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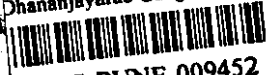
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CHINA TO-DAY:
ECONOMIC

BY

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WORLD PEACE FOUNDATION

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PREFACE

THE review of economic conditions and possibilities in China contained in the following pages would not have been possible if it had not been for the utilization of research work from many hands. There can be little that is original in any attempt to survey briefly the economic problems of a continent. The author desires to express his thanks to those whose patient field work has thrown so much light upon the real difficulties with which China is faced. This field work is being done under conditions of extreme difficulty and no one who has any first-hand knowledge of it can fail to admire the resourcefulness and determination with which it is carried through.

In the preparation of this volume the author has leaned heavily upon the important material provided by the research workers, particularly at the University of Nanking under the leadership of Professor J. Lossing Buck and at Nankai University under Professor Franklin L. Ho. He has received valuable advice and criticism also from Professor Leonard Hsu of Yenching University, Mr. D. K. Lieu and Mr. W. L. Holland. For the interpretation and arrangement of the material, however, the author is wholly responsible.

J. B. CONDLIFFE

ANN ARBOR, MICHIGAN
August 1, 1931

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**CHINA TO-DAY:
ECONOMIC**

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CHAPTER I

THE CHINESE PEOPLE

(i) *Origins and Early Growth*

The origins of the Chinese are lost in the impenetrable mists of antiquity. Although there is an impressive mass of historical information still not thoroughly exploited, not even these unique records suffice to answer the fundamental questions that present themselves to those who would discover reasons for the power of survival shown by this amazing people. There is seemingly little reliable knowledge of what constitute the essential characteristics of the Chinese. It appears clear that aboriginal elements preceded them in the occupation of their land and that in certain areas these aboriginal elements have contributed a large admixture to the present population.¹ There are also tempting suggestions such as those advanced by students of the Pacific island peoples, that the first progenitors of the vigorous Polynesian navigators, sweeping in their migrations past the southern coast of China, contributed something to the vigor and restlessness of the southern Chinese; or the more definite suggestion that there

¹Cf. L. H. Dudley Buxton, *The Peoples of Asia* (New York, Knopf, 1925), and *China: The Land and the People* (New York, Clarendon Press, 1929), p. 40-60; also L. Dudley Stamp, *Asia* (New York, E. P. Dutton, 1929), p. 469.

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is a substantial Tibetan element in the taller northern Chinese. The Chinese themselves speak of the five races formerly represented on the five-barred flag of the republic—Chinese, Mongols, Manchus, Tibetans and Moslems. These, however, are not pure racial types, if indeed there be any such types.

Whatever their origins and their elements, the Chinese to-day "do not present the characters of a mixed people."² Whether their homogeneity and absorptive capacity—as shown by the fact that they alone have absorbed and assimilated both Jews and Moslems—is due to some inherent strength of physical energy or to the cumulative force of the oldest traditional culture the world can now show, is a question beyond the scope of this volume. The fact, however, is clear. Until modern times their civilization was powerful enough to encyst and finally absorb all alien elements. It was not till the white man battered his scientific, forceful way through their outer walls that this capacity broke down. The machine civilization alone has proved to be beyond the digestive powers of the old traditional order.

There are speculations concerning the original center of dispersion within China, but not a great deal of evidence to support them. It is said that human remains prove that men were living in the Yellow River valley before the wind-blown deposits of loess were laid down in its upper reaches.³ It is regarded as probable that this was the main center of dispersion. Recorded history, ranging over more than 3,000 years, discloses leadership creating new kingdoms,

² Buxton, *China: The Land and the People*, p. 49.

³ *Ibid.*, p. 42.

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sometimes from the south, sometimes from the north and sometimes from outside the boundaries of the Middle Kingdom. During this period, population was more or less widely dispersed over the whole of the area which still remains China. The multiplication of population has, however, in more recent periods, taken the form of a thickening density, rather than an expansion into new lands.⁴

The records of this multiplication are more complete for the early periods than in any other land. From 2698 B.C. to 246 A.D. the governing powers in China financed themselves by a system of land allotment, known as *Ching-t'ien* (tsing-tien), under which the land was divided into squares as the units necessary for support of a family.⁵ These were grouped into large squares of nine units, the central square belonging to the government but cultivated by the owners of the surrounding eight.

When this system was abolished in 246 A.D., revenue was raised by means of land taxation, supplemented by other taxes, and particularly by a poll tax levied on households. There were censuses before this date, showing considerable populations estimated as high as 55 millions in the first year of the Christian era; but from 246 A.D. regular censuses were necessary for fiscal purposes as a basis of assessment for the land tax and poll tax. Until 1712, when the system was changed, it is probable that the numbers were at least not overestimated. The record shows a fairly

⁴ Different units of measurement as well as scanty and unreliable information make it difficult to estimate the amount of cultivated land at different periods. Agriculture was always on a small scale, but as population grew new land was taken up, not in great colonizing movements but by a spreading from many centers or nuclei.

⁵ Chungshen S. Chen, *The Chinese Census of Population Since 1912* (Tokyo, International Institute of Statistics, 1930); Mabel Ping-Hua Lee, *The Economic History of China* (New York, 1921), Chap. II.

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steady growth until, by 1712, the population appears to have been roughly equal to that of the United States at the present time, *viz.*, 120 millions.⁶

At that date the poll tax was abolished so that a considerable incentive to underestimation was thus removed.⁷ "The census was divorced from the fiscal system." The immediate result was a considerable jump in the population figures, and from this time onwards the estimates are more variable and apparently more questionable. In one year alone (1774) 43 millions were added, apparently as a piece of flattery designed to assure the ruling emperor of the prosperity of the kingdom under his beneficent sway.⁸ Largely because of this known error, which was carried forward in cumulative estimates, many Western scholars are inclined to "reject all official figures for the period between 1711 and 1912, when they seem to have been used not for any administrative purpose, but only to give pleasure to the emperor and his gods." Many competent Chinese scholars on the other hand reject such a sweeping statement and attach considerable value to the census figures of this period. The increase of population between 1712 and modern times is, however, a matter of much speculation and can be guessed at, pending the completion of an accurate modern census, only by indirect methods of statistical induction. It is necessary, therefore, to examine the most recent discussions of this problem in order to arrive at some notion of the probable population of China at the present time.

⁶ Chang-heng Chen, *China's Population Problem* (Tokyo, International Institute of Statistics, 1930).

⁷ *Ibid.*, p. 436-7.

⁸ *Ibid.*, p. 5, and Walter F. Willcox, "A Westerner's Effort to Estimate the Population of China and Its Increase Since 1650."

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(ii) *Estimates of Present Population*

In the year 1910 the Imperial Government took the last of the old censuses. Although the previous decennial census of 1900 had given a figure of 440 millions, the 1910 estimate amounted to only 330 millions for China proper. This result was hailed by the American minister, W. W. Rockhill, and other foreign observers, as the "first official Chinese attempt at a real enumeration of the population . . . entitled to more confidence than the enumerations which have heretofore appeared."⁹ The lower figure corresponded fairly well with the conclusions Rockhill had reached in an earlier paper (1904), the chief of which was that the population of China proper at that date did not exceed 275 millions and was probably "considerably under that figure." The chief bases for Rockhill's opinion seem to have been his discovery of the padding in previous census returns, and his belief that the proper multiplier for converting the number of households into a figure for total population was four rather than five members per family.¹⁰

Despite successive official estimates since 1910, all of them in excess of 400 millions and the latest just published (April, 1931) of 474 millions,¹¹ there has persisted a strong body of opinion, mainly among Western scholars, that the true figure is probably nearer 300 than 400 millions. The outstanding exponent of this view has been Professor Walter F. Willcox of Cornell University. In his latest estimate, after making considerable concessions to meet

⁹ W. W. Rockhill, *Bulletin of the American Geographical Society*, Vol. XLIV (1912), p. 668-673.

¹⁰ W. W. Rockhill, "An Inquiry into the Population of China," *Report of the Smithsonian Institution for 1904*, p. 659-676.

¹¹ *Pacific Affairs*, April, 1931, p. 343.

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criticism of his previous work, Willcox puts forward 323 millions as a provisional figure. This figure, moreover, he considers to have remained unchanged since 1850, believing that successive wars and calamities have prevented any increase in the total population during the last eighty years.¹²

That this controversy is of more than academic importance may be judged from the important inference drawn by Rockhill in 1912, when he concluded that "it seems certain that China could support a much larger population than it now has." Such an inference was bound to have considerable influence upon Chinese opinion and policy. It is said that Dr. Sun Yat-sen himself was in later life greatly influenced by Rockhill's work and there remains a considerable and important body of opinion in China inclined to discount the fear of overpopulation, and even to feel anxiety over the apparent stagnation or actual decrease of numbers. This opinion is reflected in a disinclination to face the facts of population pressure, and in policies aiming solely at redistribution of the people and industrial development—policies good in themselves, but not adequate to counteract the dangers of overpopulation. It is a serious matter for China since, as one of her leading experts has recently written, "any undue underestimation . . . renders it more difficult to adopt any consistent population policy in the near future."¹³

It is conceded that the statistical methods used by such foreign scholars as Willcox are technically sound, and also that the methods of recent official censuses showing much higher figures leave a good deal to be desired. The Chinese

¹² Walter F. Willcox, *op. cit.*

¹³ Chang-heng Chen, *op. cit.*

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Post Office figures, for example, which are among the highest recorded, are based upon local estimates.¹⁴ The high figure of 474 millions quoted above is the result of similar estimates by the Ministry of the Interior, while the Chinese Maritime Customs methods are even more indirect, being based upon statistics of the consumption of common products such as salt, and showing in consequence obvious internal discrepancies.¹⁵

On the other hand, not only modern well-trained scholars like D. K. Lieu and Chang-heng Chen, but also Western scholars familiar with the Chinese background, such as J. Lossing Buck, J. B. Tayler and George B. Cressey, accept the higher figures as more likely to indicate the correct order of magnitude.¹⁶ Apparently convincing arguments have been offered to show that the 1910 census on which Rockhill and Willcox have mainly relied, so far from being "entitled to more confidence than the enumerations which have heretofore appeared," was, as a matter of fact, seriously defective. It is contended that the census was really part of a sham constitutional movement by the tottering Manchu government, and that there were definite reasons for underestimation.¹⁷ If the validity of these criticisms be accepted, the estimates of population which proceed from the 1910 census as a basis, no matter how scientific and careful they may be, cannot be accepted.

While, therefore, there can as yet be no certainty as to

¹⁴ The latest estimate, 1926, is 485 millions.

¹⁵ *Nankai Weekly Statistical Service*, IV, No. 5, February 2, 1931.

¹⁶ Chang-heng Chen, *op. cit.*; D. K. Lieu, *Statistical Work in China* (Tokyo, International Institute of Statistics, 1930); G. B. Cressey, *The Geography of China* (Shanghai, Commercial Press, 1931); J. B. Tayler, *Farm and Factory in China*, S. C. M., 1928, p. 30-32; J. L. Buck, "Agriculture and the Future of China," *Annals Amer. Acad.*, November, 1930, p. 109-115.

¹⁷ See especially D. K. Lieu, *op. cit.*

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the facts, and while it is true that "the population of China must be determined in the end upon evidence obtained by the government of that country and accepted after analysis by scholars both in and out of China,"¹⁸ yet the probability would seem to be that the Chinese and foreign scholars who are actually working close to the raw material are best able to form interim judgments. Almost unanimously they discount the lower figures and state their belief that the population of China is well over 400 millions. In a closely reasoned and detailed survey of the whole question prepared for the Tokyo meeting (1930) of the International Institute of Statistics, Chang-heng Chen concludes that the approximate figure is about 457 millions. D. K. Lieu, after quoting the returns already received in the 1928-9 census, appears to place the total between 470 and 480 millions. M. T. Z. Tyau, supplementing the 1928 census returns for several provinces by the Chinese Post Office estimates for 1926 (which are generally considered 5-10% too high), arrives at a total of 463 millions.¹⁹ Warren H. Chen, using the same figures of the 1928 census for twelve provinces, and basing his estimate upon the average rate of increase, gives a figure of 445 millions. The provisional results of the 1928-9 census taken by the Ministry of the Interior, have recently been published as 474 millions.

While there is a considerable spread in these estimates (from 445 to 474 millions) and there is obviously a considerable margin of error still remaining, the consensus of opinion is that the higher rather than the lower order of

¹⁸ W. F. Willcox, *op. cit.*

¹⁹ M. T. Z. Tyau, *Two Years of Nationalist China* (Shanghai, Kelly and Walsh, 1930).

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magnitude for China's population is correct. In considering the economic problems of China it would apparently not be safe to reckon upon a lower figure for the total population than 450 millions.

(iii) *Rates of Increase*

A good deal of the controversy just discussed has centered about the "multiplier" or figure to be used in calculating the total population from the number of households. Rockhill's opinion that 4 was the average number of members in the family is now generally admitted to be too low and expert opinion accepts the former official estimates in the neighborhood of 5 persons to the family as being more correct. Sample studies made for various purposes seem to bear out this latter figure.²⁰ Evidence accumulates also to indicate that, despite all China's troubles and the grievous loss of life by famine, flood, war and pestilence, there is, over reasonably long periods, a distinct tendency towards a moderate rate of natural increase. In a paper read to the Madrid (1931) meeting of the International Institute of Statistics, D. K. Lieu has suggested that "the Chinese population is growing, not at constant rates of increase, but at high rates alternating with low ones, or through increases alternating with decreases." The 1928 census returns for eight provinces in regard to which comparable data were

²⁰ Chang-heng Chen, *op. cit.*, p. 11-15; J. Lossing Buck, *Chinese Farm Economy* (Chicago University Press, 1930), Chap. IX; Leonard Hsu, "Some Aspects of the Chinese Population Problem," *Chinese Social and Political Science Review*, July, 1930, p. 21; Sung-ho Liu, *Factory Workers in Tangku* (Social Research Dept., China Foundation, 1928), Chap. V-VI; L. K. Tao, *Livelihood in Peking* (Social Research Dept., China Foundation, 1928), Chap. IV; C. M. Chiao and J. Lossing Buck, "The Composition and Growth of Rural Population Groups in China," *Chinese Economic Journal*, March, 1928; D. K. Lieu, *The 1912 Census of China* (Madrid, 1931), p. 6.

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collected for 1912 show an annual average rate of increase for the period of 7.8 per thousand. Chang-heng Chen in his calculations assumes that the annual rate of increase between 1890 and 1930 was the same as that between 1796 and 1850, *viz.*, 6.6 per thousand; but in another place he has estimated that, from 1910 to 1928, there was an annual average rate of increase of approximately 10 per thousand. Such figures are not as high as those recorded more precisely for such countries as Japan, Russia and India; but they are higher than those for the United States, England and Wales, and France.²¹

The possibility of even a small rate of natural increase in the Chinese population is a matter of considerable importance. While there is no absolute evidence that such an increase is taking place, and it is obvious that in particular years natural calamities may wipe out large numbers of the people, yet the probability seems to be that over reasonably long periods of time, some tendency to increase exists. The magnitude of the possibilities is impressive. A people of 450 millions increasing at the rate of 7.8 per thousand annually would gain almost 37 millions in ten years.²² While this may be regarded as on the whole improbable, it is to be remembered that the population of India between 1872 and 1921 increased by 53.8 millions, apart from the growth in figures caused by the inclusion of new

²¹ Comparable figures for other countries are: U. S. S. R. (1923-8) estimated at 20-22; Japan (1925-9) 13.9; India (1924-8) 8.5; United States (1924-8) 7.5; England and Wales (1926-30) 4.6; France (1926-30) 1.4.

²² Articles by H. P. Howard (*China Critic*, Vol. 11, Nos. 22-5) estimate the annual rate of increase at 11.30 per thousand and, the author adds, "the rate of increase shown in the past nineteen years means doubling the population in about fifty years. If the population increase during the next three decades is at the same rate as during the last two, China will have within its borders a population of over 750,000,000 by 1960."

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areas and improvement in the methods of census taking.²³ The population of Japan, also, increased from 39.6 millions in 1888 to 65.7 millions in 1929, an average yearly increase of about 1.6%.²⁴ The Dutch East Indian Empire has shown even more rapid growth in recent years, and it is well, therefore, to keep an open mind concerning the possibilities of increase in the Chinese population.

The probability that some increase is already taking place is borne out by the fragmentary evidence available concerning birth and death rates, marriage ages, and age- and sex-grouping. Though China is such an old and stable population, there is some evidence that the age-grouping is more concentrated in the reproductive ages than is the standard population. A sample survey by J. Lossing Buck showed 31.55% between the ages of 20 and 39 as compared with 26.96% for Sweden, while the percentage over 60 years was only 4.23 as against 11.46 in Sweden. Such an age distribution would naturally tend towards a high birth rate.

The predominant masculinity of the younger population has probably been somewhat exaggerated by the fact that most of the sample studies so far made have been carried out in cities, to which young adult males are naturally drawn by economic opportunities, and in which economic pressure tends to encourage female infanticide.²⁵ Even in the country districts, however, the proportion of males to females is somewhat higher than the average, possibly because of the nonenumeration of girl babies, possibly also because of in-

²³ Data from *The Moral and Material Progress of Conditions in India during 1929-30*.

²⁴ *Résumé Statistique de l'Empire du Japon* (Tokyo, 1931).

²⁵ J. Lossing Buck, *op. cit.*, p. 339. See also D. K. Lieu, *The 1912 Census of China*, p. 7-8.

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fanticide, neglect or disposal of girl babies in times of stress. The disproportion of the sexes in the reproductive ages does not, however, appear to be very noticeable.²⁶

The age at marriage is low, approximately 20 years for males and 18 years for females. In Japan the corresponding figures are higher and rising.²⁷ The earlier marriage ages in China mean not only that the sexes succeed each other more rapidly but also that the reproductive periods are lengthened and that fecundity is greater in the early years of marriage.

It is not surprising, therefore, to find that all estimates agree that the birth rate is very high. Exact figures are not obtainable; but a sample investigation by C. M. Chiao and J. Lossing Buck indicates a rate of 42.2 per thousand.²⁸ Chang-heng Chen is of the opinion that, if completely recorded, the rate would be about 45 per thousand, higher than that of prewar Russia. E. A. Ross would place the figure higher still, at approximately 50 per thousand.²⁹

It is clear that such a high percentage of reproduction would make possible a progressive natural increase even in face of abnormally high death rates, and their concomitant, a low expectation of life, especially in the earlier ages. Statistics of deaths, especially in infancy, are all but impossible to ascertain; but it is probable that they are very

²⁶ J. Lossing Buck, *Chinese Farm Economy*, p. 340-345; C. B. Malone and J. B. Tayler, "The Study of Chinese Rural Economy," *Chinese Political and Social Science Review*, October, 1923, and April, 1924; Leonard Hsu, *Some Aspects of the Chinese Population Problem*, p. 5-13; "Population Statistics in Shansi," *Nankai Weekly Statistical Service*, July 13, 1931.

²⁷ J. Lossing Buck, *op. cit.* The *Nankai Weekly Statistical Service*, *op. cit.*, shows that in Shansi the most common age of parenthood is 21-25 for females and 26-30 for males, whereas in Australia the corresponding figures are 30-34 for females and 35-40 for males.

²⁸ C. M. Chiao and J. Lossing Buck, *op. cit.*, p. 6.

²⁹ Chang-heng Chen, *op. cit.*, p. 6.

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high. Even so, it seems probable that the great and uncontrolled fecundity of the Chinese people yields a fairly steady if moderate tendency to natural increase. The appalling misery and waste of human energy involved in excessive propagation, together with the great preventible loss of life, is not the least of China's problems. Nowhere else is the burden of motherhood so great an obstacle to social progress.

If, as seems likely from the experience of other peoples, the gradual introduction of modern scientific methods of public sanitation, personal hygiene and maternal care brings as one of its results a progressive lowering of death rates and especially the rate of infant mortality, the natural increase of the population will be stimulated. It was this factor more than any other which brought about the rapid increase in numbers of the European countries during the nineteenth century. The Japanese death rate, which has increased somewhat between 1870 and the present time, must not be interpreted as disproving this probability, since its apparent increase is due to an increasing birth rate with the consequential weighting of infant mortality.⁸⁰ The death rate by age groups tends to decrease in Japan as in every other country where modern science is actively at work.

In China the Health Section of the League of Nations, working in collaboration with the National Government and with private institutions, began in 1929 an extended scheme of health reconstruction in three provinces.⁸¹

⁸⁰ N. Yamasaki in *Problems of the Pacific, 1927* (Chicago University Press, 1928), p. 364.

⁸¹ League of Nations: Health Organization, *Proposals of the National Government of China for Collaboration with the League of Nations in Health*

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While it would be unreasonable to look for large immediate results, the very existence of such a scheme, supplementing the gradual improvement of education and the introduction of scientific ideas, indicates the probability that China's death rate will in course of time be brought under control.⁸²

(iv) *The Density of Population*

General observation confirms the fragmentary statistical material pointing to increasing population in China. Progressive subdivision of landholdings, the extension of cultivation to marginal lands on hillsides, further encroachments on the already depleted forest areas, crowding into towns, an increasing volume of migration northward to Manchuria and southward to such regions as British Malaya, a pushing out of the frontiers of settlement into the grasslands of Inner Mongolia, and a lowered standard of living—all these, while not conclusive and partly explainable by other causes, are presumptive evidence of increasing pressures of population upon available resources. The very fact of long-continued civil strife points, as it has pointed throughout Chinese history, to the same conclusion. As Mencius wrote in the 4th century B.C., "an increasing population over a long period of time brings about strife and disorder."⁸³

Matters, L. of N. Doc. C. 118. M. 38. 1930; and League of Nations: Health Committee, "Minutes of the Fifteenth Session," L. of N. Doc. C. 190. M. 90. 1930.

⁸² The *Nankai Weekly Statistical Service*, July 13, 1931, has figures which illustrate the possibility of reducing the death rates. For Shansi in 1923 the death rate for measles was 183.3 per 100,000 as compared with 8.8 in the United States. This and similar figures for common diseases susceptible of control by measures of preventive health are very significant.

⁸³ Mencius, quoted J. Lossing Buck, *Chinese Farm Economy*, p. 353. C. M. Chiao and J. Lossing Buck, *op. cit.*, p. 224 may also be quoted: "The

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Among the most significant of these indications must be reckoned the very great and apparently increasing densities of population recorded in many parts of China. For China as a whole the estimated density, though large, is not as great as that of Japan, and still less than that of highly industrialized countries. But a generalized average for such a vast territory is not very significant. One should compare the average density for China as a whole with that for Europe as a whole rather than with that for smaller highly developed areas. Within the total area of China some astonishing densities have been calculated, densities higher than those recorded for similar crowded agricultural regions either in India or in Japan. Walter H. Mallory quotes an estimate of 6,880 per square mile in a northern famine region.²⁴ While it is perhaps legitimate to entertain some doubts and reservations about the accuracy of this figure, there are other estimates quite high enough to be impressive. The figure of 2,000 per square mile for the plain of Ch'engt'u is sufficiently large to prove the fact of tremendous pressure upon resources.

data confirm the opinion of those who from careful observation and experience have concluded that China's population is increasing. Some of the outward signs that may be the result of such increase are:—1. More crowded housing. 2. The increase of the number of residents with the consequent increase in size of villages and also in their number. 3. Increase of the number of teahouses along the road. 4. Increase of fuel gatherers along the mountain sides. 5. No shortage of farm laborers despite the emigration to the cities. 6. Emigration of country boys to the cities. 7. Increase of land values at a rate more rapid than that of wages. 8. Decrease in the size of farms. 9. The cultivation of new lands. 10. The growing of more intensive crops. 11. The cultivation of crops more intensively. 12. Development of home industries subsidiary to farming. 13. Emigration to less densely populated regions. 14. Increase in bandits, robbers, beggars and troublemakers. 15. The increased ease with which the landlord can obtain tenants and the difficulty tenants have in securing land for farming."

