[21] See U.N., *Economic Bulletin for Asia and the Far East* (November 1954), p. 60.

[22] For the composition of Chinese exports and imports in 1935-1937, see Appendix III, Tables 7 and 8.

of tung oil, another commodity in which China began by having a near monopoly. She is still the world's largest producer, in spite of the growth of cultivation in Mississippi and Argentina, and annual production is over 100,000 tons. Tung oil is a valuable ingredient of many industrial paints. The United States used to be the main purchaser.

China produces three-quarters of the world's supply of hog bristles, the bristles from the Szechwan black razorback hog being considered of the best quality; annual exports are at the rate of 70,000 tons. Another customary export is carpet wool, chiefly from Inner Mongolia. Other exports of animal and vegetable products include eggs and egg products, feathers, sausage casings, hides and skins, furs, nuts and vegetable oils, animal feedstuffs, and Chinese foods and delicacies for overseas Chinese communities in Southeast Asia.

China before 1949 was also an important source of supply for a number of minerals. Coal, especially coking coal, and iron ore were exported to Japan. China was the world's largest producer and exporter of both tungsten and antimony, accounting for 50 per cent of the former and 40 per cent of the latter in the '30s. Although production of wolfram has expanded in other countries, to some extent on an uneconomic basis depending on subsidies granted for strategic reasons, China is again the largest producer with an annual output of over 20,000 tons. Chinese production and export of tin reached over 10,000 tons in the late '30s.

The pattern of exports did not change markedly during reconstruction.[23] China is a net exporter of cereals. Exports of grain, including soya beans, averaged 1½ to 2 million tons in 1950-1956 and edible oil exports 236,000 tons per annum in 1950-1953. China is developing her exports of pork and other meat products; in 1955 exports of pork represented 3.4 per cent of the domestic supply, but in the following year the export quota was cut by 50,000 tons. Exports of eggs and egg products at 70,000 tons a year form 7 per cent of output. Since exports must pay for imports of machinery, the export of foodstuffs will have to be maintained during the next decade or so.[24]

[23] For a percentage breakdown of exports and imports in 1950, see Appendix III, Table 9.

[24] The above figures are from Chen Yun, "Bridging the Gap Between Supply and Demand," *People's China,* November 16, 1954, pp. 4-5, his "Report on the Food Situation," *New China News Agency Bulletin,* July 26, 1955, and statements by the

Quantitative data for certain selected exports are available for 1951. In 1936 the commodities listed in Table 34 accounted for 40 per cent of total Chinese exports, including those of the Northeast.[25] Only two failed to exceed the 1936 levels of exports, the sharp decline in the export of salt being due to the absence of normal commercial relations with Japan.

Table 34

SELECTED EXPORTS 1936 AND 1951
(thousand metric tons)

	1936	1951
Antimony[a]	7	20
Coal	4,862	7,430
Egg products	63	70
Peanuts	172	250
Salt	997	100
Silk, raw	10	10
Soya beans	1,909	2,480
Tea	34	100
Tung oil	87	100

[a] 1938.

Source: U.N., *World Economic Report 1951-1952,* p. 129, Table 80. The 1951 figure for tea exports is reconcilable with the figures for tea production in State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), p. 81, since the latter are for unfired green tea, while exports consist chiefly of brick and black tea.

Exports to Russia include rice, vegetable oils and seeds, meal, tea, fruits, tobacco, silk, flax, wool, leather and other agricultural products as well as handicraft goods and non-ferrous metals, including wolfram and molybdenum ores, tin and antimony. The 1955 annual trade agreement with Russia provided for the export of an increasing amount of mineral products, which presumably reflected the growth in Chinese production of these items.[26] In addition to most of the above items Chinese exports to other Eastern bloc countries include cotton, iron ore, mercury, asbestos and cobalt. The composition of exports

Vice-Minister of Commerce, Yao Yi-lin, and the Minister of Food, Chang Nai-chi, to the National People's Congress in June 1956, cited in *NCNA,* June 26-27, 1956.

[25] U.N., *World Economic Report 1951-1952,* p. 129, Table 80. The apparent discrepancy between the figure for soya bean exports in the table and the figure for grain exports, *including* soya beans, in the text is due to the latter's exclusion of soya bean products.

[26] *Financial Times,* February 15, 1955.

to the Rest of the World has not changed much although certain new items such as plywood, newsprint, coal tar products, soda ash, graphite and sulphur were offered after 1952. The addition of canned meats, fruits, furs, and camel's hair to China's sales lists is in the traditional pattern, and even the drive to increase exports of light industrial goods, which amounted to over £20 million in 1954, is not a radical departure. Shanghai used to be a significant supplier of such goods to Southeast Asia, and the resumption and eventual growth of this trade was to be expected. More surprising is the export of 60,000 tons of steel and products to Egypt and of 20,000 to India, which, according to Chou En-lai, was due to failure to realise the transient nature of surpluses in materials such as steel and cement in an industrialising country.

B. Imports. Before the war, foodstuffs constituted about one-sixth of total imports, rice and wheat alone accounting for almost one-tenth, and cotton and tobacco accounted for another 5 per cent (see Appendix III, Table 8). The import of rubber was negligible and most imported petroleum products were for direct final consumption. Similarly, imports of machinery and other investment goods went primarily into light industry and only a very small proportion, such as railway equipment, was utilised in basic heavy industry and modern transportation. Iron and steel were imported chiefly for the production of simple tools, utensils and containers. Imports of agricultural machinery totalled U.S. $80,000 per annum! Machine and hand tools, with the latter accounting for two-thirds of this item, constituted less than 1 per cent of total imports.

The composition of imports, unlike that of exports, was transformed after 1949. The full force of the change is not clearly reflected in the data for 1950 (see Appendix III, Table 9); thus, there were still very substantial imports of raw cotton. Even so, the virtual disappearance of food imports and the big increase in rubber imports were striking. Similarly, capital goods and chemicals already showed a significant rise compared with pre-war. Since 1950, 90 per cent of all imports have consisted of means of production. By 1951, 97 per cent of imports from the Eastern bloc were industrial raw materials, industrial machinery and equipment and communications and transportation equipment.[27] In other words, most of the U.S. $700 million

[27] Liu Shao-chi, *Political Report of the Central Committee to the Eighth National Congress* (Peking, 1956), p. 28; and U.N., *Economic Survey of Asia and the Far East 1951*, p. 161.

or so of Chinese imports from Eastern Europe went directly into the industrialisation programme, which also absorbed a large part of imports from the Rest of the World.

This trend was strengthened in subsequent years. According to 1953 plans, imports from Eastern European countries excluding Russia were to be composed of capital goods, raw materials and consumer goods in the ratio of 75, 13 and 12 per cent respectively of total imports from these countries. Machine tools, tractors, cranes, drills, vehicles and building machinery were to constitute more than 50 per cent of the total and to be three times as much as in 1952. Czechoslovakian exports of machine tools and East German exports of machinery and vehicles in 1953 were to exceed their total exports to China in 1952, and Polish exports of machinery, iron and steel and non-ferrous metals were to increase by 50 per cent.

Russia, of course, is the main foreign source of capital goods and of the imported sinews of heavy industry. Between 1950 and 1953 China imported from the Soviet Union "huge quantities of equipment for the metallurgical, mining, machine-building, chemical and power industries, automobiles, farming machines, building machines, steel products, non-ferrous metal products, petroleum products, chemicals and other important raw materials that are needed in her economic construction."[28] Between 1953 and 1957 Russia was scheduled to supply China with £500 million of industrial equipment in connection with the 156 key industrial projects and 21 factories which were being built with Russian assistance.[29] In 1954 the import of complete sets of equipment for industry and capital construction — virtually all from Russia and the Eastern bloc — more than doubled. In the 1955 trade agreement with Russia factory equipment ranging from machine-making tools to chemical plants occupied the first place. Steel-making plant is another prominent Russian export, as are also turbo-generators and oil mining machinery. Interestingly enough, the 1955 agreement was the first since 1950 to make no provision for the export of rolled steel, presumably because of the expansion in Chinese domestic capacity.

The range of imports from most of the Rest of the World was limited by the restraints on trade with China in force since 1949.

[28] Statement by Ministry of Foreign Trade, April 27, 1954, *NCNA*, April 28, 1954.