²⁴ Walter H. Mallory, *China: Land of Famines*. (American Geographical Society, 1926), p. 15. See also the detailed survey from which this figure is taken, Malone and Tayler, *The Study of Chinese Rural Economy*, p. 5.

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J. Lossing Buck found an average density in seventeen scattered localities of 839 persons per square mile of crop area, the highest figure recorded in his investigation being 1,277 for a district in Fukien.⁵⁵ The most recent census (1928-9) shows a density for the whole province of Kiangsu of 813 persons to the square mile, not of cultivated ground but of total area. Moreover, every province so far recorded, without exception, shows a substantial increase in population.⁵⁶

These facts are reinforced again by the statistics showing the average holdings of cultivated land per capita. Even in 1865 the size of holding was only 5.43 mow (less than one acre) per head of population and a comparable series of figures shows a steady decline to 2.67 mow in 1900. A later figure for 1916 shows 3.38 mow, but this is not comparable with the others since it is based upon more complete records of cultivated land and includes also a greater acreage in Manchuria where, under the conditions of frontier settlement, holdings are naturally larger.⁵⁷

(v) *The Pressure of Population*

The array of statistical evidence cited above, fragmentary and inconclusive as it must be, is perhaps sufficient proof that the fundamental problem of China is overpopulation. This is the opinion of the best Chinese students and corroborates the general observation of most Western scholars. No one has stated it in more forceful terms than Dr. Sun Yat-sen, when he wrote in 1894:

At present China is already suffering from overpopulation which will bring impending danger in its wake. She is con-

⁵⁵ J. Lossing Buck, *op. cit.*, p. 351.

⁵⁶ Warren S. Chen, *op. cit.*

⁵⁷ Chang-heng Chen, *op. cit.*

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fronted with a great many hidden uprisings and frequent famines. It is extremely difficult for the populous masses to make a living even during good years, and in time of great drought and famine many people will starve to death. Our food problem is already very acute. The situation will be much worse as time goes on. If we take no timely means of remedy it will surely worry us.⁸⁸

In any examination of the economic as distinct from the political situation in China, these somewhat familiar facts of overpopulation must inevitably be put in the foreground of the problem and emphasized repeatedly. They constitute China's greatest, most fundamental and most pressing difficulty, and stand in the way of all schemes for the betterment of her economic life. Essentially they constitute a domestic problem, the solution of which must be found by the Chinese people themselves. Foreign interference can have had little influence upon them, and foreign assistance can be of little avail. Behind them lie social attitudes and conditions which only Chinese can fully estimate and comprehend and which only they can change.

No conceivable volume of emigration either to other lands, or to less thickly settled regions within China itself, can cope with an annual increase that may run into millions. Nor does the experience of other lands enable much hope to be placed upon industrial progress drawing a sufficient volume of rural workers into profitable urban occupations. The problem is too vast for any remedial measures short of restrictions on numerical increase to give appreciable relief even temporarily. Little real economic progress will be possible for the mass of the Chinese people unless the cumulative pressure of increasing numbers upon limited

⁸⁸ Quoted by Chang-heng Chen, *op. cit.*

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resources can in some way be checked. The only alternative to policies aiming at limitation of numbers is a continuance and aggravation of the already operating positive checks which Malthus enumerated—war, disease, famine and misery. Behind the disasters of recent years—floods, famines, banditry and civil war—lies the relentless pressure of overpopulation thwarting the most strenuous efforts to raise the standard of life and to erect economic defenses against calamities.

It is not necessary to place implicit reliance upon all or any of the figures quoted above. The population of China may, when more adequately counted, turn out to be less than 400 millions or more than 450 millions. The rates of increase may not be as great as recent estimates. An open mind may be preserved on these matters; but the fact of overpopulation is too obvious to be disregarded. It is the major source of China's economic weakness and responsible also for much of her political difficulty.

There is a vicious circle in which economic weakness impairs political stability and political instability hampers efforts at economic improvement. There can never be an easy escape from such a situation. The vicious circle must be broken at more than one point. Nothing is gained, however, by slurring over the fundamental weaknesses. A frank recognition of the facts does not indicate any lack of sympathy with the constructive efforts being made at political stability and economic reform. Indeed it is one of the most hopeful signs for the future that Chinese scholars lead the way in rejecting the more optimistic and insisting upon the more sober view of their economic and political problems.

CHAPTER II

THE AGRICULTURAL RESOURCES OF CHINA

(i) *The Extent of Cultivated Land*

From time immemorial agriculture has been the staple occupation of the Chinese people, and a proportion amounting perhaps to 75% of the population still lives outside the urban areas and derives its existence more or less directly from the soil.¹ Chinese farming has been proverbial for its economy and industry. It is a truism that, granted the traditional forms of organization and the existing level of knowledge, the maximum volume of production is extracted from the land. There has been a marvelous adaptation to climatic, soil and market conditions in a region which is vast enough to offer wide extremes. The general assumption, indeed, has always been that the industry of the Chinese peasantry, forced to its maximum by the persistent pressure of numbers upon available resources, has resulted in the utilization of all available land that could be made to afford subsistence. China has been regarded as a classic example of population crowding always up to the limits of subsistence and kept from increasing further only by the positive checks of Malthusian theory. ✓

¹ Such an estimate, in the absence of occupational statistics, can be little more than a guess. M. T. Z. Tyau, *Two Years of Nationalist China*, p. 415, shows 42.4 million farm households out of a total of 56.7 million reported, which gives a figure of approximately 72%.

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It is difficult, in the absence of authoritative statistics, to substantiate or criticize any such assumption regarding China. There are, as yet, no more than rather sketchy sample statistics of such important factors as the extent of cultivated land, the nature of the soils, the numbers of the people, crop production, the extent of surplus production over family requirements. Opinions concerning the extent of overpopulation, therefore, must depend upon observation, and it is extraordinarily difficult, even for competent Chinese, to get a sufficiently reliable and extensive basis of observation upon which to form a reasonable judgment. } For foreigners, even for missionaries, observation is necessarily more confined. To form an impression of China, as so many are tempted to do, from limited knowledge of the coastal regions or the densely populated river valleys, is equivalent to basing a judgment of Europe's population capacity upon a brief visit to the industrial areas and intensely cultivated lowlands of Belgium and the Netherlands.

It is, no doubt, partly for this reason, and partly also because so many new forces are now changing Chinese economic life, that some doubt seems to have grown up concerning the degree of overpopulation that actually exists. There is, obviously, no doubt at all concerning the severe pressure of population in the densely inhabited river valleys. But the thesis is often advanced that within China as a whole there is little overpopulation, and that the problem is rather one of redistributing the people, and particularly of colonizing new and fertile areas such as Manchuria and parts of Inner Mongolia. The great leader of the Chinese revolution tended to take this view toward the close of his life

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and, alarmed by the rapid increase of the white race in such areas as North America, Australia and New Zealand, was ready to argue that China if anything was relatively underpopulated.² In support of this argument, powerful pleas are often made for the building of railways and roads to open up new areas of settlement and hasten redistribution. Even more important, the acceptance of such an argument inevitably tends to distract attention from what have hitherto been regarded as the most essential problems which China has to face, the improvement of production in the areas at present occupied and eventually policies leading to limitation of numbers. It is advisable, therefore, in any consideration of China's economic problems to undertake a preliminary survey of the extent of China's agricultural resources.

The area of China is generally stated in round figures as four and a quarter million square miles, or 25% greater than that of the United States. This is the figure which popular writers and speakers have in mind when they refer to the Chinese people as "occupying a fifth of the habitable surface of the earth." This gross figure, however, includes 1,367,953 square miles in Mongolia, 550,579 in Sinkiang, and 463,320 in Tibet, as well as the 1,896,500 square miles of China proper, within which is included the 363,700 square miles of Manchuria.³

It is true that the outlying areas lie by historical right within China's sovereignty. Until the irruption of the European traders into the Far East, and indeed until well into the nineteenth century, China was truly the Middle

² Sun Yat-sen, *The Three Principles of the People*, Lecture I (China Council, Institute of Pacific Relations, 1928).

³ See, e.g., *China Year Book, 1929-30*, p. 1.

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Kingdom, surrounded by a ring of tributary states, which in times gone by has included Japan and even Java. One by one great areas formerly subject to her suzerainty, if not her sovereignty, have been stripped from her. Japan took the outlying chain of islands, including Formosa, and later annexed Korea. Britain took Burma and France annexed Indo-China. The allegiance of a large part of Tibet also is hardly nominal at the present time.

In the last decade of the nineteenth century it appeared as if Russia might extend her Far Eastern Empire to absorb Manchuria. After the Russo-Japanese War it seemed even more likely that Japan would add at least the southern part of Manchuria to form with Korea a great empire on the mainland. Almost within the last decade that progress has been arrested, and the immigration of Chinese farmers has probably secured to Chinese for all time the effective economic as well as political control of Manchuria in the long run. On the other hand, the outer reaches of Mongolia appear to have been assimilated to the U. S. S. R.

The latest authoritative estimate by a geographer who has made a painstaking field study of the situation, therefore, reduces the area of political China (excluding Outer Mongolia and Farther Tibet) to just over three million square miles.⁴

For the purposes of economic study, however, a more

⁴ George B. Cressey, "The Economic Regions of China," *Annals Amer. Acad.*, November, 1930, p. 3. Other attempts to set out the economic regions of China are L. Dudley Stamp, *Asia* (Dutton, 1929), Part II, Chap. VII; L. H. Dudley Buxton, *The Peoples of Asia* (Knopf, 1925), Chap. VI; L. H. Dudley Buxton, *China: The Land and the People* (Oxford, 1929); G. B. Cressey, "The New Map of China," *Geographical Review*, October, 1930; Co-ching Chu, *The Climatic Provinces of China*, Memoir of the Institute of Meteorology, National Research Institute of China, No. 1, 1929; M. T. Stauffer (editor); *The Christian Occupation of China*, China Continuation Committee, Shanghai, 1922, p. 1-7.

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significant figure is the rather less than one million and a half square miles which Professor Cressey estimates as "agricultural China," within which he estimates that over 98% of the Chinese people live. This estimate omits the Khingan Mountains in the west and north of Manchuria, the central Asiatic steppes and deserts, and the extremely mountainous Tibetan borderland, a total area of 1,634,915 square miles in which only eight million people are estimated to live, and which is not likely to afford livelihood for any considerably greater numbers.

Within agricultural China so estimated, there are very great variations of productivity and consequently of population. On the Yangtze plain the average density is perhaps 897 per square mile, and this is the part of China which is best known to the casual foreign visitor. But there are large areas where the density is much less.

It is very rarely realized in fact that a large part, even of China proper, is very rugged and mountainous, making communications difficult and livelihood hard to win. Another great area in the northwest, known as the Loess Highlands, has a scanty and not very dependable rainfall. Over many of even the most fertile agricultural regions, such as the great plain of north China, natural calamities, especially floods, periodically reduce the area of effective utilization.⁵

It is, therefore, of considerable interest to find in Cressey's tabular statement of the geographical regions of China, two parallel columns showing the percentage of cultivated lands and the per capita holding of cultivated land for each region. With the exception of Manchuria,

⁵ Cf. Walter H. Mallory, *op. cit.*

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which is only within the last few years being intensively settled and cultivated, the amount of cultivated land per person decreases steadily from north to south. This decrease is obviously due to such climatic factors as greater rainfall, higher temperatures and longer growing seasons making possible double and even treble cropping and intensive cultivation.

This is an interesting fact, especially when taken in conjunction with the other column showing the proportion of land cultivated in each region. The proportions vary from 71% in the Yangtze Valley where population is densest, and 66% in the north China plain where it is also very dense, to 39% in the Red Basin of Szechwan, 17% in the Loess Highlands, 15% in Manchuria and on the south-eastern coast, and a much lower proportion in the mountain regions of Manchuria and the extreme south.

These facts inevitably suggest that the age-old farming organization of China has pushed settlement very close to the ultimate economic limits over most of the country. This inference is strongly reinforced by a study of the relief map, and the known facts of climate and land utilization. It corresponds also with the opinion held by nearly all foreign and a great many Chinese observers and students, that there is in China to-day, and has for long been, a severe pressure of population upon available agricultural resources.

There is, however, a not inconsiderable school of thought which disputes this opinion, and maintains that a redistribution of population, especially if preceded by improved means of transportation, would stave off the pressure upon resources for at least a generation or two. In the face of

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the long history of the Chinese people and of present-day observation, the onus of proof ought to rest upon the optimists; but examination of their position shows that, for the most part, it rests upon vague generalized computations and analogies from other lands without detailed reference to the conditions of specific areas.

An exception must be made to this statement in the case of the studies carried out at Clark University under Professor O. E. Baker.⁶ Starting from an examination of Chinese statistics, hsien by hsien, these studies reach the conclusion that the total area of cultivated land (including the outlying areas with the exception of Tibet and Outer Mongolia) is 180 million acres (approximately 280,000 square miles.) This estimate agrees well with a similar estimate made by the *China Year Book* for 1926; but it is less by 15% than the most recent estimate made by Professor Cressey, an estimate which accords better with the latest official figure published by the Ministry of Agriculture—210 million acres in 1916.⁷ Even these larger estimates, however, are very far short of the 263 million acres reported by the Agricultural Commission of 1914, the 246 million acres shown in the 1923 Report on Crops and Markets, and the 281 million acres estimated by D. K. Lieu and Chung-min Chen.

The discrepancies are even greater and more important in the estimates so far made of the extent of land that

⁶ *Problems of the Pacific* (Chicago Univ. Press, 1928), Part III, Section XIV; also O. E. Baker, "Agriculture and the Future of China," *Foreign Affairs*, April, 1928, and La Fleur and Focue, "Agricultural Production in China," *Economic Geography*, July, 1927, p. 297-308.

⁷ M. T. Z. Tyau, *Two Years of Nationalist China*, p. 415, using the latest (1928-9) census estimates, gets a total of 135 million acres for 1,146 out of 1,943 hsiens. See also D. K. Lieu and Chung-min Chen, *Chinese Economic Journal*, March, 1928; and *Nankai Weekly Statistical Service*, Vol. IV, No. 18.

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might potentially be cultivated. Baker estimates that, of the total area of the Chinese Republic, 48% is both warm and rainy enough for crop production. Of this area, 40% is estimated as too mountainous and rough, while 5% of the remainder is probably too sandy. This leaves only 27.4% of the land area which is physically suitable for crops, a total of roughly 700 million acres.⁸

Even this very optimistic figure compares quite unfavorably with the comparable proportion for the United States which is 51%. China, even optimistically considered, is poor in agricultural resources and poorer still when these resources are compared with the mass of population.

The important point, however, is that, if one may accept Baker's estimates as even approximately correct, there are only 180 million acres cultivated out of a possible 700 million, leaving no less than 500 million acres available for a redistribution of the population. Of this large area, less than 100 millions acres is reckoned by Baker to be within Mongolia and Sinkiang. It is argued, therefore, that 400 million acres of potentially cultivable land are at present lying unused within China proper and Manchuria.

Recent detailed studies of Manchuria put the unused land capable of cultivation in that region as 24-27 million acres.⁹ Even if this figure is increased by a considerable percentage, it seems clear that this does not account for

⁸ Baker, using the percentages quoted, arrives at a figure of 29%.

⁹ *Problems of the Pacific, 1929* (Chicago Univ. Press, 1930), Part II, No. X by Chu Hsiao, p. 383, and No. XIII, by Masamichi Royama, p. 579-580. See also *Nankai Weekly Statistical Service*, November 4, 1929, and March 16, 1931. The latter estimates the per capita holding of cultivated land as 0.58 acres, instead of Baker's figure of 0.4 acres. A later bulletin of

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the bulk of the estimate quoted. It must, however, be regarded as highly unlikely that such a large area of cultivable land has remained unused within China proper, even without the mechanical equipment and power which Baker regards as the solution of the problem.

Professor L. Dudley Stamp states emphatically that "it is probable that about half the possible area of China is cultivated," whereas Baker's estimate is less than one-fourth.¹⁰ The latter's methods of estimating, however, lead one to doubt his conclusions. For example, in allowing for rough mountainous country he argues from the analogy of certain parts of the United States. This leads him to deduct 40% from the area of the climatically suitable land, whereas Stamp deducts at least half. The difference here is well over 100 million acres. Then Baker allows only 5% of the remaining land for poor soils and mentions nothing of the areas occupied by riverbeds, lakes, towns, roads and graves. That these may be not inconsiderable may be judged from the surveys made by Professor J. Lossing Buck at the University of Nanking, which show that in the rich farming districts 5-8% of the farm area is taken for graves, 2% for farm buildings and houses, and 1.6% for ponds, canals, dikes, paths and roads.¹¹ To these proportions must be added also an indeterminate amount of poor or badly situated lands.

While it is true that the absence of complete accurate statistics must make all estimates of the potentially avail-

the Nankai Service, October 26, 1931, estimates the new land available in Manchuria as 42 million acres.

¹⁰ Stamp, *op. cit.*, p. 462.

¹¹ J. Lossing Buck, *Chinese Farm Economy* (Chicago Univ. Press, 1930), Chap. 11. W. Y. Swen, *A Study of Types of Farming in Weih sien County*, found that 12% of the farm land was used for graves.

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able land little more than guesses, yet it seems to be open to considerable question whether any great area of new land exists. It is still more doubtful whether it exists in sufficient quantity to afford relief from the extreme pressure of population which now exists. In Manchuria, admittedly the most rapidly developing region of the whole republic, with virgin land being opened up by new railways and, up till very recently, a considerable measure of peace and security, a careful estimate, made after a considerable amount of actual field study, places the maximum absorption of new immigrants within the next generation as 25-40 millions, with the probability that the figure will be much lower.¹²

Even on the difficult assumption that large-scale, machine methods of farming can be successfully introduced into some of the drier regions in the northwest of China proper, Inner Mongolia and Sinkiang,¹³ it is hardly possible to foresee these regions absorbing sufficient people to give much relief to the population pressure. It is true that if such experiments produced a surplus of food products this would go some way to relieving the situation elsewhere, provided always that cheap transport were available. But even in rich countries like the United States, the economic validity of irrigation schemes, railways, dry farming and similar developments is almost always overestimated by enthusiastic experts.

One is forced back, therefore, to the conclusion that the resources of China are heavily taxed by the present popula-

¹² *Problems of the Pacific, 1929*. Part II, No. XI, by C. Walter Young.

¹³ For some of the difficulties that attend the introduction of machinery into the farm processes of China, see J. Lossing Buck, *Agriculture and the Future of China, Annals, op. cit.*, p. 109-115.

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tion and that there is little prospect of adequate relief from redistribution. There are certain areas, such as Manchuria, which can, and doubtless will, absorb a volume of immigration which is large absolutely, though not relatively, to the total population. In other areas such as Inner Mongolia the frontier of settlement will creep steadily outward over the marginal lands which fringe the Gobi desert. But, in the meantime, as was argued in the preceding chapter, the population of China is probably increasing. It may well be doubted whether the breaking in of these newer lands will do much to afford an outlet for the natural increase of births over deaths, to say nothing of relieving the situation as it exists to-day. If the estimates of natural increases quoted earlier are even approximately correct there is probably a gain running into the millions each year. Such figures show how small in comparison is the relief that may be hoped for from the opening-up of hitherto unused farming lands. In the five years 1924-8 when immigration into Manchuria was at its height, two million immigrants went into this region for permanent settlement. The highest estimate of gross immigration in any one year is 1,178,254 in 1927.¹⁴ In 1929 the net figure had dropped to approximately 200,000.¹⁵ In 1929 the figure remained approximately the same.¹⁶

As far as agricultural resources are concerned, therefore, it seems probable that so ingenious and resourceful a people as the Chinese are not likely to have neglected any very real possibilities of bringing large areas of new land

¹⁴ C. Walter Young, *op. cit.*, p. 428-434.

¹⁵ Franklin L. Ho, *Population Movement to the North-Eastern Frontier in China* (Institute of Pacific Relations, 1931).

¹⁶ Information supplied by the South Manchurian Railways.

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into cultivation when they have been under such severe population pressure for so long a time. Within the limits of their technique they have utilized the resources available to them with an industry and skill that is the admiration of all observers. Any new lands that may become available, for example by opening up new country as in Manchuria, are limited in extent when compared with the vast masses of the Chinese people and their need.

The larger areas where population is comparatively sparse may, it is true, be capable of greater production by capitalistic large-scale methods of farming, as the marginal lands of more mechanized countries have proved to be. An Australian sheep farmer would probably make something out of the northwestern grasslands, provided always he could transport with him his characteristic methods of large-scale operation, and, not less important, the financial and commercial and transportation facilities with which they have been developed. The same statement might be made of the pioneer farmers of the dry west and the colder prairies of the United States and Canada. Arguments about the utilization of new land in China are, in fact, commonly based upon the experience of other countries such as these. But such experience is not very relevant or transferable, and when Chinese farmers push out into new regions they take with them the traditional methods of their homeland.

More than one observer, indeed, has suggested that the capacity of the Chinese people to build a better economic order for themselves will meet its acid test in Manchuria. In a newly opened virgin land with far greater resources of transport and commercial organization it remains to be

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seen whether a higher standard of living will be maintained, or whether population will increase and press upon available resources to the extent that it does elsewhere in China.¹⁷

(ii) *The Division of Ownership*

With so great a pressure of numbers upon limited resources, efficiency of land utilization is the primary problem in China. From the preceding pages it may be inferred that the population is already very great and, despite calamities and high rates of wastage, is probably increasing; that by far the greater proportion of cultivable land has long been occupied and tilled, and that it is unlikely that any remaining areas which may be opened up can afford appreciable relief to the pressure of numbers. It is important therefore to examine the utilization of land already occupied.

The outstanding fact of Chinese farming, commented upon by all observers, is its minute scale and laborious intensity. Holdings are extremely small and tend to become smaller. Estimates, whether based upon official census figures for the whole of the country, or sample studies of selected areas, agree that the scale of farming is smaller than in any other country, even in the other Asiatic countries of great population pressure, India and Japan. An average for the whole of China is calculated at 3.6 acres, but for many of the most densely populated provinces—Chekiang, Szechwan, Yunnan and Kweichow—it lies between 1.0 and 1.3 acres per holding.¹⁸

¹⁷ G. B. Cressey, *op. cit.*, p. 5.

¹⁸ D. K. Lieu and Chung-min Chen, *Chinese Economic Journal*, March, 1928.

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Such figures might be repeated from various sources. The Mass Education Movement's survey of Ting Hsien, in Hopei, a northern province, shows 55.7% of the holdings below 20 mow (3½ acres) and 85.9% below 50 mow (8½ acres). In 68 villages of Chekiang, further south, another investigation found 38.5% of the farmers working on less than 5 mow, 71.5% on less than 10 mow and 92.1% on less than 25 mow (4½ acres).¹⁹

Within these tiny farms there is a further subdivision of fields, generally scattered about the village area. Recent surveys show that there are often six to eight fields in a single farm, each field being generally less than an acre even in the medium-sized farms, and each on the average being a third of a mile distant from the farmstead.²⁰ There is therefore what Mr. Tawney has well called "fragmentation" of cultivation to an extent that has never been known in any other country. There can be no economy of production as measured in labor cost while this system of scattered strips survives. China has yet to face the agrarian movements which in the other peasant lands have, after centuries of turmoil and stress, created compact workable farms out of the customary, inefficient small-scale and scattered holdings of the peasantry. The whole system of farming, indeed, rests upon the unfortunate fact that economy of labor cost is the last thing which needs to be considered in China. Evidences of this truism might be multiplied. Perhaps the most striking is the neglect of animal or machine power, which is so obvious. It is true that in the whole area of China there are to be found a considerable

¹⁹ R. H. Tawney, *A Memorandum on Agriculture and Industry in China*.

²⁰ J. Lossing Buck, *Chinese Farm Economy*, p. 23.

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number of animals. But less than 5 million horses, 3¼ million mules and asses, just over 20 million cattle, 28½ million sheep and 61 million swine are lamentably insufficient to provide animal food or even animal power.²¹ There is, naturally, some accumulation of pastoral products, particularly in the northern provinces. It is possible also that in certain areas such as Inner Mongolia animal farming might be extended,²² while promising experiments in mechanical farming have been made in Manchuria.²³ These considerations, however, do not detract from the importance of the central fact that Chinese farming is too small and its earnings too minute to enable the conservation of human energy to be profitable. Farmers in the United States use ten times as much power per man as the Chinese farmer has at his disposal.²⁴ Nor is it easy to see any way in which this situation might be improved as long as the minute landholdings and abundance of labor supply mutually reinforce a system in which human energy is the last cost that need be economized.

The peasant farmer of China, moreover, carries on his back many burdens besides that of excessive labor. Not least among them is the toll levied on him by those to whom he must look for essential services. Largely by reason of his weak bargaining power, he is exploited and even robbed at every turn. For the service of government he pays excessive taxes for little return; for the service of marketing he is again mulcted in excessive sums mainly because of the survival of inefficient methods; for the

²¹ O. E. Baker, *op. cit.*

²² R. Leibbrand, "Pastoral Products in China," *Chinese Economic Journal*, September, 1930.

²³ C. W. Young in *Problems of the Pacific, 1929*, p. 437-9.

²⁴ Estimate by O. E. Baker, *op. cit.*

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provision of credit his need is so great that the prices he must pay are calamitous; and even for the right to use the land he must in many cases pay a rent which seems unreasonably high by the standards of other countries. In China as elsewhere, "the destruction of the poor is their poverty."

Something will be said later concerning the burdens of taxation, marketing costs and rural credit deficiencies. At this point it is pertinent to examine the evidence available concerning the problems of land tenure and ownership. Though the central importance of this problem is well recognized and a great deal of attention is being devoted to it, particularly by Chinese students, its complexity is such and the lack of reliable data is so great that conclusions are very difficult to draw.

It will be recognized that the whole problem is fraught with the gravest political and social as well as economic implications. A tide of discontent is sweeping through China. The established order of centuries has been disturbed, economic balance and stability have been destroyed, the immediate effect of contact with the outside world has been to jeopardize the standards and ways of living of the masses of the people. Caught in such circumstances, not even the Chinese farmer can wholly retain his philosophic resignation. Propaganda finds a fertile soil. For a time he can be brought to believe that the foreigner with his disturbing ways and arrogant privileges is the source of his woes. But it is just as possible to direct his attention to homelier and more familiar sources of discontent. The landlord, the official tax gatherer, the money-lender, the greedy merchant, are natural objects of attack. In so far as their functions

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are too highly compensated, they become the more vulnerable.

There lies behind much of the banditry, and of the so-called Communist rebellions which vex rural China at the present time, a real sense of injustice in the face of depressing economic conditions. It is significant that the communists have made most headway, and banditry is most prevalent in the provinces which have the highest proportions of farm tenancy as distinct from farm ownership. There is evidently a strong native organization now in existence, owing little but example and precept to Soviet Russia, and prepared to exploit to the full the discontent among tenant farmers.²⁶ It is even thought that some official statistics collected during the period when the radicals dominated the National Party were exaggerated, apparently so as to strengthen the case against landlordism. In recent years the group in power has swung away from radical notions of reconstruction to more orthodox capitalist policies; but it can hardly be expected that the revolution has gone through its final phase. Its course in the future will be determined at least in part by the progress made in freeing the peasant from intolerable exactions upon his labor.

The extent of tenancy is difficult to determine. It seems clear that long ago China achieved a considerable measure of economic democracy, including a wide diffusion of land ownership. There are great differences in this respect even within local areas. In the more stable northern provinces (except those situated in Manchuria) the proportion of ownership is put as high as 75%, further south in the east-

²⁶ "Communism in China," by P., *Foreign Affairs*, January, 1931.

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central and southern provinces tenancy plays a much larger part, rising, it is calculated, to 70% of the farming population in Fukien. For China as a whole the problem is not so much one of aggregation of large estates, though such aggregations do exist, as a problem of widely diffused but comparatively small scale landlordism. The problem of great estates is perhaps worst in Manchuria, but it has hardly become acute as yet owing to the recent opening-up of the country.²⁶ The questions of landownership and high rentals are more complicated and difficult than they might be if there was more concentration in fewer hands.

While the possibilities of unduly heavy rents are not diminished and may even be increased by this dispersion of ownership, the problem of dealing with them, or of reorganizing the whole system of land tenure is immensely complicated. There is naturally an extremely powerful and comparatively numerous class with a vested interest, a class, moreover, which is able to take advantage of the new knowledge and therefore to control policies more than any other. The government of China to-day is in the hands of representatives of this class, working naturally in cooperation with the pioneers of business enterprise in the towns. It is at least possible that they may have, arrayed against them, a peasantry suffering under economic pressures from which they have failed to get relief.

It is agreed by almost all students of the problem that rents are high and have risen considerably in recent years.²⁷

²⁶ *China Year Book, 1928*, p. 111-2. Cf. statistics of ownership and tenancy in C. C. Chang, "Farm Tenancy in China," *Farm Economics* (Cornell University, August, 1930), p. 1356-7; J. L. Buck, *op. cit.*, Chap. V, and *Chinese Economic Bulletin*, September 6, 1930, p. 121.

²⁷ C. C. Chang, *op. cit.*, p. 1366-9; J. L. Buck, *op. cit.*, Chap. V.

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In part this situation may be viewed as a natural result of increasing population. Partly, however, it is a result of the weak bargaining power of the small farmer. Almost every known variety of rental system can be found in China and it is therefore difficult to average the rental cost. Among these systems there is generally a wider freedom of choice for the landlord and this naturally works hardly upon the tenant. It is true that the force of customary rights is or has been as powerful and complex in its operation as in medieval Europe; but custom tends to decay. The selling value of land is high also in China. Statistics collected by J. Lossing Buck in 1922 work out as high as \$180 (gold) per acre. But for these lands the tenant paid on an average 8% of the selling value in rent each year, so that the rent was on a twelve-year purchase basis.

To sum up the argument of this section, all the available evidence seems to support the conclusion arrived at earlier, that China's root problem is a tremendous pressure of population upon available resources. Landholdings are small, fields are minute and scattered, the whole system of farming rests upon the exploitation of human labor as the cheapest source of power, and the need of the peasant is so great that he is in an extremely weak bargaining position. While there remains a large degree of occupying, cultivating small ownership, the problems of tenancy are important and even dangerous. For perhaps half the peasant population of China, life is more burdensome than it might be because the landlords, even though the aggregation of their holdings is not conspicuously great, are able to exact rentals which are much heavier than in other lands and which, it has been estimated, are on the average more than 20%

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greater than is warranted by the contribution of the landlord to the joint enterprise.²⁸

The existence of this problem is apparent from the effort of the National Government to enforce an all-round reduction of rents by 25%, an effort which was bound to meet with great practical difficulties. It is even more significantly apparent in the discontent, merging into banditry, rebellion and even communist organization, in the areas where tenancy is greatest. It is not a problem, however, which will yield readily to legislation, and it is clear that a great variety of local adjustment will be needed. In the meantime the peasant carries a rent burden greater than the benefits he receives and it is not clear that, either socially or economically, this extra cost is compensated by the creation of a social class free to embark upon political and economic leadership.

(iii) *The Intensive Margin of Cultivation*

Since land is so scarce and valuable in China, it is natural to find that every effort is made to force it to yield its maximum productivity. Whatever effort is possible within the limits of size, technique and auxiliary organization must be made incessantly. Even then the industrious ingenuity of the peasant-farmer must be supplemented by the most rigorous economy of a sort hardly conceivable in other lands, and still the standard of living remains pitifully low so that there is always a "famine factor" in the death rate of China. The pitiless pressure of numbers too great for the available resources to support nullifies the sacrifices and labors of the most patient and frugal peasantry in the world.

²⁸ *Ibid.*, p. 165.

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It has been argued that the expectation of relief by pushing out the extensive margin of cultivation is probably not as well-founded as some optimistic observers have been led to expect. There will undoubtedly be some relief gained by redistributing the population so as to utilize to better advantage land hitherto neglected; but the extent of this possible relief is often overestimated. Redistribution of an agricultural population is a difficult and slow process, and meantime any improvement caused by emigration from crowded areas is quickly swallowed up by the further increase of population.

Some relief may come in time also from more equitable organization of land tenures; but here again the possible relief should not be overestimated. China's peasantry already owns a considerable proportion of the land it cultivates. While there are abuses in the tenurial system and rents are high, the root of the problem lies in the small-scale operations and poverty of the tenant-farmer rather than in his undue exploitation by the landlord.

When one turns from these aspects of the problem to consider the efficiency of the cultivation and the possibilities of pushing out the intensive margin, the situation at first sight may well seem hopeless. If the law of diminishing returns has any meaning it ought surely to be found in China, where greater and greater amounts of labor have been applied to smaller and smaller areas. Only by dint of almost superhuman exertion and economies have "the farmers of forty centuries" been able to wring their scanty sustenance from an inadequate soil.

There is some evidence, indeed, which seems to point in the direction of widespread partial impoverishment of

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the soil. If it had not been for the "circular farming" by which all animal and human wastes are returned to the soil, for the natural replenishment of fertility by the alluvial flood action of the rivers and for the intensity of irrigation by which water is farmed as well as land, this impoverishment would long before now have reached actual soil exhaustion.

Some of the larger ways in which this impoverishment has proceeded are tragic in their consequences. Chief among them is the deforestation of which China is a classic example.²⁹ Vast areas are rendered subject to flood, and not less disastrously to drought, because of the destruction of forests in the catchment areas of the rivers. On a smaller scale the same kind of result comes from the progressive desiccation of the soil as every scrap of organic plant material is removed from it, for fuel if not for food. Climatologists believe that in any case the desert area of north-central Asia is extending outward from the Gobi toward the coast. Man has done what is possible to assist the process by removing organic material from the soil, allowing wind and rain to remove the fine dry dust as freely as possible.

The impoverishment of the soil, despite irrigation and artificial fertilization, is reflected in the comparatively low rates of yield for most crops. These are all the more significant because nowhere else is so much labor applied to a given area. The one crop in which this effort gives a really high yield is rice, in which the output per acre is approximately 50% greater than it is in the United States. Japan, however, has a yield greater than China's by 20%.³⁰

²⁹ W. C. Lowdermilk, "Forestry in Denuded China," *Annals, op. cit.*, p. 127-141.

³⁰ J. L. Buck, *Chinese Farm Economy*, p. 202-8.

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In other products Chinese yields are lower than in most countries. Wheat, for example, averages 9.7 quintals per hectare as against a world average of 10.3 and Denmark's average of 33.1. In corn the Chinese yield average is 7.5 as against 16.3 for the United States; in cotton 1.8 as against 2.0 for the United States and 4.5 for Egypt. While these comparisons leave a great deal unsaid, and it is true that Chinese yields are substantially higher than those of India, yet it seems clear that the soil has been overworked, and that with different organization and less pressure of numbers, farming might well become more efficient.

There is at the present time a heavy and increasing import of certain staple foodstuffs. This can be explained easily enough. Some part of it is due to the fact that communications and marketing systems in China are so poorly organized that it is cheaper for the coastal regions and particularly the great seaport towns to bring food from overseas than it is to bring it from the inland areas. Seasonal and ordinary trading interchange also account for part of the import and China remains on balance an exporter of foodstuffs. Even so, a country three-fourths of whose people are engaged in agriculture should not normally find it necessary as China did in 1929 to import wheat, flour, sugar and rice to the value of 237 million Hk. Ts.⁸¹

⁸¹ *The Report and Abstract of Statistics, 1929* (Shanghai, China Maritime Customs, 1930), shows the importation of these foodstuffs as:

	MILLIONS PICULS	HK. TAELS MILLIONS
Wheat	5.7	21.43
Flour	11.9	62.90
Sugar	13.9	93.71
Rice	10.8	58.98

See also B. B. Wallace, "China's Imports and Exports of Foodstuffs," *Chinese Economic Journal*, August, 1931.

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It is on the intensive margin of production, paradoxically enough, that most competent investigators see the brightest immediate hopes for an amelioration of Chinese economic problems. Improved farming, rather than an extension of area, is China's best hope. But the same qualification holds as was asserted in regard to the extensive margin. No improvement can give more than temporary relief unless something is done to prevent a further increase of numbers swallowing it up before it is possible to better the standard of living. Some consideration is given in the next chapter to various promising lines of development which may bring improvements in agricultural productivity. Meantime it is necessary to give some indication of the very low standards of living which prevail in agricultural China to-day.

(iv) *The Agricultural Standard of Living*

The total annual expenditure of typical farm families in China (including the value of goods produced on the farm) appears to be in the neighborhood of \$136 (silver), or approximately \$60 (gold) at the rates of exchange ruling when the statistics were gathered. This is equal to \$50 (silver) per adult male equivalent.³²

Of this small sum no less than 58.9% was expended upon food, and 12.3% upon fuel. This proportion of expenditure

³² J. L. Buck, *op. cit.*, chap. XI. For other studies of the agricultural standard of living in China see Malone and Taylor, *A Study of Chinese Rural Economy*; F. C. Lee and C. Chin, *Village Families in the Vicinity of Peiping* (Social Research Department, China Foundation, 1929).

There are many urban surveys, the pioneers study being by C. G. Dittmer, "An estimate of the Chinese standard of living in China," *Quarterly Journal of Econ.*, 1918, p. 107-128. The most complete is S. D. Gamble and J. S. Burgess, *Peking: A Social Survey* (New York, Doran, 1921). See also "The Cost of Living Index Number in Shanghai," *Bulletin of the National Tariff Commission* (Shanghai, 1930).

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upon necessities confirms Engel's well-known law. Upon the basis of the same figures, each adult Chinese male had approximately 3 Chinese dollars to spend each year upon clothing, and \$6.68 for all miscellaneous expenses after paying for food, fuel and light, clothing and rent. There can be little genuine expansion of trade in China until the standard of living of the peasant is raised considerably.

More detailed investigation supports the conclusion of these figures that the standard of living of the peasant is cruelly low. Even by using the cheapest grains and eliminating all but the minimum necessities, it is difficult to see how farmers can live "on \$1.91 (silver) per adult person per month for food alone." Food is scanty and so is clothing, "the average farmer's home is a shelter only" and it is probable that poor housing causes much preventible ill-health and inefficiency.³³ When the standard of living is so low that in one county "farmers do not heat water for tea but drink it cold," and in another "farmers in order to save fuel cook their rice only once a day," it is not surprising that extremely small sums are available for social recreation and education. There is a very high degree of illiteracy and even now approximately 70% of the children between 7 and 16 years of age have never attended school, even in areas which are closest in touch with modern improvements.

The consequences of this tragic situation are well summed up by J. Lossing Buck:

This low standard of living of farmers in China is reflected in almost every aspect of the farmer's life. Far too high a proportion of his meager income goes into the necessities to maintain physical

³³ Warren S. Thompson, *Some Reflections upon the Standard of Living and Rural Industry in China* (Shanghai, 1931).

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life. Even with this, his food is unvaried and lacking in the nutriment he needs, his clothing is of the cheapest sort, his home a mere protection from the weather and with little comfort or beauty. Outside influences of education, religion and social life afford him little help. His education is so rudimentary as to be practically useless to him, both in type and extent, his local cult practices while having some social value probably cost him more than he can afford, and his social life is lacking in recreation and pleasure. . . . But even though the farmer's income be increased to an amount adequate for his needs, it is doubtful whether he can profit by it until he is educated to desire those things essential to his real welfare. Until he is so educated it is only too likely that a surplus of income would be used for excessive opium, gambling or other unfortunate forms of self-indulgence. An example of this is in years of good crops, when the farmers spend too much of their extra funds in gambling, excessive drinking and gorging themselves with food. The farmer has been made ignorant by several conditions of his environment. Poor communications have kept him isolated in small groups of persons like himself, the inadequacy of his education has kept him illiterate, and the impractical nature of such education as he can get tends to make him consider learning useless to him. There has been little in his surroundings to open his mind, enlarge his vision, or suggest a better way of doing things.

CHAPTER III

AGRICULTURAL REORGANIZATION

(i) *The Disturbance of Equilibrium*

It would seem presumptuous for any foreign observer, however expert and familiar with Chinese conditions, to suggest that there are ways in which the long-established methods of agriculture in that country might be improved. Yet there seems to be a consensus not only among the foreign experts working in China, but also among Chinese students who have received modern training in the agricultural sciences, that such improvements offer much the best and most immediate means for the amelioration of China's poverty.¹ The problem is to arrest the population cycle, to provide a surplus of production over immediately pressing needs so as to give a breathing space in which the processes of education and social reform may work to reverse the cycle and raise living standards.

The whole situation has been rendered more acute by the fact that, however adequate the traditional system of farming may have been in a self-sufficient, static China, it is obviously less adequate now that the established equilibria of

¹ Cf., e.g., J. Lossing Buck, "Chinese Rural Economy," *Journal of Farm Economics*, July, 1930, p. 444, and *Chinese Farm Economy*, p. 424. "The best future solution of the problem seems to be in some method of population control, and the best immediate solution, more intensive methods of raising crops and the growing of crops that produce more food per unit of land. Such productivity, however, will also be useless if population continues to grow."

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lage industries. Though in the long run it may be expected that the importation of cheap manufactured commodities will be a source of economic gain to China, the immediate effect is often to destroy the handicrafts and home occupations which supplemented the scanty receipts from agriculture. This process is far-reaching and has by no means reached its final stages. Cheap cotton cloths imported from abroad supply the cities and coastal areas with cheaper goods from overseas, but seriously affect the farmers who spun and wove their surplus cotton to supply first themselves and then the neighboring cities. Foreign steamers offer cheap, reliable and swift transport along the coast and up the great rivers, but in doing so they destroy the livelihood of a multitude of junkmen, porters and small merchants. As liner traffic regularizes its routes, trade becomes concentrated in a few great ports. Shanghai, Hankow and Hong Kong grow by leaps and bounds, but the smaller coastal and river ports do not share in the new prosperity and the countryside around them tends to decay. The pattern of economic life is changing. The peasant-farmer in many districts is beginning to find himself in a new world order, for which his methods, however admirable in the old organization, are inadequate. Nor has he any ready means of escape or even of comprehending what is happening around him. The greater part of his social heritage has been transmitted from past generations by word of mouth and by imitation of his predecessors rather than by book knowledge. The new life demands a reorientation based upon scientific principles of which he is almost wholly ignorant, and for the apprehension of which a vast new educational system must be created.

The decay of village industries and supplementary occu-

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pations is therefore a vital part of China's agricultural problem, taking from the peasant in increasing degree an essential part of his livelihood. The extent to which simple craft operations and local services supplemented farming receipts was considerable.³ In 1909 a Chinese scholar reported that 40% of the cultivators in the area he surveyed also operated simple appliances for weaving the cotton they produced.⁴ In 1928 a survey of a Shantung hsien showed not only cotton cloth, but hair nets, paper, incense, firecrackers, straw braid, baskets, bean curd and bean starch among the products of farm home industries.⁵ Investigations by J. Lossing Buck have shown a proportion varying from 30 to 73% of farmers who derive part of their income from other than farm sources. This extra income is derived only in small part from home industry, but it is evident that almost half of these farmers have to seek supplementary sources of income by home industry, labor, professional work, trading, or by receiving remittances from absent members of the family.⁶

As industrial development and urban concentration within China itself reinforces the disturbing effect of foreign trade, the whole problem of village organization is made more difficult. The small farm, deprived of customary support, becomes even less adequate to provide subsistence.

³ Cf. D. K. Lieu, *China's Industry and Finance* (Chinese Government Bureau of Economic Information, 1927), Chap. I; also *Problems of the Pacific, 1927* (Chicago Univ. Press, 1928), p. 392-7; J. B. Tayler, *Farm and Factory in China* (S. C. M., 1928), p. 33-45; W. H. Mallory, *China: Land of Famine*, p. 127-8.

⁴ Nyok-Ching Taur, *Die Gewerblichen Betriebsformen der Stadt Ningpo in China* (Tubingen, 1909), p. 17-35, quoted by R. H. Tawney, *Memorandum on Agriculture and Industry in China*.

⁵ W. Y. Swen, "A Study of Types of Farming, Costs of Production, and Annual Labour Distribution in Weih sien County, Shantung, China," *Chinese Economic Journal*, August, 1928.

⁶ J. L. Buck, *op. cit.*, p. 98.

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While, therefore, the development of more efficient industries, marketing organization and communications is greatly to be desired as promoting higher productivity in the long run, it clearly renders the agricultural problems of China more difficult in the meantime and increases the urgent need for improvement of farm production. The same forces are at work in China as called forth the indignation of Defoe and Cobbett in eighteenth century England.

Some remedy may be found by transitional methods of encouraging small-scale supplementary industries in rural districts. Competent students of the problem are devoting attention to this possibility at the present time.⁷ Even greater relief might be gained from the establishment of larger-scale industries in districts where they can draw their labor from surrounding villages.⁸ A notably successful case in which this has added to the prosperity of a whole large district can be seen in the cotton, silk and flour mills of Wusih, a city situated roughly halfway between Shanghai and Nanking. But unfortunately the combined effect of political insecurity in the inland areas, lack of adequate communication, and the economic advantages which draw great industries to seaport towns has caused such industrial development as has taken place to develop mainly in centers like Shanghai and Tientsin. The problem of the countryside, therefore, remains largely a question of improving the efficiency of agricultural operations to provide for an increasing pressure of population, and to make up for the loss of supplementary earnings.

⁷ J. B. Tayler, *A Policy for Small-Scale Industry* (Conference on the People's Livelihood, February 22-8, 1931, National Christian Council of China, Shanghai).

⁸ J. B. Tayler, *Farm and Factory in China*, Chap. III and IV.

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(ii) *A Tradition of Separatism*

In the course of its long history China has experimented with most of the forms of organization which are canvassed by social reformers to-day. A Chinese scholar is easily able to provide historical examples of modern experiments. For centuries, however, the social organization of China has been based upon principles which most nearly approximate those of philosophic anarchy, offering a degree of decentralization and individual, or rather family, freedom which is quite remarkable.⁹ The functions of government, at one time extensive, as such great public undertakings as canals, roads and irrigation works bear witness, were reduced to a minimum. Individuals, or rather families, and neighborhood groups were left to conduct their own affairs.