[29] N. S. Khrushchev, *Report of the Central Committee of the Communist Party of the Soviet Union* (*Soviet News*, London, 1956), p. 10.

Rubber remains the most important single industrial raw material imported from the Rest of the World. Imports totalled 70,000 long tons in 1950, 73,300 in 1951, 23,800 in 1952 and 60,000 in 1953.[30] Under the immediate impact of the embargo, a programme for developing rubber plantations in Kwangsi and Hainan was initiated with the assistance of Chinese who had returned from Malaya and Indonesia; but China should remain in the rubber market for some time. China has imported large amounts of cotton from Pakistan and Egypt in order to achieve a better balance of types for factory production of textiles and to make up for her own exports of raw cotton to Eastern Europe. She has also imported chemicals, including pharmaceuticals, dyes and fertilisers from Japan, West Germany, the United Kingdom, Switzerland, France and Italy, but even this trade was subject to impediments. Machinery imports from these countries were largely confined to machinery needed in light industry and small auxiliary tools and equipment, but she has purchased turbo-generators from Sweden and Switzerland.

4 THE REGULATION OF FOREIGN TRADE

The Ministry of Foreign Trade was set up in 1949 and empowered to co-ordinate and handle foreign commerce, to determine trade policy and to conduct the negotiation of trade agreements. State participation in foreign trade increased sharply after 1950, when State trading organisations directly handled 61 per cent of foreign trade. The State played a greater role in imports than in exports, as it was both simpler and more important to unify purchases of capital goods and industrial raw materials than sales of diversified agricultural commodities. The planning of economic development and the gradual socialist transformation of industry and commerce involved the growing socialisation of foreign trade, since it had to be fitted into the programme of industrialisation, since it was much too important an economic sector to be left in private hands and since, moreover, it readily lent itself first to centralised control and then to centralised operation. Accordingly, the percentage of foreign commerce handled by the Ministry of Foreign Trade and its subordinate trading con-

[30] International Rubber Study Group, *Rubber Statistical Bulletin* (October 1954). From 1953 China re-exported 45 per cent of its rubber imports from Southeast Asia to Russia (U.N., *World Economic Report 1953-1954*, p. 149).

cerns rose to 90 per cent in 1952, 92 in 1953 and 97 in 1954.[31] The last private firms to conduct foreign trade became joint enterprises early in 1956.

One of the Ministry of Foreign Trade's main responsibilities is the negotiation of annual bilateral trade agreements with Soviet Russia and the Eastern bloc countries. These agreements are on a socialist barter basis, i.e., they entail largely a balancing exchange of aggregates of goods against aggregates of goods, calculated in a common unit of account at relatively stable prices.[32] The Ministry also handles the negotiation of bilateral agreements with Southeast Asian and Middle Eastern governments and with Finland. The triangular agreement between China, Russia and Finland in 1954 was a new departure, which while partially dependent on the intimate commercial relations existing between Russia and Finland, on the one hand, and Russia and China, on the other, might eventually prove itself capable of extension to other countries.

Most of China's foreign trade is handled by the Ministry's specialised import and export corporations. The former co-ordinate their activities with the various Ministries of Industry, Railways, and others, which are the chief final purchasers of imports, and the latter with the State trading monopolies dealing with the main exports. The Ministry has its own Commodity Inspection and Testing Bureau for raising and maintaining standards for staple exports.

Until late in 1956 much of China's foreign trade with non-Eastern-bloc countries was conducted by the China National Import and Export Corporation with its head office in Peking and a principal branch office in East Berlin. It operated largely though by no means exclusively on the basis of the bilateral clearing of accounts in the sense that the aggregates of transactions were roughly balanced off. There was some relaxation of the centralised administration of foreign trade in 1955, and there was an increasing trend towards setting up Ministry of Foreign Trade functional organisations to handle both exports and imports on a world-wide basis. Finally the work of the China National Import and Export Corporation was completely taker over by fourteen such specialist organisations in October 1956

[31] State Statistical Bureau, *Communiqué*, Annual Economic Summary for 1953, and *NCNA*, February 10, 1955.

[32] "Various statements from East European sources indicate . . . that the prices set in their trade agreements have been, from the beginning, based on those prevailing in international trade generally, though not subject to the same cyclical fluctuations" (U.N., *Economic Survey of Europe 1954*, p. 108).

There are now 263 commodities on the export list and 480 commodities on the import list.

One condition will clearly continue to be a prerequisite on which the Chinese will insist. In accordance with Article 57 of the Common Programme, official spokesmen have repeatedly emphasised equality and mutual advantage as comprising the *sine qua non* of their foreign trade.

The People's Bank of China is responsible for determining official exchange rates and allocating foreign exchange. Government and State-operated agencies clear applications for foreign exchange through the Committee on Financial and Economic Affairs. In the period of stabilisation foreign exchange rates varied with the fluctuations in internal prices, and the yuan appreciated from 42,000 to 22,800 to the U.S. dollar (currency notes) between March 1950 and March 1951. Foreign exchange rates remained unchanged until December 1952 when there was a minor readjustment. Sterling, which had been as high as 98,900 in March 1950, was pegged at 68,590 to 69,270 yuan for telegraphic transfers; U.S. currency notes were pegged at 23,430 yuan;[33] and Hong Kong dollars at the cross-rate with sterling, i.e., at 4270 to 4310 yuan to the Hong Kong dollar (1 Hong Kong dollar = 1 *s.* $2^{27}/_{32}$*d.* to 1 *s.* $2^{31}/_{32}$*d.*). With the currency reform of March 1, 1955, the sterling rate for the new yuan became 6.859–6.927, and other foreign exchange rates were likewise deflated by 10,000 without any effect on the course of foreign trade or the balance of payments, since as far as China's international transactions were concerned it was a pure bookkeeping adjustment. China's foreign trade is largely financed by the Bank of China, which has several branches abroad, including offices in London, Hamburg, Berlin, Bombay, Calcutta and Hong Kong, as well as in many Southeast Asian financial centres.

5 RECEIPTS AND PAYMENTS ON NON-TRADE ACCOUNT

China's outpayments on current non-commercial account would not appear to be substantial. If the shipping, insurance and other charges on imports are included in their c.i.f. costs, then shipping

[33] There was no telegraphic transfer rate for U.S. dollars, as the United States had imposed a unilateral embargo on exports to China and the United States Treasury had imposed regulations blocking all Chinese assets within American jurisdiction. See Gardner Patterson and Jack N. Behrman, *Survey of United States International Finance 1950* (Princeton, 1951), p. 209.

is already allowed for in the trade accounts apart from small expenditures on passenger shipping. With regard to Russian assistance by way of the services of Russian technicians in China and the training of Chinese technicians in Russia, the former primarily engenders local currency costs without requiring significant disbursements of foreign exchange. The latter may be furnished gratis, or it may be charged to the Russian credits; in either case, no immediate Chinese foreign exchange obligations would be incurred. The payment of interest on pre-1949 Government debt and the remittance of the profits of foreign investments, which between them used to amount to over three-quarters of China's outpayments on invisibles, have ceased and the 1 per cent interest on the Russian credits is insignificant. There is also the debt arising from the transfer to China at the end of 1954 of the Russian shares in the four previously joint companies, which China is committed to repay over a period of years with goods normally exported to Russia.

There remains, however, the Chinese *grants,* to be spread over a number of years, of the equivalent of £115 million each to North Korea and Viet-Nam in the form of material and technical assistance and the smaller grants of £14 million to Outer Mongolia, £8 million to Cambodia, and nearly £5 million to Nepal, the combined sum of which substantially exceeds Russian credits to China. Material assistance takes the form of exports which, since they are gifts, generate no equivalent credits, present or future. If China's total exports and imports are in balance, then any surplus on commercial account due to the receipt of some Russian imports on credit is wiped out to the extent that it is matched by this material assistance to China's neighbours. If imports exceed exports by roughly the amount of Russian credit — if, in other words, all other exports and imports are in apparent balance — there would actually be a net deficit in the balance of trade to the extent of this assistance, to be made good by the positive items in the non-commercial current account.[34] The technical assistance as such does not involve any sizeable inpayment or outpayment of foreign exchange.

[34] Another possibility is that such material assistance may not be included in the trade sector at all, especially as it is not a loan but a gift; in that case, it would probably be included in the "Other Receipts and Payments" for 1954 in Table 35. In fact, the Budget percentage breakdown of receipts and expenditures in 1956 suggests that expenditures on foreign grants exceeded receipts from foreign loans in that year (see Li Hsien-nien, "Report on the 1956 State Budget," *NCNA,* June 19, 1956, Supplement No. 240 (in *New China Advances to Socialism,* pp. 53 and 67)).

The breakdown of total receipts and payments between the trade and non-trade sectors is available for 1950 and 1954. The turnover of receipts and payments on current non-commercial account was of the order of U.S. $500 million in 1950 and U.S. $600 million in 1954, subject to the proviso that this turnover may include items falling under the capital account on standard Western accounting procedure. The problem is in this context largely a formal one, as the capital account is not very large.

Table 35

RECEIPTS AND PAYMENTS 1950 AND 1954

	Total Receipts	Total Payments	Sum of Receipts and Payments	Trade Sector	Other Receipts and Payments
(A) (Total Receipts and Payments 1950 = 100)					
1950	52.6	47.4	100.0	70.8	29.2
1954	111.5	110.0	221.5	185.8	35.7
Percentage increase 1950-1954	112.0	131.9	121.5	162.7	22.3
(B) (U.S. $ million)					
1950	893	804	1,697	1,197	500
1954	1,893	1,866	3,759	3,145	614

Source: Statement by a People's Bank of China official cited by *NCNA*, February 20, 1955. The dollar figures are computed on the basis of a trade turnover of U.S. $1,197 million in 1950, in accordance with Table 32, p. 211 above. There is a slight discrepancy between the percentage increase in the dollar figures and the actual percentages shown in the Table, due to rounding.

The most important single item in current non-commercial receipts is overseas remittances, which in prosperous periods before 1937 amounted to as much as U.S. $150 million per annum. While their post-1945 level was adversely affected by conditions both in China and in Southeast Asia and by the imposition of exchange controls in many of the remitting countries, the flow still remained sizeable, partly as a result of rising world prices. Thus, the International Monetary Fund estimated them at somewhere around U.S.

$100 million in 1948.[35] Their volume was adversely affected by the blocking of transfers from the United States to China in December 1950 and by the political unsettlement in overseas Chinese communities during the Korean hostilities. But they quickly recovered and the estimated flow is as high as £40-50 million a year.[36] Overseas remittances are a recurring item in China's balance on current account, although they tend to decline with the cessation of emigration and the gradual weakening of the ties of overseas Chinese with their relatives in China.

The sale of Government bonds to overseas Chinese is another although minor source of foreign exchange. A small part of the 1950, 1954 and 1956 bond issues was apparently taken up among the Chinese communities abroad.[37] Bond sales abroad are a non-recurring source of foreign exchange, and in addition impose equivalent future liabilities. Nevertheless, during the critical stage of industrialisation, they may be a helpful device, especially if not too short-term. To a very limited extent Russia used the sale of "gold" bonds abroad as a means of raising foreign exchange in 1929-1936;[38] with the large Chinese population outside China domiciled mostly in Southeast Asia but also on the American continent, China is better placed to use this ancillary means of raising foreign exchange. Overseas Chinese are also encouraged to invest in certain joint enterprises, receiving preferential interest rates on their investments.

There are two other possible sources of foreign exchange. The first consists of current working balances in foreign exchange needed for maintaining the smooth flow of trade and payments. The other is the People's Bank of China's gold reserves. Some gold was still left in private hands after the ill-starred currency reform of August

[35] The *Balance of Payments Yearbook 1948 and Preliminary 1949* (pp. 113-115) gives the following estimates. The high figure for 1946 includes amounts accumulated but not transferred during the war.

PERSONAL REMITTANCES TO CHINA

(U.S. $ million)

	1946	1947	1948
Net total	147	100	100
Remittances from the United States	46	24	9

[36] *The Economist,* March 27, 1954, p. 927.

[37] See p. 181 above. The State Council Order announcing the 1955 currency reform specified that overseas holdings of Government bonds would remain unaffected thereby.

[38] *U.S.S.R. Handbook* (London, 1936), pp. 323-324.

1948, and what was not transferred or smuggled abroad in the interim was presumably gradually dishoarded. The amount so dishoarded is unlikely to have been less than a quarter of a million ounces. The Government may also have acquired a little silver through private dishoarding.

Current gold production is, in fact, augmenting People's Bank gold holdings. There is little reliable information on past gold production. The statistical summaries of the *Mineral Industry of the British Empire and Foreign Countries* estimated production outside the Northeast and Taiwan at 377,000 ounces in 1940, but this estimate may be too high.[39] The Northeast and Taiwan each produced over 100,000 ounces annually.[40] There was placer mining in Heilungkiang, Sinkiang and Chinghai; when Sheng Shih-tsai, the mad warlord governor of Sinkiang, was deposed by Chiang Kai-shek in 1944, it was reported that he saved himself from execution by payment of a ransom of half a million ounces from the "provincial," i.e., his personal, treasury. The governor of Chinghai also had a substantial private hoard amassed from primitively mined sources and was given to paying faithful officials' salaries in bags of gold dust. Production in the rest of China, mainly in the Southwest, is not likely to have been much over 100,000 ounces per annum, if that.

There is at least circumstantial evidence that China, like Russia, is not neglecting this source of foreign exchange.[41] In February 1955 a People's Bank of China official stated that China's gold reserves were eleven times more than in 1950.[42] Part of this increase is clearly due to current gold production. If China has continued the working of existing sites, production may be as much as half a million ounces per annum and could eventually be expanded to a level which has been estimated at a million ounces yearly.[43] Discoveries of precious

[39] Imperial Institute, *The Mineral Industry of the British Empire and Foreign Countries, Statistical Summary 1938-1944,* p. 123; Hollington K. Tong, editor, *China Handbook 1937-1945* (New York, 1947), pp. 392-393; and Vei Chow Juan, "Mineral Resources of China," *Economic Geology* (June-July 1946), p. 404.

[40] These figures are derived from official Japanese sources. See Elizabeth B. Schumpeter, *The Industrialization of Japan and Manchukuo, 1930-1940* (New York, 1940), p 414, for the Northeast, and A. J. Grajdanzev, *Formosa Today* (Shanghai, 1941), p. 108, for Taiwan.

[41] By the end of its Second Five Year Plan, Russia was the second largest gold producer in the world, ranking next only to South Africa (see Maurice Dobb, *Soviet Economic Development Since 1917,* London, 1948, p. 280).

[42] *NCNA,* February 20, 1955.

[43] See Vei Chow Juan, "Mineral Resources of China," p. 404, where, writing in 1945 or 1946, he claimed this level to be attainable within five years.

metals have been reported in Chinghai and other western provinces, and their exploitation with modern machinery procurable from Russia would considerably expand output. But, it must be added in conclusion, this discussion of Chinese gold production is necessarily conjectural.

In sum, by 1954, China's receipts from her international economic transactions were of the order of £675 million. This total does not cover all China's currently mobilisable foreign exchange assets, since it makes no allowance for the running down of working balances and gold reserves or for accretions from current gold production.[44] As the trend of China's international economic transactions has been markedly upward since 1950, and as this expanding volume of transactions has been largely self-financing — the size of the debt actually incurred during the five years 1950-1954 was around £150 million — her international economic and financial position is unquestionably sound.

6 BRITISH TRADE WITH CHINA

China's pattern of foreign trade is characteristic of industrialising countries. Her exports consist primarily of agricultural goods and minerals and her imports of capital goods and industrial raw materials. Her output of the items traditionally exported to Britain exceeds peak pre-war performance, as does that of tobacco and certain industrial raw materials never so far exported to Britain. She is importing investment goods on an unprecedented scale. Her annual volume of trade is approaching £1500 million and is expanding. From a narrowly economic point of view, therefore, there are sound foundations for a sizeable and increasing turnover of trade between China and Britain. Yet Anglo-Chinese trade remains trivial. It has been consistently less, allowing for price changes, than it was before World War II, when Chinese foreign commerce was smaller and when China was a much less promising customer for British exports. This low level of trade was the inevitable product of the restraints imposed on trade with the Eastern bloc beginning in 1949 and extended particularly with reference to China in 1950-1951.