Some of the greatest achievements of the Chinese people, and particularly the social stability of the premodern period, may be traced to this philosophy, which still gives to Chinese life and culture a fascination that attracts many foreign observers, especially those who esteem the practice of courtesy more than efficiency, and the pursuit of knowledge more than wealth. But the price paid for this detachment from common concerns, and especially that heavier part of it paid by the masses of the common people, has been very great. In seeking the narrower satisfactions and accomplishments of family and group life, the Chinese people have lost a large part of the discipline and co-

⁹Kiang Kang-Lu, "The Chinese Family System," *Annals American Academy*, November, 1930, p. 39-46. N. M. Vinacke, "Obstacles to Industrial Development in China," *op. cit.*, p. 173-180; also Julean Arnold, *China: A Commercial and Industrial Handbook* (U. S. Dept. of Commerce, 1926), p. 275-9, and W. C. Lowdermilk, "Forestry in Denuded China," *Annals, op. cit.*, p. 132-3.

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operation necessary to achieve great community purposes. No small part of their difficulty in establishing a new form of stable government is due to the lack of such disciplined cooperation on a great scale.¹⁰

In the economic sphere also what might be called their separatism has led to neglect of important social undertakings and institutions, and to very great difficulty in the creation of the large-scale cooperation now necessary if China is to take the place in the modern world to which its great numbers and past history entitle it. This is not the place to expand such a philosophic theme, but it is evident that the tradition of family organization is, from an economic point of view, one of the greatest weaknesses in modern China. The scientific civilization of the West is based upon freedom for the individual, supplemented by cooperation in large-scale social activities. In China the family group has largely destroyed both individual freedom and social cooperation. The community has consisted of a series of disparate groups, generally organized on a family basis. The triumphs of Chinese farming and Chinese industry and commerce in the past have been those of family or neighborhood achievement, but these are no longer sufficient in a world organized upon a basis of large-scale scientific industry. The Chinese farmer had as little to learn from the peasant of medieval Europe as the Chinese craftsmen had to learn from the medieval weavers and potters and workers in wood or metals, but he has a great deal to learn from modern agricultural science. One of the chief obstacles to his learning is to be found in what

¹⁰ Cf. the considered estimate of Arthur N. Holcombe, *The Chinese Revolution* (Harvard Univ. Press, 1930).

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Mallory has described as the "noncooperative spirit" which is derived from his separatism.¹¹

The first respect in which this has failed him is the decay of government and consequently his lack of security from civil warfare, banditry, injustice and oppressive taxation. Something is said in a later chapter of the economic effects of this failure. Correlated with it is the decay of public activities, such as the construction of great public works. There are regions of China which still conduct extensive farming on a scale made possible by vast irrigation works constructed two thousand years ago, and canal systems of venerable antiquity still provide a means of transport which is essential to the livelihood of millions of people.

But in other areas the irrigation systems, the canals and roads, and particularly the extensive works constructed to control the rivers of northern China, have been allowed to fall into disrepair with disastrous consequences to great masses of the population. Moreover, there has been a decided failure to improve and extend these admirable ancient undertakings so as to keep pace with the necessities of an increasing population. The need has been evident, there has been an increasing surplus of labor to be utilized, and the economic soundness of such undertakings was evident from past experience, but the organization necessary to undertake them was lacking.

If this is true of such public works as ancient China was capable of undertaking, it is still truer of modern necessities like roads, railways, bridges, river improvement for navigation, harbors, afforestation, flood control, telegraphic communications and public utilities generally. China offers

¹¹ Walter H. Mallory, *China: Land of Famine*, p. 100-106.

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a vast field for such improvements, and the foreign observer will be slow to criticize its government for not providing them faster. The political revolution which has been proceeding now for several decades has absorbed its political energies and the task is vast enough to have taxed the resources even of a much stronger and more favorably situated administration.

While criticism would be presumptuous and unwarranted, it remains evident that the construction of such public works is, next to the establishment of peace and economical administration, the most hopeful avenue of improvement for agricultural China. No one recognized this fact more clearly than Sun Yat-sen and no one has been more keenly conscious of the desirability of securing foreign capital and expert assistance for this purpose.¹² The need of such economic effort, indeed, provided him with much of his argument for the destruction of the effete Manchu government and its replacement by a more efficient modern system. The government of China has passed into the hands mainly of Western-trained young Chinese, who fully appreciate his teachings on this point, and, as their ambitious plans indicate, they are preparing to provide and have indeed already gone some distance in providing, these modern necessities for efficient production.

If proof were needed of the efficacy of such large-scale public works in promoting the prosperity of the agricultural population it might well be found in the success that has already attended the efforts of the China International Famine Relief Commission in its engineering undertak-

¹² Sun Yat-sen, *The International Development of China* (Putnam, 1922).

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ings.¹² Under the expert guidance of its energetic and competent engineer, O. J. Todd, it has dug wells, built roads and bridges, repaired, improved and extended river dikes, built irrigation canals. With a low overhead cost of little more than 2%, it has used moneys from Chinese and foreign sources to employ labor on preventive works, cooperating with local and national authorities and working with success even in regions devastated by civil war. In 1925 a dike costing \$150,000 (silver), of which \$102,000 was lent by the commission, reclaimed 30,000 acres of land from flood in the Yangtze valley, enabling a crop production estimated at \$5,000,000 annually to be resumed. In 1923 reversion works on the Yellow River costing \$1,500,000, of which the commission contributed \$360,000, enabled 250,000 flood refugees to return to their farms. Examples might be multiplied from the records of the commission, but the typical cases cited are sufficient to show that the combination of "engineering and altruism" practised by the commission has amply proved the necessity and the value of great cooperative public works to agricultural China. The extension and improvement of such efforts on a nation-wide scale is a promising avenue of economic progress.

(iii) *The Improvement of Farming Practice*

When one turns from public enterprises to individual farming, it is the social, cooperative aspects of the problem which again offer the greatest possibilities of progress.

¹² Cf. W. H. Mallory, *op. cit.*, with *Engineering Accomplishments: Famine Prevention and Relief Projects, 1927* (China International Famine Relief Commission, 1928, Series A, No. 21); *Annual Report, 1929* (Series A, No. 28), and *Insuring Food Supply in China* (Series B, No. 29, May, 1928); and O. J. Todd, *Engineering and Altruism in China*.

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The justly celebrated achievements of the Chinese farmer are the result of individual effort upon routine traditional lines. These achievements may be summed up as "the maintenance of soil fertility and the highly specialized system of intensive cultivation."¹⁴ The use of human and animal wastes in carefully prepared compost pits, irrigation, the dredging of mud from river beds to fertilize the fields, terracing, the actual carriage of soil, the utilization of every scrap of land, planting of useful trees and shrubs on borders, the reaping of grass from hillsides and graves, the artificial cultivation of fish ponds, the most intensive forms of garden cultivation, double and even treble cropping, often of different crops, the economy of land by breeding the plants in nurseries until transplantation—all these, as well as implements for cultivation more suitable to Chinese conditions than the Westerner is apt at first to appreciate, give to Chinese farming an efficiency which it would seem difficult to improve.

Yet the consensus of Chinese and foreign experts is that improvement is possible and that a combination of Chinese traditional methods with Western scientific knowledge, may prove to be the best method of achieving that measure of temporary economic prosperity which is essential if governmental and social reforms are to be promoted in the hope of keeping sufficiently ahead of population pressure to advance living standards and in the end to control population increase. Such a combination is not easy to achieve. The haste and often the superficiality of Chinese as well as of Westerners trained in agricultural science may be as

¹⁴ L. Dudley Stamp, *Asia*, p. 467-8. The standard work on the subject is F. H. King, *Farmers of Forty Centuries* (New York, Harcourt Brace, 1926).

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great an obstacle as the obscurantism and ignorance of the farmer who cannot be blamed for a wholesome reluctance to abandon his well-tried methods for the unfamiliar, unproved and often costly processes sometimes recommended to him. The problem is well illustrated by the story told by workers in the Mass Education Movement, of the returned Ph.D. who recommended an electric pump as a more efficient method of producing water from the well than the old cumbersome windlass, and of the complete lack of response to his suggestion by the farmers who neither understood nor could afford such a device.

But the sequel is even more illuminating. His more understanding and patient successor, equally well-trained, thought and worked over the old windlass pump until by the application of scientific principles to the familiar device, he produced a pump which could be operated in the old way by the labor of the farmer and his family, but which produced much larger results for the same amount of effort and, moreover, cost a dollar less to construct. There was no lack of response this time. The farmer's struggle is too intense for him to neglect such help, and not only was the new device readily accepted, but the prestige of the scientist was so enhanced that his advice was eagerly sought in other matters.

It would be easy to recount similar stories. The first crude period of indiscriminate imitation of Western ideas is passing away and those experts, both Chinese and foreign, who have labored patiently to understand and cooperate with the peasant, are beginning to reap the reward of his confidence, and to know where and how they can help him best. The story of this development, worked out slowly

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and with difficulty in the agricultural departments of many universities and research institutions,—the pioneer work having been done for the most part by foreign missionaries,—is one of the romances of modern education. The possibilities of its development are fraught with immense significance for the welfare of the Chinese people. It is a true case of service through understanding.

Space will not permit the elaboration of many examples. One of the most obvious is the introduction of new crops in suitable areas. A handful of peanuts sown by a missionary was the beginning of a great industry. Maize, apparently brought first by Chinese traders from the Philippines where it was introduced by the Spaniards from America, has spread even into remote mountain valleys in Yunnan; potatoes and sweet potatoes, buckwheat, rye and other grains have been introduced into various regions with success.¹⁵ As university resources and workers increase, such work is being extended, systematized and intensified. By controlled experiment, efforts are being made to discover the crops best suited for different regions. Some remarkable results have already been achieved, but conditions are difficult and workers are still few so that it may confidently be expected that much greater progress will be made in the future.

The breeding, selection and distribution of more prolific and more suitable seeds is another important activity. The success of the University of Nanking, in doubling the yield of corn under practical farming conditions simply by better seed selection, has been paralleled in many other cases at this and other universities and also by the work of such

¹⁵ W. H. Mallory, *op. cit.*, Chap. V.

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bodies as the Mass Education Association at Ting Hsien and the China International Famine Relief Commission.

The story might be continued almost indefinitely. The whole range of agricultural practice is open to these workers who are endeavoring to graft scientific principles upon the best cultivation and conservation that the world has ever known. Besides the introduction of new crops and seed selection, they concern themselves with soil surveys; even with Chinese methods of fertilization, which they are confident that they can improve; with the control of insect and fungoid diseases; with farm management and labor costs throughout the year; with methods of sowing and cultivation; the improvement of implements; the care of animals; the concentration of fields; land tenures; rural marketing; credit facilities—in fact, with all the interests and activities of the farmer's life. They are beginning to place the experience of the Western world since the introduction of science into agriculture at the disposal of the Chinese people and they are doing not a little also to rouse him to co-operative activity in pursuit of the new methods, as well as to awaken him to the need for further knowledge. As Mr. Tawney has written, the great strides made in the last three centuries by Western agriculture have depended upon chemistry, biology and mechanical invention. As long as labor remains the cheapest source of power in China it is possible that mechanical invention may not have as much to offer as in other lands, but it is certain that not only biology and chemistry but economics as well have a great deal to offer. In the control of insect and bacterial pests alone the possibilities of improvement are very great. It has been estimated that 75% of the silkworms hatched in

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China are destroyed by germs and that 85% of the cocoons spun are discolored by bacterial disease. A survey made in 1928 showed among other plant diseases a yearly loss of 20 to 40% of kaoliang from aphids, of 10 to 30% from a worm attacking the leaves of soya beans; various rusts, smuts and other bacteria causing 16% destruction in wheat, 20% in kaoliang and 17% in millet, and a tobacco worm causing a loss of 5 to 30%.¹⁸

No one who is aware of the results obtained in the study of sericulture at Lingnan University, who has seen the proved success of seed selection, the simple improvements in native implements, the dusting of seed with bluestone and similar experiments at Nanking, or the remarkable practical demonstrations offered to the farmers of Ting Hsien by the workers in the Mass Education Movement—to quote only a few examples—can have any doubts of the possibilities that lie before scientific agriculture in China. The Mass Education teacher, demonstrating gravely to a group of village elders the difference between a well-bred White Leghorn and one of the ubiquitous village hens, is a pioneer of scientific agriculture in China as much as Bakewell was in eighteenth century England. There are estimated to be over 300 million hens in China and few will deny the possibility of improving them. It is in precisely such humble ways that China may best be served at the present time.

(iv) *Rural Marketing*

Chinese agriculture has for long been commercialized to a degree that is often not fully appreciated. Though his farm still supplies the great bulk of the food and a fair

¹⁸ W. Y. Swen, *op. cit.*

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proportion of the materials used by the farmer and his family, there is a substantial proportion, especially of vegetables, purchased from outside.¹⁷ On the other hand, rather more than half of the farm produce appears to be sold. There are some cash crops in different regions, grown almost entirely for the market, but the more important fact is that even in the staple crops, such as rice and wheat, a fairly considerable proportion of the produce is sold. It is significant also that the general practice is to sell the better grains, sometimes for foreign export, and keep the cheaper, inferior varieties for home consumption.¹⁸ These facts indicate the importance to the farmer of an honest, efficient and economical marketing system in order that he may secure as large a proportion as possible of the proceeds of his labor.

Unfortunately, the marketing systems are far from fulfilling these conditions. The peasant, already sadly handicapped by the high price of land and by rents raised still further above an equitable market price by his weakness in bargaining, fleeced only too often by arbitrary and oppressive taxgatherers, is still further handicapped by having to sell his produce to local merchants when prices are lowest and to buy back his seed later at a much higher figure.

The first tremendous disadvantage under which rural marketing in China must labor lies in the restriction of the local market within narrow limits. As in so many other aspects of China's economic problems, the basic need here is for better transport and communication to widen the range of effective contact between buyer and seller. Julian

¹⁷ J. L. Buck, *Chinese Farm Economy*, p. 356-8.

¹⁸ *Ibid.*, p. 196-202.

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Arnold has at various times summed up this problem in striking statements, as for example in his calculation that human transport often costs seven times what rail carriage might be expected to cost,¹⁹ or in his statement that if Shensi farmers gave their grain to the Shanghai merchants, it would pay the latter to buy wheat from Seattle rather than pay the freight.²⁰ Wheat in Szechwan sometimes sells at one-tenth of the price on the eastern coast and it is calculated that in certain regions the cost of transport for fifty miles is more than the original price of the product.²¹

The cost of transport is, however, only one part of the problem. The taxgatherer plays his part, adding appreciably to the cost of marketing as well as to the cost of production. Indeed, it seems probable that the taxes collected while goods are in transit are a more grievous burden than even the time-honored land tax in all its variants, since they affect the cost both of the goods the farmer uses and of those he sells. Mr. Buck's studies disclose a tax burden of 3.9% of the producer's total expenses including costs of family and hired labor.²² A recent study of the marketing of soya beans shows a bewildering variety of imposts.²³ At Fuchin, the marketing center of the producing district on the lower reaches of the Sungari river, there are ten separate taxes calculated partly ad valorem and partly in cash according to weight.

¹⁹ Julian Arnold, "Changes in the Economic Life of the Chinese People," in *The Christian Occupation of China*; cf. also *Some Bigger Issues in China's Problems*.

²⁰ *Chinese Economic Journal*, October, 1930, p. 1069.

²¹ *Ibid.*, October, 1926, p. 437-8, and Ming Ju Chen, *The Influence of Communications*, p. 34 ff.

²² J. L. Buck, *Chinese Farm Economy*, p. 77.

²³ Tsao Lien-en, "The Marketing of Soya Beans and Bean Oil," *Chinese Economic Journal*, September, 1930; cf. also D. K. Lieu, *China's Industries and Finance*, Chap. IV.

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The four ad valorem levies at Fuchin totalled 8.5% and the six specific taxes amounted to \$.442 per shih plus haikwan taels .11 per picul.²⁶ At the next station the nine levies amounted to 7.8% plus \$.335 per shih and Hk. Ts. .11 per picul. Further on, at Anta, there are two more imposts, a province entrance tax of .5% and a "special" tax of \$.86 per shih. Later at Shiao chiaotse there is another entrance tax of .2%. It is impossible to calculate exactly the total cost of these burdens, since prices fluctuate and exchange rates vary, but it is obvious that this uncertainty must be disadvantageous to the farmer and add to the depressing effect on the price he receives from the merchant who has to face these 22 different tolls before he reaches the export market. The evil effects of this system of *likin* are well-recognized. The National Government has made repeated efforts to abolish it and finally on February 1, 1931, proclaimed its total abolition throughout China. A considerable measure of success appears to have attended this effort which is a great step forward, even though "consumption taxes" have replaced the *likin*.

After reaching an export center like Harbin there is still another barrier which in the case of this commodity, soya beans, has recently (January 20, 1929) been altered in the interest of local manufacturers. China has since January 1, 1930, exercised tariff autonomy and one of the natural results is the gradual introduction of a protective policy, in this case through export duties. The former export tariff rates were for beans Hk. Ts. .09 per picul and this duty has been retained, but for bean oil the old rate has

²⁶ The shih is 22.8 gallons and the picul is 133 1/3 pounds. The haikwan tael is a unit of account, \$.3511.

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been lowered from Hk. Ts. .45 to Hk. Ts. .20 (abroad) and .30 (coastwise), while that on beancake has also been reduced from Hk. Ts. .52 to Hk. Ts. .035 (abroad).

The confusion, uncertainty and heavy burden of the whole tax system will be apparent from this brief summary of one example. All economists will sympathize with Mr. Tsao's statement concerning "the omnipresent, confused, complicated and decaying system of *likin*, which is blotting away all the visible fibers of trade and industry in the country," and more than the economists will rejoice at the National Government's determined effort to clear away the whole system. There are, however, even more fundamental economic difficulties than those of high transport and excessive taxation in transit. Partly through sheer limitation of the market and inefficient methods, partly because of practices which R. H. Tawney rightly compares with the mediæval "forestalling and regrating," the peasant farmer often receives a pathetically small proportion of the final value of his product. There are great variations of price between local markets, and in the same market at different periods, while the multiplication of middlemen, nearly always organized strongly in monopolistic guilds, deprives the peasant of a large part of his share of the price.

When he has to sell rice at \$10 per picul at harvest and buy his seed a few months later for \$28 per picul,²⁵ when a picul of tea purchased in Anhwei for \$1.50 can be marketed in Shanghai (perhaps 500 miles away) for \$14,²⁶ obviously there is room for improvement in the marketing system. Conditions vary in every district and for every

²⁵ R. H. Tawney, *op. cit.*

²⁶ Boris P. Torgashev, *China as a Tea-Producer* (Shanghai, Commercial Press, 1926), p. 80.

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commodity, but there can be no doubt that the cost of marketing is excessive. The New Zealand dairyfarmer, operating through a cooperative producing and marketing system and selling his product 13,000 miles away, is able to secure for himself 81% of the wholesale price of his butter in London.²⁷ The Chinese farmer in Honan gets 56.2% of the price of his peanuts in Shanghai and of the remainder over 30% goes for trading profits and commissions.²⁸

The increasing number of analyses of this problem now being made by Chinese and foreign students, some of which are cited above, are revealing its importance and this is a promising fact. Still more promising are the experiments, as yet small but immensely significant, which are being made in cooperative marketing under the guidance of university experts who have specialized in this field of research. In a country committed to small-scale peasant farming as China is, rural cooperation is one of the most powerful levers for the improvement of economic conditions. Its natural beginning is in the provision of cheaper and more adequate credit, but its importance goes far beyond the freeing of the peasant from his demoralizing dependence on the money-lender. The great success of the movement in the peasant countries of Europe and also in such newer lands as New Zealand has sprung, as the initial success of the consumers' cooperative movement in England sprang, from the fact that it has proved efficient in a part of the economic system which was badly organized. It has even greater opportunities in China. One cooperative society organized by

²⁷ J. B. Condliffe, *New Zealand in the Making* (London, Allen and Unwin, 1930), p. 219.

²⁸ *Chinese Economic Journal*, V, p. 779-781. Cf. also similar estimates in T. S. Chu and T. Chin, *Marketing of Cotton in Hopei Province* (Peiping, Institute of Social Research, 1929).

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the efforts of Paul C. Hsu of the University of Nanking has already been able to get for its members much better prices for their cotton, amounting to as much as \$6.84 (silver) per picul for improved varieties.²⁹

The benefits of rural cooperation, however, do not cease with such services. As every student of the problem in every country has emphasized, the greatest benefits in the long run, even when measured in monetary terms, come from insistence on quality, from the elimination of short-sighted and sharp practices either in buying or selling, from the spread of education and the appreciation of scientific research, and above all from the habit of mutual cooperation and support—a habit which China so badly needs. Nor does the cooperative spirit confine itself to purely economic expressions. As the experience of the consumer's cooperative movement in England and the rural producers' movements in various European countries, particularly Denmark, clearly proves, cultural education is a natural outgrowth of interest in scientific education for economic purposes. Rural cooperation offers one of the most promising avenues of economic and cultural improvement in China and, as the following section will indicate, some considerable progress has already been made in its promotion.

(v) *Rural Credit*

Cheap and abundant credit is always a condition of economic progress, but it is nowhere more needed than where incomes are small and margins over bare subsistence meager. The development of credit institutions, even in Western countries, is comparatively recent. Here, as in so many

²⁹ Paul C. Hsu, "Rural Cooperation in China," *Pacific Affairs*, October, 1928.

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other matters, China compared very favorably with pre-modern Europe, but has been left behind by modern progress. It is true that large tracts of the economic system even in the most advanced countries still lack adequate credit facilities, but, generally speaking, China has much to learn, particularly in the organization of rural credit, even from such countries as the Dutch East Indies, and still more from the peasant countries of Europe.

The need is very evident both for the tenant-farmer and for the peasant-owner in China. Statistics of indebtedness are naturally difficult to secure and nothing more than sample indications can be hoped for. Such material as is available, however, indicates that debt is a common condition of the peasantry, that only very exceptional circumstances ever enable a farmer to free himself of debt, that there is a large, widely diffused and infinitely varied vested interest subsisting upon the indebtedness of the peasant, and that rates of interest are ruinously high.

The evidence seems to show that it is not the usual practice to acquire land under a mortgage system. Farming is not profitable enough in China for this type of long-term credit to have been evolved. The usual process of acquiring land is either by rental, share-ownership or purchase.⁸⁰ Occasionally the land is parted with and farmed by the mortgagee, but this does not seem a very important method of acquiring land.⁸¹

⁸⁰ The rise and fall of the fortunes of a peasant family are portrayed with great sympathetic insight and accurate local knowledge by Pearl S. Buck in her excellent novel *The Good Earth* (John Day, 1931), which deals in narrative form with much the same problems as her husband's researches present statistically.

⁸¹ J. L. Buck, *op. cit.*, p. 67. In 2,886 farms surveyed the land acquired by mortgage in this way represented 1.2% of the capital investment.