[44] Toward the middle of 1956 China's sterling balances were estimated to be around £100 million (*The Economist,* May 26, 1956, p. 818, where China was described as "rapidly emerging as one of Britain's largest short-term creditors"). China could therefore cover temporary import surpluses for a while by reducing the level of her liquid sterling assets.

As has already been indicated these restraints did not have any appreciable effect on the pace of Chinese industrialisation except *à rebours*.[45] The policy of retaining them was thus of dubious value in terms of its own internal logic, insofar as goods not of a strictly military-strategic character were concerned.

China's First and Second Five Year Plans present the same kind of opportunity for trade to the Rest of the World as did Russia's. It has been estimated that Germany and Britain together supplied

Table 36

BRITISH TRADE WITH CHINA IN SELECTED YEARS
(£ million)

YEAR	EXPORTS	IMPORTS
1929	14.1	12.2
1937	5.9	8.2
1949	2.4	3.6
1950	3.6	10.3
1951	2.7	7.7
1952	4.6	3.0
1953	6.3	10.2
1954	6.9	9.0
1955	7.9	12.4

Source: Board of Trade, *Annual Statement of the Trade of the United Kingdom,* 1929, 1937 and 1949-1952, and *Trade and Navigation Accounts* (December 1953, 1954, 1955); the first table column is exports, including re-exports, to China, the second is imports from China.

Russia with between half and two-thirds of the machinery it needed during its First Five Year Plan. General Electric, Ford, Siemens, Vickers and Craven sold electrical and other machinery to Russia in the '30s — this at a time when Russia had no alternative sources of supply. The policy of denying to China what was not denied to Russia is the more obscure since China has greater commercial freedom of manoeuvre.

The composition of British trade with China hardly calls for

[45] U.N., Department of Social and Economic Affairs, *The Quest for Freer Trade* (New York, 1955), says of short-term collective embargoes that "Their effectiveness is likely to lessen if they are maintained for a longer period since they are likely to give an impetus to development of domestic production of the materials which the affected country cannot procure from abroad" (p 28).

comment (see Appendix III, Table 10). By 1955 China had become Bradford's second-best foreign customer for wool tops. Yet there could be no clearer proof of the dominance of non-economic considerations than the fact that wool tops accounted for nearly two-thirds and machinery for less than 2 per cent of British exports to China. The chances were that China's First Five Year Plan would be completed without any significant imports from Britain of iron and steel, non-ferrous metals and products, machine tools, power generators, railway equipment, road-building machinery and lorries and tractors.

The level of British exports to China essentially determines the level of imports, since China's capacity to supply a larger volume both of traditional exports to the United Kingdom and of items such as tobacco is not in question. Concern about China's ability to pay for an expansion of British exports would appear to be premature in view of the low level of British imports, the magnitude of Chinese trade with the sterling area as a whole, her favourable commercial balance with Hong Kong and her receipts from sterling area remittances, not to mention her existing holdings of sterling and gold.

In the absence of significant changes in commercial policy, there would appear to be little scope for a *sizeable* expansion in Anglo-Chinese trade.[46] Even assuming an increase in annual turnover to £50 million, it would still be small, both absolutely and in relation to the possibilities. Perhaps the importance of such an increase should not be minimised, particularly as an immediate target and in the event of a contraction in world trade. But the long view is also relevant. The longer-run potentialities are favourable for two reasons. First, China's industrialisation is a continuing process. There will therefore be for many years a sustained demand for machinery and capital equipment of all kinds from abroad. Thus, according to Second Five Year Plan preliminary targets, China would have to import around 27,000 machine tools in 1962, or roughly as much as

[46] For a forceful statement of this view, see the *Annual Report* for 1955 of Mr. Cedric Blaker, Chairman of the Hongkong and Shanghai Banking Corporation: "No action of the kind we have in mind (if British merchants are to retain a share in the China trade and take advantage of the situation) can, however, be taken until there is a considerable reduction of the items on the embargo list." See also the statement in his 1954 *Annual Report* that "The potentialities of expansion of British trade with China . . . are as great as they have been for over a hundred years. As in the past century, so now they would in actuality be greater if political and ideological difficulties and suspicions could be swept out of the way." (*The Times* (London), March 11, 1955, and March 19, 1956.)

total planned domestic production in 1956. Also, the speed of industrialisation and of rural social change has brought nearer the prospect of the gradual mechanisation of agriculture. Judging by the Draft Twelve Year Programme for Agriculture, China will also have a sustained demand for tractors, agricultural machinery, fertilisers and many other goods needed by an advancing rural economy. Since the level of China's receipts was of the order of £675 million per annum in 1954 and is increasing and since agricultural output is expanding, there should be no intractable problems with respect to her ability to pay for imports.

Second, sooner or later industrialisation leads to permanently higher and rising living standards, which in their turn lead to a bigger absolute volume of international trade. Countries with high standards of living have a much greater and more diversified demand for goods from abroad than countries with low. Britain, with its stake in a large volume of world trade and with its great variety and adaptability of exports, should be in a position to benefit both directly and indirectly from China's industrialisation and rising living standards. "The prosperity of China is a material interest of the United Kingdom."[47]

One serious reservation, however, is necessary. What happens in the short run also affects the long-period outcome. The more protracted the period over which trade restrictions are maintained, the greater the probability that trade will ultimately settle down at a low level. A small turnover of trade may become self-perpetuating, since both parties tend to adapt themselves to it, a consideration which reinforces the argument both for an immediate expansion within the existing framework and for a speedy re-examination of the present restrictions, which the exceptions procedure is rendering increasingly illogical.

It can safely be predicted of the future direction of Chinese trade that present levels of exchange with the Eastern bloc will be at least maintained until the end of the Second Five Year Plan. This follows from the fact that the pattern of Chinese industrialisation determines the pattern of her trade; that planning industrialisation necessitates planning trade; that as a result of Western restrictions such planning has so far only been possible in trade with Eastern Europe; and that, other things being equal, trade will tend to run in the now accustomed

[47] Board of Trade, *Report of the United Kingdom Trade Mission to China* (London, 1948), p. 24.

grooves. It is more difficult to predict whether, given a further, and by no means unlikely, expansion of Chinese foreign trade, the *proportion* of her trade with Eastern Europe to her total trade will continue to rise or, indeed, whether it will even remain stationary. The international political situation is here the primary unforeseeable variable, which will affect the retention or abandonment of restrictions, the atmosphere in which trade is conducted and, therefore, the possibility of orders being placed for goods taking one, two or three years to manufacture and deliver. It should be unnecessary to add that political cause and economic effect interact. The growth of British trade with China, as with Eastern Europe, would itself contribute to a lessening of political tensions just as the absence of, or restrictions on, trade tend to operate in the opposite direction.

The prospects for British trade with China thus depend on a major unknown. In July 1954 the Chinese Trade Mission to Britain estimated the annual potential turnover at £80 to 100 million, assuming a rough equality between exports and imports. Subsequent internal developments in China make this estimate appear conservative rather than otherwise. Given the scale of imports required for the attainment of Second Five Year Plan goals, it would be safe to raise this estimate of *potential* Anglo-Chinese trade by a minimum of 25 to 50 per cent. In view of the demonstrated elasticity of British foreign trade since 1945 and the drastic redirection of Chinese trade since 1950, the adjustments necessary to achieve an annual level of £100 to £150 million would be quite small. From Britain's point of view there would be considerable advantages in such an increase in trade. It would mean a broad new market for British exports at a time when new markets are hard to win. It would make a welcome contribution to Hong Kong's depleted entrepot earnings. Finally, China would be a stable market free from cyclical fluctuations.