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The most important uses of credit in rural China fall into two main classes, not always distinguishable. In the first class are loans for what in other countries would be called "intermediate" or "short-term" requirements. The farmer borrows for current expenditure, anticipates his harvest, redeems his implements from the pawnshop, buys livestock or seed on credit, or is driven to improve his property by digging wells or draining, with expenditure from a loan. In the second class come loans for spendthrift or distress purposes, to cover unusual expenditure on funerals, weddings, festivals or replacements after a disaster such as flood or fire.⁸²

Whatever the form of loan, it is only too clear that the driving cause in almost all cases is pitiful necessity. In other words, the Chinese farmer, like the low-paid workers in other countries, rarely uses credit deliberately and intelligently, as an economic instrument for increasing his productivity and so securing a profit for himself. He is driven to it by disaster or by the inadequacy of his income.

It is not surprising, therefore, to find that he is forced to pay cruelly high rates of interest and is commonly in almost constant bondage to the money-lender in one way or another. The form of loans, the security taken and rates of interest demanded vary greatly. The first investigation upon which the Famine Relief Commission based its program of rural credit disclosed rates of interest never less than 1%, averaging over 2% and running up occasionally to 10% monthly. Subsequent investigations corroborate these figures and seem to suggest that rates of 1% are not

⁸² C. B. Malone and J. B. Tayler, *op. cit.*, p. 44; W. H. Mallory, *China: Land of Famine*, p. 20-3.

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now obtainable. A recent statement by Paul C. Hsu,⁸⁸ for example, shows that

the rate of interest varies from 1.5% to over 10% monthly. A monthly interest of 1.5% is obtainable at cooperative credit societies only. As an extreme example of usury rate, the farmers near Nanking have to pay one dime (a twelfth of a Mexican dollar) for every dollar borrowed. This refers to reliable farmers only, while the farmers with poor credit have to pay two dimes instead of one. In general, loans with higher rates of interest are small loans for short terms. This makes the small farmers suffer most. It is almost impossible for the farmers to recover their original economic position once they assume debts with such heavy interest charges. This results in the taking over of the land of the small farmer by the money-lender. So, eventually, the latter becomes landlord, while the farmer becomes tenant. The establishment of the legal rate of interest by the National Government tends to moderate the rate but does not solve the problem.

The sources from which the loans are obtained are almost entirely local. Indeed the wide diffusion of the vested interest in money-lending greatly increases the difficulty of dealing with it. Loans, especially those for short terms, are easy to obtain. Credit rating and personal reliability are easy to estimate in the village community. For larger expenditures on weddings and funerals recourse is often had to mortgages on the land, but for the shorter loans of seed or cash to carry on till harvest, neither security nor guaranty and sometimes not even a written contract is required. The money is obtained from local merchants, larger farmers or pawnshops. The latter are familiar institutions both in town and country and the extent to which they become stocked with implements, clothing and other

⁸⁸ Paul C. Hsu, "Rural Credit in China," *Farm Economics*, August, 1930; W. H. Mallory, "Rural Cooperative Credit in China," *Quarterly Journal of Economics*, May, 1930, states that the ruling rate of interest in Hopei Province is 3% monthly.

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poor possessions in winter is eloquent evidence of China's poverty.

The great shortage of credit resources in China is aggravated by lack of security in rural districts. Far too much of China's resources goes into land values in the cities, into hoards, and into government loans, often for military purposes. There is a vast credit field awaiting better organization and it may reasonably be hoped that in time the rural loan societies which have long been a feature of Chinese life may be broadened and strengthened by becoming true cooperatives, that their strength will be further increased by support from cooperative banks and that these may be buttressed by a stable national banking system which includes land banks among its institutions. When that time comes the credit resources now heaped up in the cities may find a more useful outlet in the country districts and may even be supplemented by foreign credits.

A very promising start has already been made with the organization of cooperative credit. Here again the initiative has been taken by the China International Famine Relief Commission, whose activities have been emulated by other institutions. There are possibly 1,000 such societies to-day, of which 246 are recognized by the Famine Commission.³⁶ The movement is only ten years old in China and is still in its infancy. The 246 recognized societies have only 7,862 members, but their experience has been so successful that

³⁶ Cf. Paul C. Hsu, "Rural Cooperation in China," *Pacific Affairs*, October, 1929; Walter H. Mallory, "Rural Cooperative Credit in China," *Quarterly Journal of Economics*, May, 1931; Paul C. Hsu, "Rural Credit in China," *Farm Economics*, August, 1930; "Herr Raffessen among Chinese Farmers" (China International Famine Relief Commission, Series B, No. 37, April, 1930); "Rural Cooperative Credit Societies: Model Constitution, etc." (Series B, No. 18, 1926); D. K. Lieu, *China's Industries and Finance*, Chap. II; and *Nankai Weekly Statistical Service*, October 19, 1931.

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the movement is now rapidly being extended and is being taken up by provincial authorities as well as by voluntary forces at work in modern China.

(vi) Government Policy and Private Initiative

The tremendous scope and intricate complexity of the agricultural problems of China might well daunt even the stoutest-hearted reformer, yet they are the fundamental problems which need to be tackled. It will be evident from the brief and imperfect sketch attempted in this chapter that pioneer explorations and experiments have been made largely by private institutions. The promise of these experiments is very great and within their limited area practical results have already followed. But any considerable progress must be supported by national effort and, at the present time, the government is the only organization which can be looked to for such support. The time may come when private organizations such as farmers' cooperatives may link themselves together, but that cannot be until the government has succeeded in overcoming the disunity at present so painfully evident.

It is easier to see what needs to be done than to do it. The political leaders of China from Sun Yat-sen onward have laid great stress upon agricultural and land reform. Behind the drive for liberty and efficient government, there is in all sections of the National Party, a conscious economic motive, a desire for social betterment. As in other lands there are divisions of opinion as to methods. Radicals strive for the adoption of principles and policies aiming at the construction of a socialistic state while moderates or conservatives plan a capitalist development, but both real-

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ize the economic and social implications of political action. The nationalist movement has never been merely a political struggle. It is, however, very unfortunate for China that the very real divisions of opinion on policy should have resulted in so great disunity among those who lead the national progress toward modernization. The difficulties that beset such progress are great enough in any case. The vast problems that need solution are hindered by the lack of elementary facilities for good government—poor communications, the absence of an adequate civil service, a low level of education, the survival of vested political interests and traditional customs—and it is unfortunate that there should be added to such hindrances personal and political controversies which tend to paralyze attempts to get forward with administrative reforms. It is true that China is at the turning of the ways in almost every conceivable aspect of its social life. Every decision is a binding precedent, not to be lightly made and hardly to be reversed. There is good reason for heart-searching in regard to fundamental policies, but it is distressing to watch great problems going by default while theoretical attitudes are canvassed. The need for action is so urgent in so many directions that one cannot but hope for reasonable measures of compromise and cooperative unity, combining adequate discussion with greater vigor in administration. China's problems would be well on the road to solution if the proportions of energy and national resources now put into dissension on the one hand, and government on the other, were reversed.

Notwithstanding this grave handicap, however, some progress is being made. Successive conferences of the Kuomintang have considered the problems of agriculture

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and a program has been laid down, the comprehensive character of which may best be judged perhaps from the following official summary.²⁵

Legislation relating to rural cooperation, agricultural insurance, storage of grain, organization of model villages, prevention and control of diseases in animal husbandry, etc., will be compiled and additional agricultural experimental stations will be established in the provinces to improve the cultivation of tea and cotton. The campaign against insect pests will be prosecuted with vigor and a bureau of entomology will be established. Waste lands in the northwest and the northeast will be surveyed with a view to colonizing them with the disbanded soldiers and relieving the congested areas in China proper of their surplus population. The local communities will be encouraged to dig wells and irrigate their lands, while river systems will be improved in order to minimize the danger of floods and droughts. A national sericulture bureau will be established, while additional cattle farms will be established in the northwest region. The fishery trade along the coast and in the inland waters will be extended and agricultural insurance will be promoted. Efforts will be made to reduce the transportation charges on agricultural produce, and land taxes will be reduced as much as possible. A system of rural credits and cooperative agencies will be started and rural banks will be promoted. An agency to control the foodstuffs and keep track of their production will be established as a precaution against famine, while effective measures to increase the productivity of arable lands will be introduced. The system of model villages will be extended and amusement grounds will be promoted for the recreation of the farming communities. Moreover, expositions of agricultural products will be held periodically and weather forecast stations will be established.

While this program is quite obviously one of aspirations couched in general terms, it indicates a grasp of essential problems. It is important also that a Land Department with extensive powers is now in existence preparing to work on

²⁵ M. T. Z. T'au, *Two Years of Nationalist China*, p. 183.

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the program,⁸⁶ and that an important Land Law has been passed laying down the basic legal principles along which reorganization shall proceed.⁸⁷ The ground is prepared and the foundation laid upon which a better system of agriculture may be erected in the future.

The primary tasks of securing peace and security, of devising equitable and less burdensome taxation, of providing adequate communications, of facilitating private initiative in improvements of marketing and of credit organization, and above all of extending scientific research and agricultural education, lie largely in the future, as does the tremendous administrative task of overhauling the tenurial system. Little success has so far attended the efforts of the government to regulate rents or rates of interest. A promising beginning has been made in the reform of the tax system by the abolition of *likin*, and the foundation of the Academia Sinica with its well-endowed research institutes is a great step forward.⁸⁸ But no concerted effort has been possible to survey the real possibilities of bringing new land into cultivation, and such colonization as has taken place by individual effort in regions like Manchuria has been subject to gross abuses and exploitation. No one who has even the sketchiest notion of the vastness and difficulty of the great agricultural problems that still await solution will be impatient or unsympathetic as the young leaders of modern China approach their colossal tasks.

⁸⁶ *Ibid.*, p. 70.

⁸⁷ *The Nanking Government's Laws and Regulations*, translated by British Chamber of Commerce (Shanghai, 1930).

⁸⁸ M. T. Z. Tyau, *Two Years of Nationalist China*, Chap. X.

CHAPTER IV

THE GROWTH OF TOWNS AND URBAN INDUSTRY

(i) The Growth of the Coastal Cities

There are said to be over 2000 towns in China,¹ but there is obviously a great economic difference between the marketing and administrative centers of old China and the vigorous new cities which are growing so fast on the sea-coast and along the river valleys and railway lines. The urban life of China before the advent of foreign trade on a great scale was as decentralized as its agriculture, with which indeed it had an intimate connection. The units of organization were the market towns, which were generally administrative centers also, each surrounded by its satellite agricultural villages. There was no dominating ascendancy of great commercial or industrial centers drawing the trade, financial resources and surplus population of the whole countryside to themselves.

Both local trade and administration were decentralized. Communications were poor and costly. The economic life of China therefore resembled a collection of unicellular organisms rather than a complex differentiated structure.

¹ Boris P. Torgashev, "Town Population in China," *China Critic*, April 3, 1930.

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What are now the great trading centers on the coast were little developed before the advent of foreign commerce. The great historic towns of China were usually the seats of government at different times, but Kaifeng, Loyang, Sian, Soochow, Hangchow, even Peiping and Nanking have now fallen behind in the race with the new upstart cities of Shanghai, Hangkow, Tientsin, Dairen, Canton and Amoy. With them has passed, or is passing, the dominance of the scholar-administrators. Political as well as economic ascendancy seems likely to fall, as it has in other countries, into the hands of the leaders of commerce, finance and industry.

It was the development of foreign trade on a great scale in the middle of the nineteenth century that began the processes of urban concentration familiar to students of European economic history since the Industrial Revolution. When foreign steamers began to carry rice from southern China to the capital at Peiping, traffic along the Grand Canal fell off, but the seaport towns flourished. One of the most remarkable features of recent economic change, indeed, has been the mushroom growth of these great trading centers, particularly Shanghai, which has become the most important city in China both economically and politically.

To this growth the disturbance of equilibrium touched upon in a previous chapter has materially contributed. J. Lossing Buck found in a survey of 2,054 farm families that 3.7% of their number had migrated.² Many went to seek their fortunes in newly opened regions such as Manchuria, but many were drawn also to the developing towns. Temporary migrations caused by seasonal un-

² J. L. Buck, *Chinese Farm Economy*, p. 348-350.

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employment or by failure of crops add to this drift to the towns. Any serious disturbance, distress or insecurity in the countryside accentuates it greatly.

Many historical examples might be given. The original influx of Chinese residents into the International Settlement at Shanghai for instance was caused by the distresses that accompanied the Taiping rebellion in the early fifties.³ Even to-day there is abundant evidence of the same forces at work. A recent survey of housing and social conditions in Shanghai vividly described the plight of these refugees from rural distress and reveals the extent of the problem:⁴

Having no patrimony and no relatives who can help, they come to the city unbefriended by the native people and are subjected to the worst of hardships in making a living. Being driven often by disillusion and hunger, they are willing to do the most menial work for very low wages. So they have become the beasts of burden of a toiling community. Their income is so small and the cost of living is so much higher here than where they come from, that they cannot as a rule afford to pay rent in any of the houses described above. So they are obliged to choose between the open air and mud huts to be built by themselves. As a result Shanghai is now surrounded by a dotted chain of mud-hut colonies which are readily visible to any one who travels about the outskirts. No accurate statistics of the number of huts or their inhabitants are available, but a rough estimate by the writer would place the number of huts beyond 50,000 and their inhabitants between 200,000 and 300,000.

³ F. L. Hawks-Pott, *A Short History of Shanghai* (Kelly and Walsh, 1928). The most dramatic recent example is afforded by the wholesale migration from north-central China to Manchuria; see *Population Movements to the North Eastern Frontier of Manchuria* (Nankai Institute of Economics, 1931).

⁴ M. Thomas Tchou, *Outlines of Report on Housing and Social Conditions among Industrial Workers in Shanghai* (National Committee, Y. M. C. A. of China, May, 1926), p. 9. Simon Yang and L. K. Tao, *Livelihood in Peking*, p. 23, estimate the unskilled and semiskilled workers in that city—"street hawkers, handicraft workers, and rickshamen, even some policemen of the lower rank, servants and assistants in small stores"—as not less than 270,000.

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Apart from this very distinct tendency for the surplus population of the rural districts to seek their livelihood in the growing coastal towns, there are, of course, important economic causes for the growth which attracts them. Broadly speaking, these causes originate outside China and fall into three main classes.

The first and as yet the least important, though in the long run probably the most permanent and beneficial, is to be found in the activities of the new governmental order based largely upon Western ideas and institutions. Whatever its failings, the present government has the great virtue of being the first in long centuries to have a constructive, progressive outlook. It is not content to govern and collect taxes but, within the limits of its powers, presses forward with economic reconstruction. Canton under the revolutionary régime was the first city to feel the impact of these new influences. New broad streets were opened up, public works undertaken, universities established, banks promoted and government activities invigorated. In more recent times, since the government has been established at Nanking, such developments have been largely concentrated in Chekiang, which is to be the "model province."⁵ Hangchow is an excellent advertisement for this policy, but the whole province has benefited.

The second influence which is transforming the coastal cities of China is also Chinese in agency, but derived from Western origins, in this case operating from outside China. It lies in the effect of the extraordinary volume of remittances from overseas Chinese. The volume of these remit-

⁵ "The Building of a New Chekiang," *Chinese Economic Journal*, December, 1930.

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tances is difficult to estimate, but the recent researches of Professor C. F. Remer indicate that it is greater than has hitherto been estimated and may amount to as much as \$250-\$300 millions (silver) annually.⁶ It has probably been the largest single factor in enabling China to maintain a consistently adverse balance of trade for many years.

The colonies of emigrant Chinese who have prospered so well in many lands, but particularly in the Straits Settlements,⁷ the Dutch East Indies⁸ and Hawaii, come largely from the southeastern coast. For several decades now there has been a return stream of money, ideas and men. The revolution was born among these emigrants and their influence has been as powerful economically as politically. Whole towns, notably Amoy, have been reinvigorated by their influence.⁹ Returned emigrants, in this case from Australia, established the great department stores that now operate in all the great coastal towns. An increasing stream of overseas Chinese is returning to take advantage of the economic opportunities for leadership in their homeland. As R. G. Hawtrey has well said,¹⁰ in such a backward economic land all the higher executive positions of industry are vacant, and Chinese who have learned Western ways abroad are not slow to appreciate this fact.

The third, and till now by far the most important, of these

⁶ "Extent of U. S. and Other Investments in China," *China Weekly Review*, May 9, 1931.

⁷ W. J. Hinton, *The Government of Pacific Dependencies—British Malaya*, data paper prepared for the Institute of Pacific Relations Conference, 1929.

⁸ Amry Vanderbosch, "A Problem in Java," *Pacific Affairs*, November, 1930.

⁹ Cf. the illuminating articles and photographs in an article by Fang Fu-an, "Public Works in Amoy," *Far Eastern Review*, April, 1931.

¹⁰ R. G. Hawtrey, *Economic Aspects of Sovereignty* (Longmans, Green & Co., 1930).

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external influences is obviously the presence of foreign traders, their capital resources and the impetus they bring to the utilization of progressive economic ideas. In addition to their economic influence, there is the very important fact that they have established what may be called "islands of privilege" or "asylums of security" according to the political attitude one takes toward the measures they have adopted to secure protection of their personal rights and property, due observance of law and orderly administration. Whatever view is taken politically, the economic fact is undisputed that within and around the foreign settlements there have grown up great urban areas of Chinese life.

It is difficult to measure statistically the exact extent of their influence. Foreign investments in China apart from government loans are the subject of an investigation not yet completed, but from the fragmentary information now available it seems probable that the total is not less than \$3,000 millions (gold), and may be considerably more.²¹ Of this total the greater part has been invested in the coastal towns. A Chinese survey of British business investments estimates that 42% of the total is in manufacturing establishments, 21% in insurance, 10% in shipping, 7% in real estate and 7% in importing and exporting businesses.²² It is obvious that the great bulk of these investments is to be found in the coastal towns. The whole of this foreign investment has come into China within a hundred years and most of it within the last thirty years. It has obviously been a powerful factor in the growth of the great trading and manufacturing centers.

²¹ *China Weekly Review*, May 9, 1931.

²² D. K. Lieu, *Foreign Investments in China* (Nanking, Chinese Government Bureau of Statistics, 1929).

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The effect of the ideas and organization introduced by the foreign residents in these cities is not capable of any precise estimation, but it is obviously considerable. While there may be some question as to the political consequences of their establishment of essentially foreign cities on Chinese soil, there can be no doubt that they have been the chief means of presenting to the Chinese people a tangible and visible demonstration of the superior economic efficiency of the Western world.

There is the still greater question concerning the political and legal means by which the foreign settlements have protected their interests, but on the economic side again the evidence is clear that Chinese have taken advantage of the security and amenities thus procured. It is, of course, impossible to separate the effect of foreign controls over government from the effect of natural geographical advantages. The commanding economic position of such a center as Shanghai is derived from both, in what proportions no one can exactly say. That the security and conveniences offered by the privileges of the foreign settlements are important, is clear from the fact that land values drop 20% even on the "extra-settlement roads," when they pass into Chinese territory. For properties not fronting on these roads and therefore entirely outside foreign control the difference is estimated at 40 to 50%.¹³

The recent official report of Judge Feetham to the Council of the International Settlement at Shanghai contains an illuminating and detailed section on "Business Interests in Shanghai."¹⁴ The port of Shanghai is now "well within

¹³ *Report of the Hon. Mr. Justice Feetham, C. M. G., to the Shanghai Municipal Council, 1931, I, p. 341.*

¹⁴ *Ibid., Part III.*

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the first eight ports of the world" in respect of tonnage entering it. It is the premier port of China, at which the Chinese Maritime Customs collects 45% of the revenue. It is the leading manufacturing center of China, over 53% of the cotton spindles being situated in this one town, and probably larger proportions of other large-scale manufacturing industries. It has also become the principal banking center of China. Of the 20 foreign banks having offices in Shanghai, 19 are situated within the International Settlement. All 39 of the modern Chinese banks and 70 of the 77 old type Chinese banks are situated there also. The remaining foreign bank is in the French Concession, so that the only banks in the Chinese area are seven "Native" banks. The modern Chinese banks in the Settlement include the head office of the central Bank of China (an exclusively government bank) and also the head offices of the semigovernmental Bank of China and Bank of Communications.

The new Chinese Mint, said to be the largest silver mint in the world, is also at Shanghai, with access from the International Settlement. Behind the note issues and other liabilities of these banks there was at the end of 1930, a reserve of over 200 million taels of silver (\$83,640,000 gold at 1930 average exchange).

In view of this concentration of mercantile, manufacturing and financial interests it is not surprising to find that in recent years land values have mounted rapidly. The assessed values of the lands in the foreign settlement were less than Ts. 50,000,000 in 1900, rose to Ts. 150,000,000 in 1907, fell slightly to 1911 and then rose slowly to Ts. 200,000,000 by 1920, since when they have jumped to

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Ts. 600,000,000.¹⁶ It is true that a considerable part of this most recent increase really consists of adjustment to the falling price of silver, but this factor is insufficient to account for the generally recognized increase of "real" values. There are two factors here involved which may be graphically illustrated by quotations from memoranda submitted to Judge Feetham and published in his report.

The first¹⁶ gives practical evidence of the main point stressed in this section, *viz.*, the importance of external influences in building up the great coastal cities of China :

It is, I think (the first quotation runs), a generally accepted fact that, throughout the world, more particularly in seaports and populous centers, land has what may be called an international value. If the sterling/tael exchange declined to 6d, and owners of land and buildings in Shanghai did not adjust their ideas of prices at which they were willing to sell, it would mean that banks, insurance companies or other concerns from overseas would come to Shanghai and buy important properties for an amount in gold ridiculously small, having regard to the cost of the buildings, and the value of the land upon which they stand for international use by reason of its location.

The second memorandum draws attention to the powerful attraction exercised by these foreign influences upon economic resources within China itself. The Shanghai Property Owners Association, after recognizing the unique situation of the port of Shanghai, added :¹⁷

¹⁶ The exchange of Shanghai taels on New York was, on average for the years stated :

1900	.....	\$0.6819
1907	.....	.6553
1920	.....	1.1860
1929	.....	.5842

¹⁶ Feetham, *op. cit.*, p. 338-9.

¹⁷ *Ibid.*, p. 340-1. Against such statements one must weigh the considered verdict of a leading Chinese economist that "while such security is very important to industrial development in general, it is a mistake to consider it the cause of Shanghai's industrial growth. The flocking of refugees

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For while, generally speaking, land values have shown an upward tendency in all parts of China—subject to local exceptions due to special causes—during the last thirty years, there is no other city in China which shows such a phenomenal growth and rise of land values as is the case with Shanghai. It must be admitted this, in large measure, is due to its geographic situation. . . . However, after making due allowance for these purely geographical or economic factors, the next most important contributory cause to the prosperity of this port has been the security and public services obtainable under a very efficient municipal government which, up to the present time, has been under the guidance and direction of experienced foreign administrators. . . . In support of this contention we would call attention to the fact that during the past 15 years—since, say, the Revolution of 1912—there has been a definite tendency for wealth and capital to flow from all parts of China to Shanghai for security and investment.

In summing up the facts presented in this section, one might well use the metaphor suggested by R. H. Tawney and say that “a new fringe has been stitched along the hem of the ancient robe of China” or put the same idea in other words by dividing China into coastal and interior zones.¹⁸ The cities of China which are growing into a position of economic and political dominance, Shanghai most of all, are created largely by the new external influences which connect China with the more developed industry and trade of Western lands. As yet their chief *raison d’être* lies in trading. Though there are manufactures of some im-

to Shanghai may cause a phenomenal rise in rent and prices, swell the pockets of the local landowners and tradesmen and present superficial signs of prosperity, yet industries do not develop through mere congestion of population. No amount of security in a small area of a few square miles can make industries prosper if an adequate supply of raw materials is not maintained by good communication facilities, and the products marketed through the same means. (D. K. Lieu, *China's Industries and Finance*, Chinese Government Bureau of Economic Information, 1927, p. 30.)

¹⁸ R. H. Tawney, *op. cit.*; C. F. Remer, *American Investments in China*, (Institute of Pacific Relations, 1929); W. J. Hinton, quoted in Stamp, *Asia*, p. 479.

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portance, their chief interests are commercial and financial. China may find difficulty in industrializing itself, but in these coastal cities at least, its commercialization (if one may use such a word) has already proceeded very far.

(ii) *The Problems of Urban Development*

The facts discussed above are illuminating both in regard to the developing problems of urban life in the new cities of China and also in connection with the relief which urban and industrial development is in many quarters expected to bring to China's basic agricultural and population problems. What has so far happened can hardly be called industrialization, except in the widest sense of that term.¹⁹ The city problems are not so much those created by the growth of factories and factory conditions as the more fundamental questions of finding employment, housing and decent environmental conditions for those who have crowded from an overpopulated countryside into these urban areas.²⁰ Something is said later concerning the conditions of work in the new factories, but it should be made very clear that the more urgent and prior problems are those of the unskilled casual workers who throng the city streets and camp in its environs. The primary problem is to find work and therefore food for the laboring masses.

It is no exaggeration indeed to say that unemployment, together with underemployment, is the gravest of China's social problems. China has too many people in relation to

¹⁹ Cf. Franklin L. Ho and H. D. Fong, *Extent and Effects of Industrialization in China* (Tientsin, Nankai University, 1929).

²⁰ Cf. C. F. Ma, "Notes on China's Labour Population," *Chinese Economic Journal*, November, 1930. Cf. the Nankai University studies of industrialization in Tientsin, *Hosiery Knitting in Tientsin*, p. 57, and *Rayon and Cotton Weaving in Tientsin*, p. 50, for the very large proportion of workers in those industries born outside the city.

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its available resources, capital and organization. Even in agriculture, based as it is almost entirely upon human labor, there is an alarming problem of surplus labor-time. The average farmer appears to be fully employed only for one-fourth of the year, even though it takes many times the labor to raise crops in China that similar crops require in the United States.²¹ One outstanding reason why, despite low living standards, labor-costs are high in China, is to be found in the extraordinary fact that the farmer is unemployed approximately three-fourths of his possible working time.

There is much evidence to indicate that the same sort of conditions are to be found in the cities. Even though, as on the farms, much work that in other countries is done by mechanical means is more cheaply performed in China by human labor, there is still an enormous volume of underemployment. It is often said that 20% of China's people are engaged in transport and every visitor to China is familiar with the sight of rickshamen, porters and coolies dragging heavy loads. Yet those most competent to judge place unemployment in the foreground of social problems.²² Moreover, this unemployment, which extends to intellectual as well as manual workers,²³ has been rendered more disastrous for the individual by the new conditions of urban life,²⁴ and all investigators agree in describing the position

²¹ J. E. Buck, *op. cit.*, Chap. VIII. In addition to this underemployment, C. F. Ma, in the article just quoted, cites an estimate of actual unemployment in Shensi, of over 15% of the population.

²² Cf., e.g., Ta Chen, *Chinese Labour since 1927* (Shanghai, Conference on the Peoples' Livelihood, February, 1931).

²³ L. K. Tao, "Unemployment among Intellectual Workers in China," *Chinese Social and Political Science Review*, June, 1929.

²⁴ H. D. Fong, *Industrialisation and Labour in Hopei* (Conference on Peoples' Livelihood, February, 1931).

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particularly of the unskilled casual laborers as deplorable.²⁵ This is probably the major problem of urban development.

There is little need to dwell at great length upon the related problems of housing,²⁶ efficient urban administration,²⁷ sanitation²⁸ and education²⁹ which confront the municipal administrations. All students of economic history in the early nineteenth century are familiar with the difficulties of devising effective measures to deal with the similar problems which then presented themselves in the industrial towns of northern England. Those same problems are now more difficult in China; if only because of the more rapid pace of transition. It is, moreover, difficult to believe that there is, as yet, any great increase in productivity such as accompanied the Industrial Revolution in England and finally made possible the measures of social control, education and welfare legislation that enabled the masses of the laboring people to climb out of the worst depths of their poverty and illiteracy.

If this diagnosis be true in the main, and practically all Chinese and foreign students of the problem agree on the facts, then it follows also that the recent rapid growth of the cities is not giving appreciable relief to China's popula-

²⁵ Cf. L. K. Tao, *Livelihood in Peking* (Social Research Dept., China Foundation, 1928), and many other studies of the standard of living of unskilled urban workers.

²⁶ Cf. M. Thomas Tchou, *op. cit.*

²⁷ Report of Judge Feetham, *op. cit.*, p. 149-165, 238-251.

²⁸ See the address of Dr. L. W. Rajchman, reported in League of Nations, Minutes of the Health Committee, 15th session, p. 7-14 (C. 190. M. 90. 1930. III. 5).

²⁹ Cf. M. T. Z. Tyau, *Two Years of Nationalist China*, p. 219-222; J. L. Buck, *Chinese Farm Economy*, Chap. XI; *Problems of the Pacific, 1929*, p. 134-5; F. L. Hawks-Pott, *A Short History of Shanghai*, Chap. XII, and Feetham, *op. cit.*, p. 164-5. The status of this question is summed up in Tyau's statement "the problem of compulsory education remains to be tackled." In the International Settlement of Shanghai there were in 1930 four secondary and three primary municipal schools with provision for 3,276 children. The Chinese population of the Settlement was estimated as 971,397.

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tion problem. Rather it is a symptom of that problem, created largely, though not wholly, by the overpopulation and surplus labor of the countryside. The urgent need of China is for a rapid increase in productivity creating a temporary surplus of wealth over bare necessities that can be used in an effort to raise standards of living and of behavior, so as to restrain the present prolific increase of the people. Evidences of wealth in the cities, and of the prosperity and even luxury of the wealthier classes, whether Chinese or foreign, do not disprove the facts of overpopulation, nor ameliorate them. The essential condition of improvement is that some part at least of the increased wealth should be directed to improving the status of the laboring people, by directly raising their standard of living, and by placing in the hands of the government and public institutions the means of promoting their education and social welfare. The problem is so colossal that such a solution may well seem chimerical, but the condition of the laboring masses whom Charles Dickens described in *Bleak House* seemed equally hopeless to its generation, and the lessons of history in this respect are clear. It is necessary, therefore, to examine the prospects of more rapid industrial progress in the near future, not because such prospects offer the most fundamental solution of China's problems, but because they are a necessary counterpart of the possibilities of agricultural progress discussed in the preceding chapter.

(iii) *The Present Stage of Industrial Development*

Any attempt to summarize the present industrial development of China is faced with almost insuperable difficul-

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ties. The vast extent of a country almost as great as that of Europe, the wide range of diversity presented by its characteristic industries, and the equally diverse stages of their economic organization are sufficient obstacles, but in addition one must reckon with an almost complete absence of reliable statistics for what still remain the major industrial activities of the Chinese people. The statistics readily available refer in almost all cases to those better organized, larger-scale industries which are located in the more accessible coastal regions. In them the foreign-controlled modern industry and the Chinese factories using modern methods loom large. The result is apt to be very misleading, giving a false impression of industrial development not warranted by the facts for the country as a whole.⁸⁰

The collection of accurate statistics for the greater part of China has, as yet, proved impossible. Nothing approaching a census of production can be hoped for until a much greater degree of political organization has been achieved. Even if there were a stable government, adequately served by a trained civil service in the provinces as well as at the capital, there would still be great difficulties to overcome. There is no general use of standard weights and measures, and local custom varies enormously. Even in the same town there may be many varieties used. In the same way there is a bewildering variety of local currencies, often at differing stages of depreciation. Nomenclature, both of products and of places, presents many pitfalls also, grades and qualities of products are stated according to local

⁸⁰ The concentration of industries in a few areas is well set out in the *Nankai Weekly Statistical Service*, August 17, 1931, "Provincial Distribution of China's Industrialization."

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custom, and there is, finally, the very considerable problem of persuading the individual producer that the statistics are collected disinterestedly, largely for his benefit, and that it is therefore to his own interest to render full and accurate information.⁸¹

Immediately after the Revolution of 1912 the government made a big effort to collect more adequate statistics and this effort was maintained till 1921. The main results, as far as industrialization is concerned, have been summarized by Franklin L. Ho, but while valuable information is contained in his report, there are great and obvious gaps.⁸² Though the National Government has now taken up the task once more in what promises to be a much more adequate fashion,⁸³ one must in the meantime utilize the rather fragmentary information available in monographs and journal articles devoted usually to limited aspects of single industries.⁸⁴

It is, therefore, all the more necessary to emphasize the fact that the industries for which definite statistical information is available do not represent the whole of Chinese industry, and indeed are not characteristic, as yet, of the major part of Chinese economic life. Those most competent to judge are emphatic that cottage industry and workshop industry, are, and will for some time remain, more important than factory industry. Moreover, the so-

⁸¹ Cf. the detailed statement of these difficulties in D. K. Lieu, *China's Industries and Finance*, Chap. III.

⁸² Franklin L. Ho, *Extent and Effects of Industrialization in China* (Nankai University, 1929). Cf. also *Nankai Weekly Statistical Service*, November 2, 1931.

⁸³ Cf. D. K. Lieu, *Statistical Work in China* (International Institute of Statistics, 1927), and M. T. Z. Tyau, *Two Years of Nationalist China*, Chap. XII.

⁸⁴ The files of the *Chinese Economic Journal* and of the *Nankai Weekly Statistical Service* are increasingly valuable for this purpose.

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called factory industry of China is for the most part not really comparable with the large-scale factory production of other and more developed countries. It is necessary, therefore, to proceed with more than usual caution in attempting to visualize Chinese industrial development.

Those economists most familiar with the actual conditions of industry lay stress first upon the continued importance of home or cottage or village industry. In an earlier chapter some mention was made of the importance of such subsidiary employment to the peasant-farmer, and of the difficulties resulting from its displacement. This kind of organization, however, displays considerable vitality, and, though its form appears to be changing somewhat, it plays a very important part in the economic life of the villages. It is perhaps significant that the first detailed illustration which D. K. Lieu presents of this kind of industry is the manufacture of knitted hosiery, a comparatively modern product for which simple machines, introduced from overseas, are widely used.⁸⁵ The necessities of the villagers are so great that, as J. B. Tayler has recently written, "it is not surprising that village industry shows a good deal of tenacity, and, indeed, sometimes breaks out into new life. In North China, particularly, where the need is greatest . . . village industry shows a tendency to develop rather than to diminish in the face of industrialism."⁸⁶

It is very difficult to draw any clear line of distinction between the cottage labor involving the part-time activities of some or all the members of a village family, and the so-called "workshop industry" of the handicraftsmen. There

⁸⁵ D. K. Lieu, *China's Industries and Finance*, p. 9.

⁸⁶ J. B. Tayler, *A Policy for Small Scale Industry in China*.

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are differences in the degree of skill and training involved and the equipment used, as well as in the proportion of time devoted to the industry, but, particularly in the transitional stages of organization through which all these small-master industries are passing, there are probably greater resemblances than differences. Everyone who has been in China is familiar with the multitude of small workshops in every city and with the high degree of craftsmanship often obtained in them. Silver, jade, ivory, embroidery, weaving, cloisonné, porcelain, bronze, enamel, lacquer, furniture—the list could be extended almost indefinitely.⁸⁷ By far the larger part of China's industry is still in the hands of these small craftsmen. Even in cotton weaving, the most highly developed of the modern manufacturing industries of China, it has recently been estimated that four-fifths of the consumption of cotton cloth (perhaps \$1,000,000,000 (silver) is produced by the Chinese themselves and manufactured by the hand-loom.⁸⁸ Mining is traditionally a large-scale industry, but Torgashev estimates that "there are in China, at present, hardly half a dozen truly modern mines, that is, mines equipped with really modern machinery throughout." From the "native mines," excluding all which are even semimodern, he estimates that the output constitutes 30 to 40% of the total mineral output, produced by more than 60% of the total number of miners in China.⁸⁹

The characteristic form of organization in such industries has always been some variety of the master craftsman

⁸⁷ D. K. Lieu, *op. cit.*, p. 3-8; J. B. Tayler, *Farm and Factory in China*, p. 33-45.

⁸⁸ F. L. Hawks-Pott, *A Short History of Shanghai*, p. 132.

⁸⁹ Boris P. Torgashev, *Mining Labour in China* (Shanghai, Bureau of Industrial and Commercial Information, Ministry of Industry, Commerce and Labor, 1930).

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system with its apprentices and journeymen, closely related in China with family and neighborhood ties.

Much of what is commonly classed as factory industry is really a transitional form of this system, similar both in its general trend of development and in its bewildering variations, with the stages through which the English craft guilds and companies passed in the sixteenth, seventeenth and eighteenth centuries.⁶⁰

The workshops in the Tientsin carpet industry (writes Dr. Fong)⁶¹ are organized either under the master craftsman system, or under the merchant-employer system. The owner of a workshop may manufacture on his own account, or take orders from an export firm for a fixed wage per square foot. In both cases the loom and the workshop belong to the owner, but the raw material and the design may be supplied by himself, or secured from the export firm. The craftsman, like the outworker under the merchant-employer system, may receive orders from the export firm, but provide his own material and work for a price. The outworker, on the other hand, is dependent upon the export firm for raw materials and occasional advances of loans to finance the operation of his workshop, and receives a fixed wage for the work done. The distinction is clear enough to a theorist, although in actual practice it seldom exists. The craftsman may retain his status at one time, but may become an outworker at another. In the Tientsin carpet industry the flexibility of industrial organization, or its susceptibility to change according to market conditions, corresponds closely with the unstable economic conditions not uncommon to Western nations in the heydays of their industrial revolutions.

The very valuable survey of the industrialization of Tientsin now being conducted by the economists of Nankai

⁶⁰ Cf. the description of industrial organization in H. D. Fong, *The Tientsin Carpet Industry* (Nankai University, 1929), p. 9-17, with George Unwin's *Industrial Organisation in the 16th and 17th Centuries*, and with Dr. Fong's own work, *The Triumph of the Factory System in England* (Nankai University, 1930).

⁶¹ *The Tientsin Carpet Industry*, p. 14.

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University,⁴² is revealing, industry by industry, the processes of change that are transforming the workshop industries of China. These processes are evidently leading to larger-scale, capitalist, factory organization, but the so-called factories are still very small. Eighty-six per cent of the hosiery knitters, for example, are in factories of less than 30 workers and there are numerous outworkers, as well as apprentices. Dr. Fong's vivid description of a typical workshop is worth quoting:⁴³

In one of the many small establishments visited by the present writer, the wife of the owner, manager, foreman and worker, was sitting on an elevated ground, by the side of which were two or three apprentices, standing, knitting hose or winding bundles of yarn into spools. This room, about eight feet square, was filled with a repulsive odor, and covered with a muddy floor. A small window and a side door, which were closed most of the time because of winter cold, served as the only outlet for ventilation. The elevated ground, by the way, was the bed for the manager and his wife. The other workers, chiefly apprentices, slept in the next room of the same size, which was also a workroom. By the side of the bed was the kitchen, composed of a small brick oven and a pan above it. In the middle of the room finished hose and wound yarn were piled on a hanging board—the miniature storehouse for the establishment. Outside these two workrooms, there was a small courtyard filled with dyed hose exposed to the sunlight and air for drying. This picture is not exaggerated, but typical of many other establishments on a similar scale.

Side by side with this struggling workshop industry, there exist in a few centers, mainly the treaty port coastal towns, modern large-scale, well-equipped manufacturing establishments, for the most part, though not entirely, under foreign management and financial control. These estab-

⁴² Other reports already published are: *Rayon and Cotton Weaving in Tientsin*, November, 1930, and *Hosiery Knitting in Tientsin*, December, 1930.

⁴³ H. D. Fong, *Hosiery Knitting in Tientsin*, p. 27-8.

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lishments are as yet confined to a comparatively few industries, of which the chief are cotton spinning and weaving, flour milling, mining, silk filatures, tobacco and cigarette manufacture, match making, oil crushing, leather printing and paper making. The official statistics of the capitalization of Shanghai industries are illuminating in respect of the division of the industries between proprietary concerns, partnerships and corporations.⁴⁴ There is in existence a great deal of satisfactory statistical information concerning all these manufacturing industries, to which indeed a degree of attention has been paid out of proportion to their present economic importance, though possibly not to their future significance.⁴⁵ At the present time it is estimated that the total number of those connected with large-scale industry in China, together with their families, constitute about 1% of the population.⁴⁶ The rapid growth of this industry, especially during and just after the European war, naturally attracted attention and caused some rather needless alarm in the industrialized countries, but it is evident that the actual industrial progress so far made is not very great.

⁴⁴ M. T. Z. Tyau, *op. cit.*, p. 418-9.

⁴⁵ Cf., e.g., the following studies:

Cotton: D. K. Lieu, *The Chinese Cotton Industry, Problems of the Pacific, 1929*, p. 262-299.

Statistical Information concerning Cotton Spinning in China (Manchester, Cotton Yarn Association Ltd., October, 1928).

"Cotton Mill Statistics in China," *Nankai Weekly Statistical Service*, February 23, 1931.

Fang Fu-an, "The Chinese Cotton Industry, 1930," *Chinese Economic Journal*, November, 1930.

Flour: "The Chinese Flour Industry, 1930," *Chinese Economic Journal*, February, 1931.

Mining: H. Foster Bain, *Ores and Industry in the Far East* (Council on Foreign Relations, 1927).

Boris P. Torgashev, *The Mineral Industry of the Far East, Mining Labour in China*.

⁴⁶ J. B. Tayler, *Farm and Factory in China*, p. 52.

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The net result of half a century of effort (writes J. B. Tayler)⁴⁷ is that in a country of four hundred million people—one which if superimposed on the map of Europe would stretch from within the Arctic Circle to the coast of Africa and from Liverpool to Leningrad—there are some seven thousand miles of railway, rather more than a dozen modern coal-mines, a few iron and steel, shipbuilding and other engineering works, and about a thousand modern factories. The most numerous are cotton and flour mills and match factories, which all exceed a hundred each; there are eighty electrical plants, fifty telephone exchanges and important oil, tobacco, cement, printing and soap works and numerous silk filatures. In addition there are some thousands of smaller semimodern factories.

(iv) The Bases of Industrial Progress

While one would hesitate long before ascribing the progress of China's coastal towns primarily to industrial development, it is obvious that such development has materially contributed in recent years to their growth. The concentration of manufacturing establishments in the bigger towns tends to convey a false impression of industrial advance which is certainly not true for the country as a whole, and can easily be exaggerated for the cities themselves. A few splendidly equipped and well managed cotton factories, British, Japanese or Chinese, a large volume of modern shipping necessitating repair shipbuilding yards, flour mills and similar enterprises ought not to be allowed to obscure the multitude of handicraft workers, and the great number of small factory workshops. The important silk industry, for example, is still largely in the workshop stage.

While these facts must be kept in the foreground of consideration, it is true that the advance has been fairly

⁴⁷ *Ibid.*, p. 51-2.

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rapid, especially in recent years. The first cotton mill dates only from 1889, and foreign manufacturing enterprise did not begin till after the treaty which ended the Sino-Japanese War in 1895.⁴⁸ The present statistics of industry must be viewed in the light of this recent history and in the light also of the disturbed condition of China in recent years. Chinese modern thought lays a good deal of stress on industrial development as a means of promoting a higher productivity, and therefore a higher standard of living. This is rightly regarded as one of the most obvious ways of social improvement, offering the opportunity at least of providing educational processes which alone can come to grips with China's fundamental problem, overpopulation.

In the approach to this problem governmental activity must play a large part. The Ministry of Industry, Commerce and Labor has already begun to take the initiative and has set out a program of development with state aid.⁴⁹ The Ministry of Finance, evidently impressed by the progress of the Five Year Plan in the Soviet Union, has taken the initiative in forming a Central Economic Council to coordinate the economic activities of government and private enterprise. The council has proceeded immediately to sketch a large industrial program.⁵⁰

There is, of course, a prior governmental responsibility in the provision of peace and security, the establishment of recognized and effective legal processes, and of regular moderate and equitable taxation. As long as China is

⁴⁸ F. L. Hawks-Pott, *op. cit.*, p. 132-6.

⁴⁹ M. T. Z. Tyau, *op. cit.*, p. 205-7.

⁵⁰ Ministry of Finance, *Annual Report for the Fiscal Year July, 1929, to June, 1930* (Nanking, 1931).

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torn by civil war, and the Kuomintang itself is rent by disension, the basic governmental services are hampered. Beyond the political functions of government there lies the necessity in China for providing public utility services. The railway and telegraph systems are already nationalized and it would seem the path of wisdom as well as of necessity for the government to retain control as these and similar great public services are extended to fit modern needs. An admirable beginning has been made in the reorganization of banking, by the establishment and operation on sound lines of the Central Bank of China. By cautious steps an approach is also being made to the provision of a sounder monetary system.

The guess may perhaps be hazarded that progress along these lines will be steady and possibly rapid, if not in the whole area of China, at any rate in those provinces which come more immediately and directly under the control of the National Government. This probability is greatly strengthened by the arrangements now concluded for the continuous cooperative help of the three technical sections of the League of Nations dealing with health, transit and finance, but it does not depend solely upon such help. The most hopeful economic sign in China recently has been the close connection maintained between the National Government and the powerful bankers and merchants at Shanghai. The public opinion which counts in China finds its most significant expression in the deliberations of the Bankers' Associations and the Chambers of Commerce. The very effective administration of the domestic loans raised in recent years is an important illustration of the efficiency of the cooperation maintained, and of the essential

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strength of the government even in face of continued dissidence and rebellion.

If public order and security can be maintained and the great public utility services successfully developed even in a limited area, the important question of fostering industrial development outside of the treaty ports will become practical politics. Already a significant step has been taken in the protective policies incorporated in the tariff which went into force on January 1, 1931. While the need for additional revenue was the greatest incentive in China's struggle for tariff autonomy, and that need has largely been met since autonomy has been achieved, moderate protection was also an important object. A scrutiny of the new tariff rates discloses some important first steps toward the encouragement of local industry. In the cotton industry, for example, the duties on raw cotton and yarns are virtually unchanged, but the rates on cotton cloth are up by approximately a third. Those on silks are doubled and those on artificial silk are raised from 10 to 58%; the duty on raw wool is down, but that on woolen goods is doubled; tobacco leaf is unchanged and cigarette paper down, but the duties on finished tobaccos and cigarettes are multiplied seven times, the soap duties are trebled, and chinaware and matches are both up from 7.5 to 40%. On the other hand, the duties on metals are generally lower, those on railway sleepers and on tools and machinery are halved, while only those foodstuffs of a luxury character, mainly for foreign consumption, show increased rates.⁵¹ The tariff as a whole remains moderate and gives evidence of a statesmanlike compromise between the desires of the

⁵¹ *Chinese Economic Journal*, February, 1931.

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producers and the needs of the consumers. It affords convincing evidence also of the government's intention to foster industrial development in those industries for which China has natural advantages.