Conclusion

THE OUTSTANDING characteristics of Chinese economic development since the final defeat of the Kuomintang and the overthrow of landlordism have been its speed and scale and its peacefulness. Its speed and scale elicited the following comments from Mr. Cedric Blaker, Chairman of the Hongkong and Shanghai Banking Corporation, in his *Annual Report* for 1955:

> Even here in Hong Kong, close as we are to the Chinese scene, we find it hard to keep pace with and to evaluate the day to day economic and industrial changes and developments which are so rapidly being evolved. Nor do we know neither can we judge how the Chinese people as a whole — and particularly the agricultural population — are reacting to the kaleidoscopic events which have affected their lives and livelihood in the last few years.
>
> Collectivisation is certainly proceeding with ruthless vigour: at the same time almost the whole range of agricultural production is being directed and controlled from above in a way which has had no previous parallel in Asia. This kind of policy is, of course, tied up with the current Five Year Plan and with industrialisation. The whole picture reveals remarkable speed of development. There is special concentration on heavy industry with extensive Russian help. Railways and road communications are being opened up at an astonishing pace, even if allowances are made for some work of a rough and temporary nature.
>
> The key point in the economic policy of China has been summarised as follows: To build a socialist society which cannot be raised on the foundations of a small-peasant economy; its foundations must be based on large-scale industry and large-scale collective farming.[1]

If the pace of socialisation in industry and commerce and still more so in agriculture was much swifter than had been anticipated even

[1] *The Times* (London), March 19, 1956.

by the boldest of Chinese Communist leaders, the process occurred smoothly and without organised resistance by the private business men and rich peasants and, therefore, without the need for countervailing force. At the time of writing it is too early to tell how far China will be able to avoid the industrial sabotage and agrarian unrest encountered by Russia. Nevertheless, there seems no likelihood of their occurring on anywhere near the same scale. And indeed it appears probable that the Chinese Communists will successfully maintain their tradition of carrying through great changes first experimentally and gradually, then with accelerating velocity, but always with a minimum of social and economic friction. The socialisation of agriculture is the acid test. Many Chinese Communists had feared considerable rich peasant opposition but so far it has been relatively weak. The elimination of the rich peasantry as a class and their fairly painless absorption as individuals into collective farms may constitute the most startling demonstration of Chinese Communist know-how in social engineering.

The Chinese are following the Russian precedent in industrialisation. But they have transformed the original recipe to suit domestic ingredients and tastes. Their progress to date has already exerted a significant economic influence on other Asian countries with very different political institutions. Whether or not it will exert a proportional political influence will to a great extent depend on the speed and scale of the process of Indian industrialisation.

The industrialisation of China is clearly not only of Asian but of world significance. With the attainment of projected rates of growth Chinese production of the basic elements of modern industry may have begun to be comparable with that of the major West European industrial powers by the end of the Third Five Year Plan, that is, by 1967 or thereabouts. By 1975 the global — although not per capita — disparity, if any, may well have become negligible. In the broader historical setting the industrialisation of China is likely to compare with that of the United States in the second half of the nineteenth century and that of Russia in the first half of the twentieth.

Measurable growth is not the only relevant criterion. Industrialisation has invariably been an agonising process, whether in England and the United States or in Russia, whether in Germany or in Japan. To carry through the transition from a pre-industrial to an industrial society has been a hard dirty job which exacted heavy sacrifices, whatever the ultimate material rewards. So far, perhaps partly because

China started from such low levels and was standing on Russia's shoulders, China's growing pains appear to have been relatively mild. If war is avoided and if the socialisation of agriculture continues smoothly and if the rate of increase in population does not encroach on the pace of industrialisation, the way seems clear for China to do a workmanlike job. With that unique sense of form in thought and action which is part of their cultural legacy the Chinese have a better chance than any other nation to achieve industrialisation without the soulless philistinism that has marked industrial revolutions in the past.

Appendix I

EXTRACTS FROM THE COMMON PROGRAMME[1]

Chapter I—GENERAL PRINCIPLES

Article 3. The People's Republic of China must abolish all the prerogatives of imperialist countries in China. It must confiscate bureaucratic capital and put it into the possession of the people's state. It must systematically transform the feudal and semi-feudal land ownership system into a system of peasant land ownership; it must protect the public property of the state and of the co-operatives and must protect the economic interests and private property of workers, peasants, the petty bourgeoisie and the national bourgeoisie. It must develop the people's economy of New Democracy and steadily transform the country from an agricultural into an industrial one.

Chapter IV—ECONOMIC POLICY

Article 26. The basic principle for the economic construction of the People's Republic of China is to develop production and bring about a prosperous economy through the policies of taking into account both public and private interests, of benefiting both labour and capital, of mutual aid between the city and countryside, and circulation of goods between China and abroad. The state shall co-ordinate and regulate state-owned economy, co-operative economy, the individual economy of peasants and handicraftsmen, private capitalist economy and state capitalist economy, in their spheres of operations, supply of raw materials, marketing, labour conditions, technical equipment, policies of public and general finance, etc. In this way all components of the

[1] The Articles here quoted from the Common Programme are those which have the most specifically economic bearing. The Common Programme was adopted by The First Plenary Session of the Chinese People's Political Consultative Conference, in Peking on September 2, 1949. The text is given in *The Important Documents of the First Plenary Session of the Chinese People's Political Consultative Conference* (Peking, Foreign Languages Press, 1949), pp. 1-20.

social economy can, under the leadership of the state-owned economy, carry out division and co-ordination of labour and play their respective parts in promoting the development of the social economy as a whole.

Article 27. Agrarian reform is the necessary condition for the development of the nation's productive power and for its industrialisation. In all areas where agrarian reform has been carried out, the ownership of the land acquired by the peasants shall be protected. In areas where agrarian reform has not been carried out, the peasant masses must be set in motion to establish peasant organisations and to put into effect the policy of "land to the tiller" through such measures as the elimination of local bandits and despots, the reduction of rent and interest and the distribution of land.

Article 28. State-owned economy is of a Socialist nature. All enterprises relating to the economic life of the country and exercising a dominant influence over the people's livelihood shall be under the unified operation of the state. All state-owned resources and enterprises are the public property of all the people and are the main material basis on which the People's Republic will develop production and bring about a prosperous economy. They are the leading force of the entire social economy.

Article 29. Co-operative economy is of a semi-Socialist nature and is an important component of the people's economy as a whole. The People's Government shall foster its development and accord it preferential treatment.

Article 30. The People's Government shall encourage the active operation of all private economic enterprises beneficial to the national welfare and to the people's livelihood and shall assist in their development.

Article 31. The economy jointly operated by state and private capital is of a state-capitalist nature. Whenever necessary and possible, private capital shall be encouraged to develop in the direction of state-capitalism, in such ways as processing for state-owned enterprises and exploiting state-owned resources in the form of concessions.

Article 32. The system of workers' participation in the administration of production shall, for the present period, be established in state-owned enterprises. This means that factory administrative committees shall be set up under the leadership of the factory managers. In privately-owned enterprises, in order to carry out the principle of benefiting both labour and capital, collective contracts shall be signed by the trade union, representing the workers and employees, and the employer. For the present period, an eight- to ten-hour day should in general be enforced in publicly- and privately-operated enterprises,

but under special circumstances this matter may be dealt with at discretion. The People's Governments shall fix minimum wages according to the conditions prevailing in various localities and trades. Labour insurance shall be gradually established. The special interests of juvenile and women workers shall be safeguarded. Inspection of industries and mines shall be carried out in order to improve their safety devices and sanitary facilities.

Article 33. The Central People's Government shall strive to draw up, as soon as possible, a general plan for rehabilitating and developing the main departments of the public and private economy of the entire country. It shall also fix the scope of the division and co-ordination of labour between the central and local governments in economic construction, and shall undertake centralised regulation of the interrelationship between the economic departments of the central and local governments. Under the unified leadership of the Central People's Government, the various economic departments of the central and local governments should give full play to their creativeness and initiative.

Article 34. Agriculture, forestry, fisheries and animal husbandry: In all areas where agrarian reform has been thoroughly carried out, the central task of the People's Government shall be the organisation of the peasants and of all man-power available for allocation to the development of agricultural production and secondary occupations. The People's Government shall also guide the peasants step by step, in the organisation of various forms of mutual aid in labour and co-operation in production, according to the principle of willingness and mutual benefit. In newly-liberated areas, every step in agrarian reform shall be linked up with reviving and developing agricultural production.

The People's Government shall, in accordance with the state plan and requirements of the people's livelihood, strive to restore the output of grain, industrial raw materials and export goods to the pre-war production level and to surpass it within the shortest possible time. Attention shall be paid to construction and repair of irrigation works, to prevention of floods and droughts, to restoration and development of animal husbandry, to increasing the supply of fertilisers, to improvement of farm implements and seeds, to prevention of pest damage and plant diseases, to relief work in the event of natural calamities, and to planned migration for land reclamation.