How far such governmental encouragement to industry should go along more positive lines by financial assistance, experiment and actual operation of basic industries is a more debatable question. It was to be expected that a revolutionary government, mainly of young men, would prove more receptive to plans for state initiative than is generally the case in older lands. China has two outstanding examples of modernization before her eyes, those of Japan and the Soviet Union, both accomplished largely as the result of governmental initiative. The ministry's program for establishing "iron and steel works, electrical and hydraulic plants, machine factory, salt refinery, alkali works, cotton mills, paper mills, gasoline works and an international exchange bank" has been approved, together with the plan for floating industrial development bonds up to \$200,000,000.

Certain limitations to industrial progress should, however, be mentioned as a check to overoptimistic conclusions from such initiative. The first limit obviously is set by the capacity of the market. That market will for some time to come be largely, if not wholly, domestic. While the ministry has an ambitious program for the promotion of foreign trade, it is very sensibly concerned primarily with characteristic Chinese exports, mainly of food stuffs, and raw materials. It is possible that some export trade may develop also in such commodities as cottons, but for the most part production must necessarily be directed to

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the domestic market. Both in the necessary importations of machinery and construction materials, and in the improved purchasing power for foreign products consequent upon greater productivity, the older industrialized countries have much more to gain from the Chinese market than they have to fear from Chinese competition. It is probable, moreover, that the pace of development will not be fast. In addition to the problems of economic organization on the productive side, the capacity of the market to absorb the new manufactures will depend upon the progress made in rural production, communications, administration and similar rural developments.

At the present stage, the controversy over the adequacy or inadequacy of the mineral resources of China to sustain heavy industry is a little academic. The geological resources of the country are far from fully surveyed, but enough is known from the excellent work of the Chinese Geological Survey, supplemented by that of foreign mining engineers, to reduce the optimistic estimates once made of China's resources to much more sober proportions. Though rich in coal, and possessing important deposits of other valuable minerals, China is not among the richest mineral countries of the world. Her greatest weakness is in iron ore, and the comparative lack of coking coal, together with the separation of the ore deposits from the coal, and the difficulty of transporting ore to convenient centers for manufacture, offers considerable and possibly insuperable difficulties to the development of heavy industries on a great scale. The position is still further complicated for China by the fact that so many of the more valuable and accessible mineral deposits, particularly of iron ore, have passed into

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the control of Japanese concerns either directly as in the Fushun coal mines and Anshan ironworks in Manchuria, or indirectly by means of financial advances.⁵² Many of the iron ore deposits have a low iron content and are refractory, containing high silica content and requiring expensive concentration before smelting. Though the Japanese, particularly at Anshan in Manchuria, have expended much capital and expert research in attempting to develop these ores, the results so far have been both costly and small.

China has many other minerals, very few of which are extensively worked. Tin from Yunnan is exported to the United States; wolfram ore, producing tungsten and antimony, are important in the world's supply, but there is little evidence of petroleum reserves, and the production of gold, silver, copper, lead and zinc is very small.⁵³

⁵² Cf. the position of the Han Yeh Ping works near Hankow, which in the 15 years 1909-1923 accumulated net losses of over \$4,000,000, and owes 50,000,000 yen to Japanese interests, though the estimated value of the property is only a third of this sum (*Far Eastern Review*, April, 1931). Cf. also John E. Orchard, "Japanese Expansion in China," *Annals of American Academy of Political Science*, November, 1930, and the earlier analysis of costs of production of iron and steel by D. K. Lieu, *China's Industries and Finance*, Chap. VI.

In 1927 the output of iron ore from modern mines was 862,000 tons, of which more than nine-tenths came from mines wholly or partly under Japanese control, and more than half from the two Manchurian mines. Practically all of this output was exported to Japan. The annual output of pig iron is from 300,000 to 500,000 tons, of which much more than half comes from Anshan. The Japanese works there, however, accumulated a loss of 24,000,000 yen in 1919-1927. The profit in 1928 appears to be due to writing down capital.

The output of native iron works mainly in Shansi is difficult to estimate. Torgashev (*Mining Labour in China*, p. 77) estimates it at 170,000 metric tons of pig iron annually, but this seems optimistic. Cf. also Walter Voskuil, "The Iron and Steel Industry of China," *Annals of American Academy of Political Science*, November, 1930, p. 191-5.

⁵³ The standard work on mineral resources in China is H. Foster Bain, *Ores and Industry in the Far East* (New York, Council on Foreign Relations, 1927). A more optimistic view is taken by Boris P. Torgashev, *Coal, Iron and Oil in the Far East* (Institute of Pacific Relations, 1929), and *The Mineral Industry of the Far East* (Shanghai, Chali Press, 1930).

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China's greatest mineral wealth is undoubtedly its extensive reserves of coal. The most generally accepted estimate appears to be 996.6 billion metric tons.⁵⁴ Estimates of the total annual production range from 25 to 35 million metric tons, the difference consisting mainly in divergent estimates of the production from small native mines, mainly in Shansi. In 1928 the Sino-British Kailan Mining Administration produced over 7 million long tons and the Japanese mines operated by the South Manchuria Railway at Fushun produced 4½ million long tons. There is an annual export of 3½ to 4 million tons, mostly to Japan, and an import of 2½ million tons from Indo-China.

It seems clear from these figures that China has ample coal resources for its needs at present and in the immediate future. The supplementary resource of electric power is little developed. There are 645 plants mainly in Kiangsu, of which the largest, in Shanghai, has recently passed into American hands. The power generated is still small.⁵⁵ There is evidently ample power available.

Too much has been made of the handicap upon Chinese

The latest estimate is by John W. Frey, "Economic Significance of the Mineral Wealth of China," *Annals of American Academy of Political Science*, November, 1930, p. 116-ff.

⁵⁴ The following wide range of estimates has been published :

	BILLION METRIC TONS
Wong (1924)	23.4
Inouye (1912)	39.6
Hsieh (1926)	217.6
Hsieh (revised)	536.0
Drake (1916)	996.6

The latter is accepted as of the right order of magnitude by both V. K. Ting and H. Foster Bain. See Bain, *op. cit.*, Torgashev, *op. cit.*, also J. E. Orchard, *Japan's Economic Position* (McGraw Hill, 1930), Chap. XVII-XVIII.

⁵⁵ See *Nankai Weekly Statistical Service*, March 30, 1931, for detailed figures. The water power resources in China were described in T. Shing and W. H. Wong, *An Outline of the Power Resources of China* (London, Transactions of the First World Power Conference, I, 1924).

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industrial development imposed by the comparatively poor iron resources. In particular, the calculation by which China's per capita reserves were shown to be lamentably insufficient to provide for consumption of iron and steel on the American scale has been grossly overworked. It has in fact very little meaning for China, which is not likely to use iron as the United States does. As R. H. Tawney has observed, "prosperity does not depend on using iron and steel with the utmost possible profusion, but on using them for those objects for which they are necessary, and, in the case of a nation whose supplies are small, on being careful to use them for nothing else."

Industrial development might go far along simple lines before being brought up sharp by a shortage of mineral resources. The apprehensions on this score seem to reflect the natural disappointment of American mining engineers seeking opportunities for large-scale development of rich concessions rather than any anxiety on the part of the Chinese themselves.

The most immediate limiting factor to industrial development is probably to be found in the nature of the labor supply. The abundance of cheap labor is often thought of as one of China's greatest assets, but in fact it is probably one of its worst handicaps. This is brought out very forcibly in one of the most illuminating chapters of H. Foster Bain's standard work on mineral resources in the Far East.⁵⁶ There are some industries, such as cotton, in which labor of an almost unskilled character can be used, but in any development requiring technical skill of a scientific rather than a handicraft character, there are im-

⁵⁶ Bain, *op. cit.*, Chap. VIII.

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mense difficulties to be faced. A large population cannot be equipped in a short time with elementary scientific knowledge, an appreciation of mechanical forces and methods, or tuned to the work rhythms of large-scale industry. Observations concerning mechanical efficiency are not easy to make and international comparisons are almost impossible, but all the evidence seems to point to very low efficiency in China which goes far to counteract the advantage of low wages.⁸⁷ Even in Japan, which is much more advanced industrially and has a higher level of popular education, and in the cotton industry which is normally suitable for such labor, expert opinion discounts the advantage of cheap labor when measured by labor-cost per unit of production.⁸⁸ There is probably a transitional advantage in certain industries till rising labor costs, accompanied usually by trade union development, catch up to the level of efficiency, but this advantage is temporary.

(v) The Costs of Industrialization

There has been much apprehension, and not a little misreading of economic history, concerning the social consequences of any very rapid industrial development. This apprehension has found vent in agitations for the regulation of labor conditions, mostly directed against the new factories. The conditions of labor and housing to be found in many of the coastal cities are bad enough to rouse the zeal of any reformer, but their worst features are to be found not in the large, well-equipped and efficiently managed large-scale enterprises so much as in the weak, inefficient, transitional forms of the workshop industries, and

⁸⁷ Cf., e.g., Boris P. Torgashev, *Mining Labour in China*.

⁸⁸ Cf. Arno S. Pearse, *The Cotton Industry of Japan and China*. ↗

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in the deplorable position of the unskilled laboring masses. These conditions parallel those found in Great Britain in the early stages of the Industrial Revolution.⁸⁹

The effort by social workers, both Chinese and foreign, to establish a code of labor regulation in the International Settlement of Shanghai, while economically sound and admirably humane, would not, if it had succeeded, have dealt adequately with the problem.⁹⁰ The truer line of advance is that pursued by the National Government in its attempt first to draft a comprehensive minimum code of labor legislation and then gradually to provide for its enforcement. Such a code has been drafted embodying most of the measures that have been found effective in other lands. It was to go into effect on August 1, 1931. It fixes a minimum employment age at 14 years, limits the employment of women and minors, establishes eight hours as the regular working day, regulates night work, provides for rest periods and holidays, and proposes a minimum wage. More ambitious provisions aim at welfare, safety and health provisions, disability insurance, factory councils with workers' representation, the regulation of apprentices, and measures for conciliation and arbitration.⁹¹ There is a large body of opinion that the legislation as a whole is too ambitious and, in its present form, impossible of enforcement.

⁸⁹ Cf. Lillian Knowles, *Industrial and Commercial Revolutions in England during the Nineteenth Century*.

⁹⁰ See Dame Adelaide Anderson, *Humanity and Labour in China* (Student Christian Movement, London); see also Judge Feetham, *op. cit.*, II, p. 24-38.

⁹¹ Cf. Jefferson D. H. Lamb, *The Origin and Development of Social Legislation in China* (Peiping, Yenching University, 1930). M. T. Tchou, *Industrial and Labour Legislation and the Problem of its Administration* (Conference on the People's Livelihood, Shanghai, February 23-28, 1931). M. T. Z. Tyau, *Two Years of Nationalist China*, p. 207-8. For the factory inspection act see International Labor Office, *Legislative Series, 1931*, China, I.

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The official definition of a factory as a workshop employing more than 30 persons will allow many of the smaller workshops to escape regulation. What is needed most is a beginning of actual enforcement of minimum conditions in regard to such matters as the abuse of apprenticeship and the labor of women and children and a gradual strengthening of the law as a competent inspectorate is built up.

In the meantime, apart from the abuses of the labor of women and children,⁶² and from the wretched sanitary, safety and health conditions obtaining in many workshops, there are emerging the fundamental problems of wages and labor contracts. Wages are extremely low, ranging about 40 cents (silver) per working day for mines,⁶³ to 65-90 cents (silver) for carpenters and masons.⁶⁴ More detailed statistics recently compiled by Dr. H. D. Fong show a similar range, but indicate the effects also of the fall in the price of silver and the consequential rise in the cost of living, and of the inevitable broken time. His conclusion is that "the real wages per month in Tientsin are lowest for factory workers (\$9.00 or \$9.60 for all workers or \$12.20 for male workers) and highest for craftsmen (\$17.08), whereas those for the semimodernized workers stand between the two extremes (\$11.28)."⁶⁵

Such figures as these would seem to justify Dr. Fong's

⁶² *Nankai Weekly Statistical Service*, March 2, 1931, estimates a total of 449,578 female and 67,337 child workers as compared with 448,038 male workers in the industries for which statistics are available.

⁶³ Torgashev, *op. cit.*

⁶⁴ Sidney D. Gamble, *Peking Wages* (Yenching University, December, 1929). The British Report, *Statistical Information concerning Cotton Spinning in China*, October, 1928, quotes daily wages from 6d to 11½d per day of 11 hours. Miss S. T. King and D. K. Lien, "China's Cotton Industry," in *Problems of the Pacific*, 1929, p. 277-8, give a range of 40-70 cents (silver) for cotton workers.

⁶⁵ H. D. Fong, *Industrialisation and Labor in Hopei* (Conference on People's Livelihood, 1931).

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statement that "in respect of wages the workers in modern industries do not seem to share the increment due to increased productivity." This is further borne out by the following very significant statement from L. K. Tao, who wrote in 1928:⁶⁶

Our foreign critics are specially advised to grasp our view of looking at the Chinese labor problem from the national viewpoint. While we recognize fully the predominant rôle of labor and the necessity of giving it its due share in the distribution of national income, we should, nevertheless, make the development of industries a concern ahead of everything else. Indeed to give adequate remuneration to labor and to promote national industrial development at the same time are not incompatible; yet when the existence of the nation's industry, which is still in its infancy, is threatened by the unfair competition of other countries, it is believed that it should be saved even at the temporary sacrifice of labor. This point, be it understood, is made not to justify the ill-treatment received by Chinese workers in many of the factories of this country, but merely to show a possible happening in the course of industrial development here.

It is not surprising, therefore, to find that the most frequent cause of labor troubles in recent years has been some form of discontent with the wages paid, the fines collected or the cost of living.⁶⁷ The next most frequent group of causes concerned the treatment of labor, and in this group resentment against the foreman or labor contractor apparently looms large, as it did in the early stages of the industrial revolution in England. The abuse of the laborer

⁶⁶ Sung-ho Lin, *Factory Workers in Tangku* (Social Research Dept., China Foundation, 1928), p. IX-X. Similar figures are given by the Shanghai Bureau of Social Affairs in a report, *Wages and Hours of Labour in Greater Shanghai, 1929*.

⁶⁷ Ta Chen, *Analysis of Strikes in China from 1918 to 1926* (Chinese Government Bureau of Economic Information, 1927); Leonard T. K. Wu, *An Analysis of Labour Disputes in Hopei Province and the Cities of Peiping and Tientsin, January, 1927-June, 1929* (Peiping, Institute of Social Research, 1930); "Strikes and Lockouts in Shanghai, 1929," *Nanghai Weekly Statistical Service*, January 5, 1931.

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by these subordinates is a constant source of trouble, only to be remedied as the better managed firms develop their own personnel relations.⁶⁸

The development of a trade union movement strong enough to protect the workers' interests in such matters is peculiarly difficult in China. The formation of unions was encouraged in the earlier stages of the nationalist revolution, especially during the period from 1924 to 1927 when the Kuomintang availed itself of communist help.⁶⁹ This unionism, which rose rapidly to a peak of membership of over 3 millions in 1927, had important political as well as economic functions which afterwards proved difficult to control. The result was a purging of the movement, the revolutionary wing of which has accordingly gone underground. There is no means of accurately estimating the force of such a movement, but if Moscow sources are to be trusted it is still very considerable and is reinforced by a widely organized Peasant Labor Movement. The Pacific Labor Conference called by the Third International at Vladivostok in August, 1929, also held, it is said, a secret conference in Shanghai, at which the Chinese communists were well represented.

Since the enactment of the Trade Union Act in October, 1929,⁷⁰ the organization of the movement has been subjected to definite political controls, which indeed were operating before. The number of unionists has fallen to 576,250 in 741 unions in 1930.⁷¹ There are over 108,000

⁶⁸ Cf., e.g., Boris P. Torgashev, *Mining Labour in China*, Chap. V.

⁶⁹ Ta Chen, "Fundamentals of the Chinese Labour Movement," *Annals of American Academy of Political Science*, November, 1930.

⁷⁰ Fang Fu-an, *Chinese Labour: An Economic and Statistical Survey* (Shanghai, 1931), an appendix to which gives an English translation of recent labor legislation.

⁷¹ "Organized Labour in China," *Nankai Weekly Statistical Service*, March 9, 1931.

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unionists in Canton, 68,000 in Shanghai and 57,000 in Hankow. The strongest organizations are to be found in the communication industries (104,000), textiles (86,000), machinery trades (68,000) and food industries (58,000). It is obvious that these represent the more moderate and conservative craft unions, but it was upon such bases that the strong British trade union movement was first built. While the workers have not yet been able adequately to safeguard their economic interests, the nucleus of organization is in existence and when political circumstances become more propitious, it is probable that a steady growth of trade unionism both in numbers and in effectiveness will follow naturally.

CHAPTER V

THE PUBLIC FINANCES

(i) The Establishment of National Government

China's public finances are weak. Her financial credit is at a low ebb, the provincial and national governments are impoverished, taxation is multifarious, indirect, inequitable and inefficient, the collection of revenue is interfered with by local autonomy, there is cruelly heavy expenditure upon civil war and upon the service of existing debt, much of which is entirely unproductive, and the main sources of revenue are already burdened with debt commitments.

These are discouraging facts, but it would be a mistake to view them out of relation to present circumstances. At a very trying period in its economic and social life China has been going through a long and difficult political revolution. The task of establishing an efficient modern government is one that might well appall the most optimistic of reformers. When the revolution occurred in 1911 the effete Manchu dynasty had allowed the machinery of imperial government to lapse into weak military and fiscal control of self-governing local units, the most vital of which were the family and neighborhood groups and guilds.¹ The weakness of the Manchu rule was exposed by the ease with which the revolutionary effort broke it; but the revolutionaries soon

¹ The best analysis of the political course of the revolution is Arthur N. Holcombe, *The Chinese Revolution* (Cambridge, Harvard University Press, 1930).

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found that the lack of an effective opposition which made their destructive work easy betokened a lack of governmental facilities which made their task of reconstruction difficult. The republic which they created was a roof without support, a parliament without a civil service. The effort to strengthen it by enlisting the services of former officials was not a success. The chief of these officials, Yuan Shih-kai, ruled for a brief time in Peking, but the democratic revolution shifted south again and raised the revolutionary flag afresh at Canton. After Yuan's death in 1916 the central power at Peking was the prey of contending groups composed partly of old officials, partly of new upstart adventurers. The governmental system of the Manchus fell into chaos and almost the only national functions discharged were those of the Foreign Office and of the foreign-controlled services—the Customs, Salt Gabelle and Post Office.

The effort to build up a strong centralized government ought indeed, to be dated not from 1912, but from about 1926 when the revolutionary government at Canton set forth upon its northern campaign, which resulted in the capture first of Hankow, then of the lower Yangtze valley, including Nanking and Shanghai, and finally, in 1928, of Peking. Earlier dates might perhaps be selected, fixing upon some development in the revolutionary movement which centered at Canton; but that movement did not make any really effective bid for national power till 1926.²

² Cf. M. T. Z. Tyau, *op. cit.*, Chap. I. Cf. also the statement by the Minister of Finance, Mr. T. V. Soong, in his report upon the public finances for the year ending June, 1930: "The past seven years have witnessed the establishment of the National Government at Canton, the steady extension of its authority throughout the country, and the continual struggle for the maintenance and further consolidation of its authority."

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Even at that date the present National Government did not exist. There is some continuity in the fact that the Kuomintang or National Party founded by Sun Yat-sen and expressing his ideas, has been the ruling instrument since the standard of revolt was raised for the second time at Canton; but the personalities and policies of the Kuomintang have undergone such definite and important changes that it is not difficult to mark out distinctive epochs. The years from 1923 to 1927 form such an epoch, which Holcombe refers to as "the period of the Soviet Republic." After a meeting between Sun Yat-sen and Adolf Joffe in Shanghai, Michael Borodin appeared at Canton in the autumn of 1923 as the agent of the Third International and the trusted adviser of the Kuomintang. The march to Hankow little over two years later was made possible largely by his skillful organization; but in the summer of 1927, for reasons still in part obscure, the present leaders of the Chinese Government broke from their Russian advisers.³

The National Government which now functions at Nanking is, therefore, a very recent creation. Most of its leaders have been associated with the revolutionary movement for many years and have held office in previous governments.⁴ But it is important to emphasize the fact that there has been a continual process of regrouping and selection as a result of which the present government emerged under the leadership of Chiang Kai-shek in 1927. As the factional movement which set up a rival government at

³ H. Owen Chapman, *The Chinese Revolution, 1926-7* (London, Constable, 1928); Louis Fischer, *The Soviets in World Affairs*, II, Chap. XXIII. (Cape, 1930).

⁴ Arthur N. Holcombe, *The Spirit of the Chinese Revolution* (New York, Knopf, 1930).

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Canton in the spring of 1931 bears witness, the National Government is by no means a homogeneous unit even yet. Under a party dictatorship which brooks criticism only within narrow limits and suppresses free speech in many directions, the only effective opposition can be by revolution.

The weak National Government, therefore, in the troubled first years of its existence has had to meet not only a succession of militarist and provincial uprisings, complicated at times by the existence of foreign privileges, but also the continued dissidence of its own supporters. The very fact that it has survived is encouraging. It could not have done so without support from three main sources.

In the first place the recognition and support of the foreign states interested in China has been important both psychologically and for solid economic reasons. When the powers, led by Great Britain and the United States, agreed to China's tariff autonomy, it became possible to increase the customs revenue very considerably. It is possible also, that in course of time, the goodwill of the powers will supplement the expert assistance already being given to China in various ways by their nationals by facilitating the provision of some form of foreign financial help.

The second source of support has come from the attachment of the foreign-controlled services, particularly the Chinese Maritime Customs, to the Nanking Government. The adherence of these services not only strengthens the revenues, but provides the government with a nucleus of established and well-trained civil servants, admirably supplementing the newly created departments at Nanking.

By far the most important and significant support of

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the present government, however, has come from the Chinese bankers, merchants and industrialists who have made Shanghai the commercial and financial capital of China. A very large proportion of the customs revenue of China is collected at Shanghai and at the ports higher up the Yangtze, and this is an important factor in the government's stability. But even more important has been the steady backing which the Shanghai bankers have given to T. V. Soong, the Minister of Finance. The domestic credit of the government is relatively high and has steadily improved. Loans have been raised in Shanghai with fair ease since their interest and repayment service has been intrusted to a committee of bankers. The price of bonds has risen and interest rates have fallen.⁶ No other government in China has enjoyed the confidence of the financial community in this way, except the previous revolutionary government at Canton, in which also Mr. Soong was Minister of Finance.

It is reasonable to conclude, therefore, that by a natural political evolution the National Government has swung far to the right. Its attitude to trade unionism and communism, its conciliatory foreign policy, its use of foreign experts and the recent agreement calling for technical assistance from the League of Nations, all point in the same direction. On the whole, it is a conservative capitalist reconstruction that is in prospect if the present government retains power.

The perspective briefly sketched above should serve to moderate the pessimism which a consideration of China's financial position might otherwise evoke. After all, the

⁶ *Problems of the Pacific, 1929*, p. 147.

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government is hardly five years old and already its progress commands the confidence of the leading Chinese financiers and elicits the cooperation of the foreign services and the foreign powers. It is a reasonable deduction, therefore, that the financial problems of China are not as hopeless as is often thought. Debts, military expenditure, and other such drains are bad enough, but they are still on a scale to be manageable.