Forests shall be protected and afforestation shall be developed according to plan.

Coastal fisheries shall be protected and the aquatic products industry shall be developed.

Livestock-raising shall be protected and developed, and preventive measures shall be taken against plague.

Article 35. Industry: In order to lay the foundation for the industrialisation of the country, the central point of industrial work shall be the planned, systematic rehabilitation and development of heavy industry, such as mining, the iron and steel industry, power industry, machine-making industry, electrical industry and the main chemical industries, etc. At the same time, the production of the textile industry and other light industries beneficial to the national welfare and to the people's livelihood shall be restored and increased so as to meet the needs of the people's daily consumption.

Article 36. Communications: Railways and highways shall be swiftly restored and gradually extended. Rivers shall be dredged and water transportation expanded. Postal, telegraphic and telephone services shall be improved and developed. Various communications facilities shall be built up and civil aviation established step by step according to plan.

Article 37. Commerce: All legitimate public and private trade shall be protected. Control shall be exercised over foreign trade and the policy of protecting trade shall be adopted. Freedom of domestic trade shall be established under a unified economic state plan, but commercial speculation disturbing the market shall be strictly prohibited. State-owned trading organisations shall assume the responsibility of adjusting supply and demand, stabilising commodity prices and assisting the people's co-operatives. The People's Government shall adopt the measures necessary to encourage the people in saving, to facilitate remittances from overseas Chinese, and to channel into industry and other productive enterprises all socially idle capital and commercial capital which is not beneficial to the national welfare and/or to the people's livelihood.

Article 38. Co-operatives: The broad masses of working people shall be encouraged and assisted to develop co-operatives according to the principle of willingness. Supply and marketing co-operatives, as well as consumers', credit, producers', and transport co-operatives shall be organised in towns and villages. Consumers' co-operatives shall first be organised in factories, institutions and schools.

Article 39. Currency and Banking: Financial enterprises shall be strictly controlled by the state. The right of issuing currency belongs to the state. The circulation of foreign currency within the country shall be prohibited. The buying and selling of foreign exchange, foreign currency, gold and silver, shall be handled by the state banks. Private

financial enterprises operating in accordance with the law shall be subjected to supervision and direction by the state. All who engage in financial speculation and undermine the financial enterprises of the state shall be subjected to severe punishment.

Article 40. Public finance: A budget and financial statement system shall be instituted. The spheres of financial administration of central and local governments shall be defined. Economising and frugality shall be enforced. The budget shall be steadily balanced and capital accumulated for the country's production.

The tax policy of the state shall be based on the principle of ensuring supplies for the revolutionary war and taking into account the rehabilitation and development of production and the requirements of national construction. The tax system shall be simplified and an equitable distribution of the tax burden effected.

Chapter VII—FOREIGN POLICY

Article 57. The People's Republic of China may restore and develop commercial relations with foreign governments and peoples on a basis of equality and mutual benefit.

Appendix II

EXTRACTS FROM THE CONSTITUTION[1]

PREAMBLE

From the founding of the People's Republic of China to the attainment of a socialist society is a period of transition. During the transition the fundamental task of the state is, step by step, to bring about the socialist industrialisation of the country and, step by step, to accomplish the socialist transformation of agriculture, handicrafts and capitalist industry and commerce.

Chapter I—GENERAL PRINCIPLES

Article 3. The People's Republic of China is a unified, multi-national state. All the nationalities are equal.

Article 4. The People's Republic of China, by relying on the organs of state and the social forces, and by means of socialist industrialisation and socialist transformation, ensures the gradual abolition of systems of exploitation and the building of a socialist society.

Article 5. At present, the following basic forms of ownership of means of production exist in the People's Republic of China: state ownership, that is, ownership by the whole people; co-operative ownership, that is, collective ownership by the working masses; ownership by individual working people; and capitalist ownership.

Article 6. The state sector of the economy is a socialist sector owned by the whole people. It is the leading force in the national economy and

[1] The Articles here quoted from the Constitution of the People's Republic of China are those which have the most specifically economic bearing. The Constitution was adopted by the First National People's Congress in Peking on September 20, 1954. The text is given in *Documents of the First Session of the First National People's Congress of the People's Republic of China* (Peking, Foreign Languages Press, 1955), pp. 131-163. For a brief history of the Constitution, see Liu Shao-chi, "Report on the Draft Constitution," *ibid.*, pp. 11-12.

the material basis on which the state carries out socialist transformation. The state ensures priority for the development of state-owned economy.

All mineral resources and waters, as well as forests, undeveloped land and other resources which the state owns by law, are the property of the whole people.

Article 7. The co-operative sector of the economy is either socialist, when collectively owned by the working masses, or semi-socialist, when in part collectively owned by the working masses. Partial collective ownership by the working masses is a transitional form by means of which individual peasants, individual handicraftsmen and other individual working people organise themselves in their advance towards collective ownership by the working masses. The state protects the property of the co-operatives, encourages, guides and helps the development of the co-operative sector of the economy. It regards the promotion of producers' co-operatives as the chief means for the transformation of individual farming and individual handicrafts.

Article 8. The state protects the right of peasants to own land and other means of production according to law. The state guides and helps individual peasants to increase production and encourages them to organise producers', supply and marketing, and credit co-operatives voluntarily. The policy of the state towards rich peasant economy is to restrict and gradually eliminate it.

Article 9. The state protects the rights of handicraftsmen and other non-agricultural individual working people to own their means of production according to law. The state guides and helps individual handicraftsmen and other non-agricultural individual working people to improve their enterprises and encourages them to organise producers', supply and marketing, and credit co-operatives voluntarily.

Article 10. The state protects the right of capitalists to own means of production and other capital according to law. The policy of the state towards capitalist industry and commerce is to use, restrict and transform them. The state makes use of the positive sides of capitalist industry and commerce which are beneficial to national welfare and the people's livelihood, restricts their negative sides which are not beneficial to national welfare and the people's livelihood, encourages and guides their transformation into various forms of state-capitalist economy, gradually replacing capitalist ownership with ownership by the whole people; and this it does by means of control exercised by administrative organs of state, the leadership given by state-owned economy, and supervision by the workers.

The state forbids capitalists to engage in unlawful activities which

injure the public interest, disrupt the social-economic order, or undermine the economic plan of the state.

Article 11. The state protects the right of citizens to own lawfully-earned income, savings, houses and other means of life.

Article 12. The state protects the right of citizens to inherit private property according to law.

Article 13. The state may, in the public interest, buy, requisition or nationalise land and other means of production both in cities and countryside according to provisions of law.

Article 14. The state forbids any person to use his private property to the detriment of the public interest.

Article 15. By economic planning, the state directs the growth and transformation of the national economy to bring about the constant increase of productive forces, in this way enriching the material and cultural life of the people and consolidating the independence and security of the country.

Article 16. Work is a matter of honour for every citizen of the People's Republic of China who is able to work. The state encourages citizens to take an active and creative part in their work.

Article 19. The state deprives feudal landlords and bureaucrat-capitalists of political rights for a specific period of time according to law; at the same time it provides them with a way to earn a living, in order to enable them to reform through work and become citizens who earn their livelihood by their own labour.

Chapter II—THE STATE STRUCTURE

Article 27. The National People's Congress exercises the following functions and powers:

(9) to decide on the national economic plans;

(10) to examine and approve the state budget and the financial report.

Article 49. The State Council exercises the following functions and powers:

(7) to put into effect the national economic plans and provisions of the state budget;

(8) to control foreign and domestic trade;

(9) to direct cultural, educational and public health work;

(10) to administer affairs concerning the nationalities.

Chapter III—FUNDAMENTAL RIGHTS AND DUTIES OF CITIZENS

Article 91. Citizens of the People's Republic of China have the right to work. To guarantee enjoyment of this right, the state, by planned development of the national economy, gradually creates more employment, and better working conditions and wages.

Article 92. Working people in the People's Republic of China have the right to rest and leisure. To guarantee enjoyment of this right, the state prescribes working hours and holidays for workers and office employees; at the same time it gradually expands material facilities to enable working people to rest and build up their health.

Article 93. Working people in the People's Republic of China have the right to material assistance in old age, in case of illness or disability. To guarantee enjoyment of this right, the state provides social insurance, social assistance and public health services and gradually expands these facilities.

Article 94. Citizens of the People's Republic of China have the right to education. To guarantee enjoyment of this right, the state establishes and gradually extends the various types of schools and other cultural and educational institutions. The state pays special attention to the physical and mental development of young people.

Article 95. The People's Republic of China safeguards the freedom of citizens to engage in scientific research, literary and artistic creation and other cultural pursuits. The state encourages and assists creative work in science, education, literature, art and other cultural pursuits.

Article 96. Women in the People's Republic of China enjoy equal rights with men in all spheres of political, economic, cultural, social and domestic life.

The state protects marriage, the family, and the mother and child.

Article 100. Citizens of the People's Republic of China must abide by the Constitution and the law, uphold discipline at work, keep public order and respect social ethics.

Article 101. The public property of the People's Republic of China is sacred and inviolable. It is the duty of every citizen to respect and protect public property.

Article 102. It is the duty of citizens of the People's Republic of China to pay taxes according to law.

Appendix III

STATISTICAL TABLES

Table 1

SPECIFIC INDICES OF INDUSTRIAL PRODUCTION 1950-1952

	1950	1951 (1949 = 100)	1952
Pig iron	394	575	768
Steel	383	566	850
Rolled steel	299	571	921
Electric power	106	134	168
Coal	132	164	205
Crude oil	166	251	358
Cement	213	376	433
Machine tools	209	370	705
Cotton yarn	134	149	200
Cotton cloth	154	197	306
Paper	130	223	345
Wheat flour	95	147	233
Sugar	121	151	234
Matches	87	107	135
Cigarettes	116	125	163

Source: State Statistical Bureau, *Communiqué,* Annual Economic Summary (hereinafter *SSBC*), 1952.

Table 2

PRODUCTION IN STATE INDUSTRIES AS PERCENTAGE OF PLAN, 1952

Pig iron	111	Ammonium nitrate	156
Steel	118	Cement	99
Rolled steel	142	Plate glass	120
Electric power	99	Generators	73
Coal	106	Electric motors	118
Crude oil	110	Machine tools	112
Petroleum	127	Timber	102
Coke	106	Cotton yarn	106
Copper	110	Cotton cloth	109
Lead	108	Paper	103
Sulphuric acid	102	Tyres	102
Nitric acid	107	Rubber shoes	105
Caustic soda	123	Edible oils and fats	89
Soda	119	Sugar	156
Ammonium sulphate	104	Cigarettes	123

Source: SSBC, 1952.

Table 3

CURRENT RECEIPTS AND EXPENDITURES 1953-1956

		1953	1954	1955	1956 (ESTIMATED)
	(1) Percentage Distribution				
A.	*Receipts*				
	State enterprises	35.0	38.0	41.1	48.2
	Taxes	56.4	50.4	46.9	47.0
	Other	8.6	11.6	12.0	4.8
B.	*Expenditures*				
	Economic construction	48.4[a]	50.2	46.9	53.6
	Culture and education	16.3	14.1	10.9	13.1
	Defence	24.5	23.6	22.1	20.5
	Administration	11.1	8.8	7.3	8.0
	Other	1.7	3.4	12.8	4.8
	(2) Growth (1952 = 100)				
A.	*Receipts*				
	Total	114	139	144	157
	State enterprises	162	214	238	308
	Taxes	126	137	133	145
	Other	40	66	70	31
B.	*Expenditures*				
	Total	131	152	180	184
	Economic construction	142	169	188	220
	Culture and education	156	155	143	176
	Defence	122	136	152	144
	Administration	123	112	111	125
	Other	63	147	658	251

The sum of the separate expenditure items comes to more than 100 per cent. In 1953 expenditures on all items other than defence were lower than indicated. (See also Table 29, notes a and b, p. 185 above.)

Source: Po I-po, "Report on the 1953 State Budget, February 17, 1953," Hsinhua News Agency, Peking, *Daily News Release,* February 20, 1953; Teng Hsiao-ping, "Report on the 1954 State Budget," *NCNA,* June 24, 1954, Supplement No. 204; Li Hsien-nien, "Report on the 1955 State Budget," *NCNA,* July 14-15, 1955, Supplement No. 229, and "Report on the 1956 State Budget," *NCNA,* June 19, 1956,

Supplement No. 240, reprinted in *New China Advances to Socialism* (Peking, 1956). The above data exclude the carry-over from receipts and the surplus from expenditures. The percentage distribution figures in (1) are rounded to the first decimal place and not always additive; the figures in (2) are rounded to the nearest percentage point.

Table 4

PLANNED DISTRIBUTION OF STUDENTS IN HIGHER EDUCATION 1953-1957

	Number to be enrolled in 5 years (000)	Per cent of total	Number to graduate in 5 years (000)	Per cent of total	Number in 1957 (original target) (000)	Per cent of total	1957 as percentage of 1952
			(1) *All Higher Education*				
Total	543.3	100.0	283.0	100.0	434.6	100.0	230
Engineering	214.6	39.5	94.9	33.6	177.6	40.9	270
Teacher training	130.7	24.0	70.4	24.9	89.0	20.5	280
Medicine	57.6	10.6	26.6	9.4	54.8	12.6	220
Agriculture	41.8	7.7	18.8	6.6	37.2	8.6	240
Natural science	32.6	6.0	13.8	4.9	27.1	6.2	280
Arts faculties	29.3	5.4	21.6	7.6	20.4	4.7	150
Economics	16.4	3.0	25.5	9.0	12.7	2.9	60
Politics and law	10.6	2.0	4.8	1.7	9.3	2.1	240
Physical education	6.0	1.1	2.8	1.0	3.6	0.8	1,110
Fine arts	3.7	0.7	3.8	1.3	2.9	0.7	80

(2) *Engineering*

Total	214.6	100.0	94.9	100.0	177.6	100.0	270
Machine and tool making	54.1	25.2	19.3	20.4	46.1	26.0	400
Construction	37.4	17.4	25.1	26.4	28.2	15.9	160
Geology	17.5	8.1	10.0	10.5	12.5	7.1	220
Mining	16.0	7.4	7.6	8.0	12.4	7.0	260
Power	15.5	7.2	7.5	7.9	13.3	7.5	230
Chemical	10.6	5.0	5.1	5.4	9.1	5.1	220
Metallurgy	10.0	4.7	3.2	3.4	8.9	5.0	400
Transport and communications	9.6	4.5	4.7	5.0	8.5	4.8	200
Electrical machinery	9.4	4.4	1.7	1.8	8.8	5.0	870
Surveying, etc.	4.6	2.2	2.1	2.3	3.5	1.9	270
Light industry	4.4	2.0	3.3	3.4	3.6	2.0	140
Paper and lumber	0.7	0.3	0.6	0.6	0.6	0.3	130
Other	24.8	11.6	4.7	4.9	22.1	12.4	410

Source: State Council, *The First Five Year Plan* (Peking, Chinese language, 1955), pp. 120-121. Percentage increases in the last column have been rounded to the nearest ten percentage points.

Table 5

MERCHANDISE TRANSACTIONS 1946-1948
(U.S. $ million)

	1946		1947		1948	
	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS
Maritime Customs returns	152	565	231	480	168	209
Adjustments for undervaluation and smuggling	30	113	46	96	67	31
Barter	23	5	14	—	13	4
U.S. Lend-Lease and Special Aid	—	79	—	14	—	—
U.S. Surplus Property	—	59	—	—	—	—
UNRRA	—	340	—	250	—	—
U.S. Post-UNRRA	—	—	—	5	—	44
U.S. Economic Aid	—	—	—	—	—	96
U.S. Military Assistance	—	—	—	—	—	72
Total	205	1,161	291	845	248	456

Source: U.N., International Monetary Fund, *Balance of Payments Yearbook 1948 and Preliminary 1949,* p. 114.

Table 6

PERCENTAGE DISTRIBUTION OF FOREIGN TRADE 1937-1948[a]

	1937		1938		1946		1947		1948	
	IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS
United Kingdom	11.7	9.6	7.9	7.4	4.6	4.4	6.9	6.6	8.1	3.9
Hong Kong	2.0	19.5	2.8	32.0	4.5	28.2	1.9	34.8	1.5	31.4
Japan[b]	17.2	13.0	32.5	21.7	0.4	3.1	1.7	1.9	0.9	5.5
United States	19.8	27.5	16.9	11.3	57.2	38.7	50.2	23.3	48.4	29.1
Germany[c]	15.3	8.6	12.6	7.4	0.4	—	—	—	—	0.2
Eastern Europe	1.4	0.7	0.6	0.1	1.1	5.0	0.7	1.5	1.3	3.2

[a] Chinese imports from and exports to the countries listed. The 1937-1938 returns exclude the Northeast and Taiwan.
[b] For 1937-1938 Japan includes Taiwan and the Kwantung Peninsula.
[c] For 1946-1948, Western Germany.

Source: League of Nations, *International Trade Statistics 1938;* U.N., *Economic Survey of Asia and the Far East 1950.*

Table 7

COMPOSITION OF EXPORTS, ANNUAL AVERAGE 1935-1937

Commodities	Average Value (U.S. $ million)		Per Cent of Total	
Food and tobacco, total		56.1		25.2
Eggs, dried, frozen and fresh	13.2		6.0	
Tea	9.6		4.3	
Peanuts, nuts and fruit	7.7		3.5	
Vegetables and beans	7.2		3.2	
Sausage casings, pigs and meat	6.3		2.8	
Millet, oilcake and bran	4.8		2.1	
Tobacco leaf	2.6		1.2	
Other	4.7		2.1	
Agricultural raw materials, total		86.4		38.9
Tung oil	21.1		9.5	
Other oils, seeds and fats	14.1		6.4	
Raw silk and pongee	14.1		6.3	
Raw cotton	8.4		3.8	
Bristles	7.2		3.2	
Sheep wool and camel's hair	5.8		2.6	
Goat and lamb skins	4.8		2.2	
Hides, skins and leather	7.2		3.2	
Other	3.7		1.7	
Minerals, total		22.2		10.0
Tin	9.0		4.1	
Tungsten	5.8		2.6	
Antimony	3.1		1.4	
Iron ore	1.2		0.5	
Coal	3.1		1.4	
Manufactures, total		33.1		14.9
Cotton yarn and piece goods	6.1		2.8	
Cotton and silk waste	3.9		1.7	
Lace, thread and embroideries	4.6		2.1	
Linen embroideries	4.9		2.2	
Rugs and mats	5.1		2.3	
Other textiles	2.9		1.3	
Other	5.5		2.5	
Miscellaneous		24.3		11.0
Total		222.1		100.0

[a] Excluding the Northeast; figures are rounded to the nearest first decimal place and therefore not always additive.

Source: Chih Tsang, *China's Postwar Markets* (New York, 1945), pp. 129-130.

Table 8

COMPOSITION OF IMPORTS, ANNUAL AVERAGE 1935-1937

Commodities	Average Value (U.S. $ million)		Per Cent of Total	
(1) Machinery and tools, iron and steel, non-ferrous metals, transportation equipment, timber and cement, total		90.5		30.2
Machinery and tools	30.0		10.0	
Iron and steel	28.8		9.6	
Automobiles and bicycles, ships and planes	8.8		2.9	
Non-ferrous metals	6.8		2.3	
Railway equipment	5.5		1.8	
Timber and cement	10.7		3.6	
(2) Petroleum products, fuel, dyes, chemicals, cotton, wool and rubber, total		81.6		27.3
Petroleum products	30.8		10.3	
Dyes	12.3		4.1	
Chemicals and pharmaceuticals	16.0		5.3	
Cotton	10.2		3.4	
Wool	4.4		1.5	
Fuel and wood	4.8		1.6	
Rubber	3.2		1.1	
(3) Foodstuffs and tobacco, total		54.2		18.1
Rice, wheat and flour	27.8		9.3	
Sugar	7.6		2.5	
Tobacco	5.2		1.7	
Other foodstuffs	13.6		4.5	
(4) Other consumer goods, total		73.0		24.4
Cotton, woollen and rayon yarn and manufactures	15.0		5.0	
Paper and books	18.5		6.2	
Flax, linen, jute and manufactures	5.4		1.8	
Sundries	34.1		11.4	
Total		299.3		100.0

[a] Excluding the Northeast; figures are rounded to the nearest first decimal place and therefore not always additive.[a]

Source: Chih Tsang, *China's Postwar Markets* (New York, 1945) pp. 114-115.

Table 9

MAIN COMMODITY EXPORTS AND IMPORTS 1950

(By percentages of total exports and imports)

EXPORTS		IMPORTS	
A. By commodities		A. By commodities	
Soya beans	14.4	Cotton	18.0
Tung oil	7.0	Rubber	11.5
Bristles	6.7	Iron and steel	11.3
Fats and oils	5.4	Machinery	8.3
Peanuts, shelled	4.7	Petroleum	6.2
Eggs and products	4.7	Pharmaceuticals	4.0
Wool	4.1	Vehicles	3.2
Tea	3.3	Gunny bags	3.0
Total	50.3	Total	65.5
B. By categories		B. By categories	
Food	16.3	Food	3.0
Raw materials	42.4	Raw materials	29.5
Oils and fats	12.4	Mineral oils	8.4
Others	28.9	Chemicals	10.3
		Machinery and metals	26.1
		Other manufactures	5.5
		Others	17.2
Total	100.0	Total	100.0

Source: U.N., *Economic Bulletin for Asia and the Far East* (November 1953), p. 27.

Table 10

BRITISH TRADE WITH CHINA 1952-1955

(£000)

IMPORTS	1952	1953	1954	1955
Dairy products, eggs	821	3,741	2,773	1,884
Fruits and vegetables	[336]	[339]	[477]	[376]
Tea	[122]	[132]	[524]	[411]
Hides and skins	[210]	[266]	[118]	[101]
Oil seeds and nuts	301	300	108	34
Wool and animal hair	3	1,812	1,266	2,563
Miscellaneous animal and vegetable materials	42	511	1,247	2,038
	[359]	[589]	[1,297]	[526]
Animal and vegetable oils	101	2,023	1,082	1,034
	[1,790]	[2,102]	[34]	[32]
Chemicals	69	328	776	1,458
	[658]	[297]	[300]	[260]
Miscellaneous textile manufactures	110	250	490	728
All others	1,565	1,257	1,217	2,622
Total	3,012	10,222	8,959	12,361
	[3,475]	[3,725]	[2,750]	[1,706]
EXPORTS				
Wool, total	727	3,558	3,565	5,177
Wool tops	714	3,095	3,340	5,091
Chemicals	2,789	847	1,470	1,775
Machinery, total	546	900	901	149
Textile machinery	498	255	63	78
All others	479	856	891	767
Total U.K. exports	4,541	6,161	6,826	7,868
Re-exports	40	105	93	78
Grand total	4,591	6,266	6,919	7,946

Source: Board of Trade, *Trade of the United Kingdom with Selected Countries: 1954 Compared with the Years 1952 and 1953,* pp. 42 and 72-74, and Board of Trade, *Trade and Navigation Accounts,* December 1955. The figures in brackets are for United Kingdom imports from Hong Kong clearly originating in China, although there may have been some blending or processing performed in Hong Kong. There is no way of separating out items appearing in the trade returns as exports to Hong Kong which are re-exported to China.

Appendix IV

LIST OF WORKS CITED

ABBREVIATIONS AND SHORT TITLES
(Full titles appear below)

Board of Trade Report	Board of Trade, *Report of the United Kingdom Trade Mission to China*
NCNA	*New China News Agency Bulletin*
Political Report	Liu Shao-chi, *Political Report of the Central Committee*
Proposals for the Second Five-Year Plan	*Proposals of the Eighth National Congress for Development of the National Economy*
Report on Proposals	Chou En-lai, *Report on the Proposals for the Second Five-Year Plan*
SSBC	State Statistical Bureau, *Communiqué,* Annual Economic Summary

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NOTE: Due to limitations of space, bibliographical material, footnote citations and most proper names quoted or mentioned in passing are omitted from the index. The reader is referred to Appendix IV.

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