The more important and difficult problems are those connected with the collection of revenue for the constructive expenditure which China so badly needs. The immediate difficulties of financial rehabilitation would probably yield without great trouble to expert treatment provided only that there was sufficient breathing space from civil warfare. But it is a very different matter for the government, once stabilized, to provide for its people an adequate measure of public service.

The most obvious problem is that presented by the absence in China of any centralized tradition. The uprisings of military leaders and dissident factions are greatly complicated by provincial jealousies. Some form of federalism, including a large degree of local autonomy, would seem to be the ultimate solution. In the meantime the National Government functions with any effectiveness only in a limited area, sometimes of three, sometimes of five or more provinces. For the rest, compromises of varying character must be made with the local administrations. Fortunately there has for some time been little serious challenge to the government's control of foreign affairs and of various essential services, such as the customs and post office. In course of time there will arise the knotty problems of differentiation between national and provincial

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functions and demarcation of the respective spheres of taxation and expenditure. In the meantime, however, the problem is rather to buttress the power of the central government and render its control more effective over those areas which act upon, as well as acknowledge, its authority.

The creation and training of an honest and effective civil service is another problem which has already been vigorously tackled. There seems no doubt that the intellectual strength of young China has been behind the National effort and, despite dissensions, it remains there. One is apt to forget in reading of wars and rebellions that the vast majority of the administrators and public servants remain quietly on their jobs. Their power increases cumulatively as the years go by and this body of trained civil servants, together with a revenue sufficient to pay them regularly, is no mean element in the establishment of a stable government.

Something is said in the following sections concerning the technical problems of budgeting and revenue. It seems clear that, unsatisfactory as the situation remains, it is much better than it was, and that the foundations are being laid for future orderly development. Temporary disturbances and present weakness ought not to blind one to the progress made in a relatively short time toward the establishment of a National Government.

(ii) The National Budget

The available statistics of public finance are far from satisfactory. There are a good many tabular statements available and, from the financial year 1928-9, the Minister of Finance has published annual reports of the closed accounts; but it is practically impossible to arrange these materials

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from various sources into satisfactory historical tables.⁶ There are several major reasons why this is difficult.

The first and most important is the change that has taken place in the governing authority. From 1912 to about 1928 the successive governments at Peking inherited the authority of the Manchu dynasty. The foreign diplomats remained at Peking and treated whatever government was in power there as the *de facto* government of China. The Foreign Office, working steadily under changing masters, remained at Peking also, and the head offices of the various departments under foreign control turned over to the Peking governments the surpluses of revenue remaining after foreign claims had been met. The change-over to Nanking came in the summer of 1928 when the foreign states recognized the National Government and the Inspector-General of the Chinese Maritime Customs, the Associate Chief Inspector of Salt Revenue and the co-Director-General of Posts came directly under the control of that government.⁷

Another great difficulty of historical comparison follows from the first. The relation of the provincial revenues to the central budget has varied with the degree of power exercised by the government from time to time. There came a time when it could be said that "the central government has little authority outside the walls of Peking." Local warlords withheld more and more of the proceeds of central

⁶ D. K. Lieu, *China's Industrial Development*, Chap. III; *The China Year Book*, successive issues; Chang Ying-hua, *The Financial Reconstruction of China* (Peking, 1923); G. Padoux, *The Financial Reconstruction of China* (Peking, 1923); A. G. Coons, *The Foreign Public Debt of China* (University of Pennsylvania, 1930), Chap. IX-X; *Problems of the Pacific, 1929*, p. 368-376; *Annual Reports for the Fiscal Years 1928-9 and 1929-30* (Ministry of Finance, Nanking).

⁷ M. T. Z. Tyau, *op. cit.*, Esson M. Gale, "The Public Administration of Salt in China," *Annals*, November, 1930.

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taxation, appropriated and used the railways for military purposes and levied arbitrary and oppressive new taxation. It is impossible therefore to discover the total tax burden levied on the Chinese people, or to form any true estimate of the relation between provincial and national finances. The National Government since its establishment in 1927-8 has had fluctuating fortunes. Its grip upon the provinces in the immediate vicinity of Nanking has on the whole strengthened; but its control over other parts of the country has varied considerably from time to time. In August, 1931, it appeared to have a friendly alliance with the Manchurian leaders, who also controlled the northern provinces of China proper; an alliance based upon a large degree of local autonomy, but with Manchuria recognizing the National Government's control over foreign affairs, contributing some local revenues to the central budget and allowing the central services to transmit regular revenues also to Nanking. With this exception the other factional governments, Feng and Yen in the northwest, the Canton group in the southeast and the various so-called communist bands in west-central China, were independent of Nanking. It is significant, however, that the areas controlled by the government, the northeast and east-central regions, are the areas of greatest economic progress and, therefore, of richest taxable capacity. It is important to notice also that, with the exception of the seizure of the customs at Canton in the summer of 1931, the customs revenue had for some time gone intact to Nanking. The salt revenue, though greatly interfered with by factional disunity, had been reorganized and was yielding substantial sums to the government. But the land tax, which formerly was the chief support of the central government, appears to have been abandoned to the

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provincial authorities. *Likin* has long been collected by local officials and the price of its abolition seems to have been permission to those officials to collect a consumption tax in its place. The various excise taxes, such as those on wine and tobacco, also offer a tempting opportunity to local officials. It is, therefore, impossible to construct a statement which will show in proper form the total amount of national revenue.

One further complication must be stated. All receipts and expenditures, with the recent exception of the customs revenue, are in terms of Chinese dollars. There has to be reckoned with, therefore, not only the varying degree of depreciation of the silver or paper dollar in different parts of the country, but also the very considerable recent fall in the price of silver. When comparing the most recent total of revenue, \$539,000,000 for 1929-30, with the sums collected in earlier years it should be remembered that the dollar was worth much less in 1930 than formerly. Not only the difficulties of comparative study, but also the more practical problems of a minister of finance faced with large external payments in gold currency, will be sufficiently apparent from a mere glance at the course of exchange.

It is best, therefore, to approach the consideration of China's public finances from an analysis of the reports of actual revenue and expenditure by the National Government in the years 1928-9 and 1929-30. These reports are definite statements of actual amounts received and spent. Imperfect as they are, they mark the beginnings of a national financial system. The surprising elasticity of revenue revealed in them is in itself an indication that taxation is being more efficiently collected, and, if the expenditure

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side of the budget has not yet been brought fully under effective control, the very existence of a budget and financial report available to the general public is an omen of promise.

RECEIPTS OF THE NATIONAL GOVERNMENT OF CHINA, 1928-9 AND 1929-30

	1928-9 \$ 000,000	1929-30 \$ 000,000
A. Revenue		
I. TAXES:		
1. Customs	179.1	275.5
2. Salt	29.5	122.1
3. Rolled Tobacco and Kerosene	27.7	36.6
4. Collected by Provinces	14.5	11.4
5. Tobacco and Wine	3.5	6.8
6. Stamps	3.0	5.4
7. Flour	2.0	3.9
8. Parcel Post . . . . .	.9	—
9. Miscellaneous	—	21.9
Total Taxes	260.6	483.7
Less Cost of Collection	—	45.6
Net Tax Receipts	260.6	438.1
II. MISCELLANEOUS REVENUE	1.9	—
III. UNCLASSIFIED		
1. National revenue collected by provinces and directly disbursed for military expenses	62.4	—
2. Miscellaneous	7.6	—
B. Refunds		
I. RETURN OF RUSSIAN INDEMNITY	1.7	—
II. OTHER REFUNDS1	—
C. Bonds, Treasury Notes and Loans	100.1	100.9
GRAND TOTAL	434.4	539.0

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It should be emphasized that these figures represent a public statement of revenues actually received at Nanking. They are of more importance, therefore, than the long series of budget estimates that are often quoted for earlier years. The last imperial budgets in 1911 and 1912 anticipated revenues of \$447,000,000 and \$370,000,000,⁸ and it is probable that these anticipations were substantially realized. The following estimates by successive governments show a fairly steady rise in the anticipated revenue to \$461,600,000 in 1925; but it is doubtful whether in fact the governments received anything like these sums. A. G. Coons estimates that the total revenue collected in China varied from \$173,000,000 in 1919 to \$233,900,000 in 1924. These figures are less than half the budget estimates; but even then not all the revenue collected reached the central treasury. After examination of the detailed figures, Coons reaches the conclusion that in the years mentioned the actual receipts of the government did not exceed \$180,000,000 in any one year.⁹

This is the background against which the revenue statements of the last two years should be judged. It is evident that the present National Government, young and weak as it is, has in three years been able to base itself more firmly upon a comparatively sound financial basis than any previous government since the Manchu dynasty fell. It has done this in the face of great obstacles. Leaving difficulties of expenditure on one side for the moment, it has had to face the total loss of the old land tax and of *likin*, which between them constituted about a third of the imperial

⁸ D. K. Lieu, *op. cit.*, p. 100-3, and A. G. Coons, *op. cit.*, p. 133.

⁹ *Ibid.*, p. 122-5.

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budgets. It has been unable to collect either direct or indirect taxation except in the provinces actually under its control and it has lost control of the greater part of the railway system. Yet, such is the recuperative power of the Chinese people, that it has been able in its limited area to collect more revenue than the Manchu government used to, and much more than any intervening government.

There are many reasons for its success in this direction. In the first place, it has enjoyed the confidence and assistance of the foreign states. The most concrete proof of this may be seen in the growth of the customs revenue. Even in the middle of 1929 Coons, calculating the potential financial capacity of China, estimated a probable revenue from the Maritime Customs in 1930 as a minimum of \$132,000,000 and a maximum of \$152,000,000.¹⁰ Actually the collections in the fiscal year 1929-30 amounted to \$275,500,000, less \$22,900,000 cost of collection. This was obviously due for the most part to the higher rates of duty which China was able to impose after the restoration of tariff autonomy.¹¹

The reorganization and increased efficiency of the other tax services is well illustrated by the jump in salt revenue from less than \$30,000,000 in 1928-9 to over \$120,000,000 in the following year.¹² It would be impossible, without more direct information than is available, to ascertain how far this and other increased receipts from taxation are due to more efficient collection and more honest accounting on

¹⁰ *Ibid.*, p. 150.

¹¹ In part also it was due to the depreciation of the silver currency. From February 1, 1930, customs duties were collected in terms of a new gold unit equal to 40 cents (gold). In May, 1931, a further step toward the introduction of the gold standard was taken by the issuance of banknotes with the title "customs gold unit."

¹² Esson M. Gale, *op. cit.*

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the one hand or to higher rates on the other. But there is an eloquent piece of evidence which supports the common belief that the increased revenue is due mainly to better collections. No other government in China has been able to count as this one has upon the steady support of the bankers. In the first flush of revolutionary enthusiasm the Republican government floated in 1913 a large Reorganization Loan, mainly from foreign sources; but China's credit among Chinese and foreign bankers fell steadily lower until T. V. Soong, as Minister of Finance, began to command the confidence of the local bankers. Domestic loans averaging over \$100,000,000 annually are practical evidence of their confidence in the National Government.

There is one item, however, which throws a good deal of light upon the financial difficulties of China. The total revenue collections were diminished by almost 10% because of the cost of collection. It cost the customs service \$22,900,000 to collect revenue amounting to \$275,500,000, and the Salt Gabelle cost \$13,600,000 for a gross revenue of \$122,100,000. Until some way can be found to reduce these abnormally high costs, it will be difficult to get financial prosperity in China.

The greatest weakness of China's public finances, however, lies on the side of expenditure, as the following table will clearly show.

EXPENDITURES OF THE NATIONAL GOVERNMENT OF CHINA, 1928-9 AND 1929-30

	1928-9	1929-30
	\$ 000,000	\$ 000,000
I. PARTY EXPENSES	4.0	4.6
II. CIVIL ESTABLISHMENTS:		
1. State Council	4.1	1.8
2. Executive Yuan	22.3	29.9

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3. Legislative Yuan5	1.0	
4. Judicial Yuan5	.4	
5. Examination Yuan2	.6	
6. Supervisory Yuan4	.6	
7. Famine Relief	—	10.0	
8. Subsidies to Provinces	4.7	6.7	
9. Miscellaneous	1.4	.5	51.5
III. MILITARY ESTABLISHMENTS	209.5		245.4
IV. TRANSFERS TO LOCAL AUTHORITIES FROM SALT REVENUE	—		35.6
V. LOAN SERVICE	121.3		159.0
VI. INDEMNITY SERVICE	38.7		41.2
VII. ADVANCES FOR CAPITAL OF CENTRAL BANK	20.0		—
VIII. SUSPENSE	6.8		1.7
	434.4		539.0

Here again there has been in the two years analyzed some improvement in an obviously bad situation. But if the main items are reduced to percentages the real difficulties of the situation are very evident.

PERCENTAGES OF NATIONAL EXPENDITURES IN 1928-9 AND 1929-30

	1928-9	1929-30
	%	%
I. PARTY EXPENSES . . . . .	.9	.9
II. CIVIL ESTABLISHMENTS	7.9	9.6
III. MILITARY ESTABLISHMENTS	48.2	45.5
IV. TRANSFERS TO LOCAL AUTHORITIES OF SALT REVENUE	—	6.6
V. LOAN SERVICE	27.9	29.5
VI. INDEMNITY SERVICE	8.9	7.7
VII. CENTRAL BANK CAPITAL	4.6	—
VIII. SUSPENSE	1.6	.2
	100.0	100.0

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No budget of which from 82 to 85% is spent upon the unproductive services of military establishments and debt and indemnity payments can be said to be healthy. The crying need of China is for peace and a reduction of military expenditure. Less than 10% of the revenue collected goes to the true functions of central government.

The actual figures are pathetic. Despite the increases in 1929-30, there was less than \$30,000,000 (silver) available for all the executive departments of government. Though the removal of extraterritorial privileges is the most important foreign policy of the National Government, only \$446,540.86 (silver) was available for the use of the Judicial Yuan. With this sum, worth at that time perhaps \$150,000 (gold), the Judicial Yuan must provide proper courts, prisons and police systems not only for the 450,000,000 people of China, but also for the foreign communities who are to come under their jurisdiction.

No one would contend, therefore, that the excellent work achieved in the establishment of a national budget and financial report is more than a promising beginning. No success in collecting taxation can be of much value as long as expenditures upon civil war and debt services continue to increase.

Yet, compared even with the recent past, these figures demonstrate the remarkable financial resilience of China. The revenues now collected, even while the government controls so few provinces, exceed competent estimates made even three or four years ago.¹⁸ The economic strength of China is behind the present government and though factional strife may continue and be expensive, there is every

¹⁸ Cf. Coons, *op. cit.*, p. 162.

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reason to expect a sound if gradual approach to the complicated and difficult problems of controlling expenditure, improving revenue collections and consolidating the unsecured debt, which is the greatest hindrance to the full restoration of China's public credit at home and abroad.

(iii) *China's Debts, Secured and Unsecured*

It should be apparent from the figures quoted above that progress has been made in securing more elastic revenues for China. Despite civil warfare and the loss of important sources of revenue such as the land tax, and despite the fall in silver, the elasticity of revenue has been quite remarkable. Given freedom from external complications it should be possible to bring about a greater consolidation of authority, and with it a greater control over military expenditure. The problem of balancing China's budget will then depend largely upon the settlement of the unsecured debt, both internal and external. It is necessary, therefore, to get at least a summary notion of the extent of China's debts.

The foreign public debt of China is of quite recent origin and most of it, unhappily, has been incurred as a result of political and military weakness. The first foreign loan in 1865 was floated in Great Britain in order to pay war compensation to Russia.¹⁶ There followed a series of small loans, mainly for military and naval purposes, amounting to perhaps \$44,000,000. These loans, now all repaid, were

¹⁶ Much the best recent analysis of the history and present position of the whole problem is A. G. Coons, *The Foreign Public Debt of China* (University of Pennsylvania, 1930). The figures in the brief historical summary above are largely taken from his work. See also J. R. Baylin, *Foreign Loan Obligations of China*, and S. Y. Liu, *China's Debts and their Readjustment*, both published by the Chinese Bureau of Industrial and Commercial Information, and *The Outstanding Debts of the Ministry of Communications* (to the end of 1925), published by the Ministry.

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floated on the general security of the Chinese Government, without pledging specific revenues. From 1887 to 1894 there were no loans floated.

The real beginnings of embarrassing foreign indebtedness, therefore, must be dated from China's defeat in the Sino-Japanese War of 1894-5. To pay for the war and for the indemnity imposed by Japan it was necessary to float further large loans. By 1900 a sum of \$265,000,000 had been borrowed, all for the unproductive purposes of war and war settlement.

Then in 1901, after the Boxer uprising, China was further saddled with indemnities totalling \$325,000,000 (gold). This amount was treated as if it had been a loan, the interest and amortization payments running till 1940. Even though considerable portions of this indemnity have been remitted it has been a heavy burden on Chinese resources.¹⁵ The damage done was overestimated in many cases, and subsequent falls in the price of silver made payments much heavier. Together with the costs of the Sino-Japanese War, the Boxer indemnity must be regarded as the main cause of China's financial weakness at the opening of the twentieth century.

There followed a period in which a scramble set in for railway and similar concessions, usually conditioned by loans. The atmosphere of this scramble has been well described in one of Putnam Weale's novels, *The Altar Fire*. From the defeat of China by Japan in 1894 right up to the first years of the republic, contending foreign interests,

¹⁵ *Ibid.*, p. 21-2. "The entire American indemnity, the British indemnity from 1922 on, the balance of the Russian indemnity (after 1924), a very large portion of the Japanese indemnity, and the balance of the French indemnity, have been remitted under certain conditions, and the German and Austrian portions no longer stand."

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often supported by diplomacy, threatened, despite John Hay's enunciation of the open door policy in 1901, to carve China up into a number of spheres of influence. The first banking consortium, formed in 1910, checked the unseemly scramble to some extent, but private firms still competed and the withdrawal of the American group at the instance of President Wilson in 1913 weakened the consortium's grip on the situation.

After the revolution in 1912, foreign lending to China in only too many cases became more questionable. It is difficult, if not impossible, to disentangle loans for truly productive economic purposes from those in which such purposes were merely a blind. It seems clear that China paid dearly, not only in high rates of interest but also in low prices of flotation and heavy commissions, and that the moneys received were not always wisely or economically spent. Coons lists 42 separate railway loans between 1898 and 1922, totalling \$297,000,000 (gold) at rates of interest varying from 5 to 9%, with the Chinese Government receiving only about 92% of the nominal value of the loans.¹⁶ There were, in addition, industrial loans amounting to \$33,000,000, and administrative political loans amounting to \$205,000,000.¹⁷

All of these loans were secured upon specific revenues and many of them have since been repaid. The chief securities, except for the railway loans, have naturally been the foreign-controlled revenue services, the Chinese Maritime Customs and the Salt Gabelle.

When one leaves these secured loans to consider those which were made upon more doubtful security or no

¹⁶ *Ibid.*, Chap. II.

¹⁷ *Ibid.*, Chap. III.

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security at all, attempts at calculation become more difficult. If to foreign loans are added those (often forced) raised within China itself, and also provincial and local borrowings, the amounts become so indefinite as to defy accurate estimation.

There have in recent years been many attempts to calculate the total foreign indebtedness, secured and unsecured. The National Government is naturally anxious to secure a settlement of the unsecured debt and to maintain full payment of the secured debt. Since the formation of the second banking consortium in 1920, China has had virtually no foreign credit, the only loans which were obtained having been political transactions on terms which patriotic Chinese now bitterly regret. It is of considerable importance to China that its credit shall be restored quickly.

The most recent available estimates place the total indebtedness at the end of 1928 at something over \$3,000,000,000 (silver). Any such figure, however, has in it a large element of doubt. The loans were made in various currencies, both gold and silver, and rates of conversion naturally vary a great deal. A series of considered unofficial estimates made at the Kyoto Conference in 1929 reached fair agreement on the above figure.¹⁸ The amount secured upon the Chinese Maritime Customs revenue is fairly definite and may be stated as about \$545,000,000 (gold). The unsecured foreign debt is also fairly calculable at about \$256,000,000 (gold). To these amounts there should perhaps be added in strict legality the \$120,-

¹⁸ *Problems of the Pacific, 1929*, p. 147-8 and p. 370-1. Other estimates are \$2,228,000,000 by D. K. Lieu (January 1, 1926), *China's Industries and Finance*, p. 104, and A. G. Coons, \$2,675,000,000 (1926). See also other estimates quoted by Coons, p. 120.

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000,000 (gold) of indemnities still outstanding; but in actual practice a large portion of these indemnity payments is now returned to China.¹⁹

The secured debt held by Chinese is perhaps in the neighborhood of \$550,000,000 (gold);²⁰ the unsecured debt is more difficult to estimate. There are fairly large amounts of local and provincial as well as some national debts which will probably never be recognized now, and there are also very large arrears of salaries and similar payments overdue.

The position may perhaps be summarized by stating the foreign debt, secured and unsecured, at \$800,000,000 (gold) and estimating the total indebtedness at the end of 1930 at roughly \$4,500,000,000 to \$5,000,000,000 (silver). This larger total is due mainly to the fact that, as the Minister of Finance has pointed out, "the price of silver in terms of gold has fallen by more than half in the last two years [1928-30]."²¹ Since 97% of the foreign debt is held in terms of gold this is obviously a severe blow to the Chinese finances.

Even this larger figure, however, remains a comparatively small amount when the size and resources of China are remembered. Translated into gold currency at the rate of exchange ruling in early 1931, \$5,000,000,000 (silver), is equivalent to little over \$1,000,000,000 (gold). This is a much smaller public debt than that carried by New Zealand with barely a million and a half people. The fact is that even now China's public finances are on a manageable scale.

¹⁹ There is practical agreement between these figures quoted from the Kyoto Conference report, *op. cit.*, and Coons' estimates.

²⁰ E. Kann and J. Baylin, "Chinese Loan Issues Outstanding on July 1st, 1930," *Chinese Economic Journal*, September, 1930.

²¹ *Annual Report, 1929-1930.*

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The chief difficulties of managing them are political. There is the difficulty first of securing respite from military expenditures and then of persuading the nationalist sentiment to accept and make the best bargain concerning the debts incurred by its predecessors. One may sympathize with the official Kuomintang position that "foreign loans, contracted by irresponsible governments in China, such as the Peking régime, founded on bribery and corruption, were used, not to promote the welfare of the people, but to maintain the existence of the militarists, or to further their policy of bribery and stealing," and yet wonder whether the conclusion that "the people of China should not hold themselves responsible for the payment of such debts,"²³ is really in China's best interests for the future.

As a matter of fact, steps have been taken to approach the problem of the unsecured debt, both foreign and domestic. The last report of the Minister of Finance indicates that conversations have been proceeding with the foreign representatives and that an association of Chinese bondholders is being formed. As an earnest of good faith the government in 1929-30 paid up all arrears of interest on the salt-secured loans, and also set aside \$5,000,000 as the first installment of a fund to consolidate and eventually liquidate the remaining unsecured and inadequately secured debt.²³ The 5% gold loan of 1895 was fully paid off on July 1, 1931, when over \$12,000,000 had been paid to bondholders on that account in three years.²⁴

It would seem that China has a case for composition of her debts which her creditors could hardly fail to meet in a

²³ M. T. Z. Tyan, *op. cit.*, p. 30.

²³ *Annual Report, op. cit.*

²⁴ League of Nations, A. Extr. 83, 1932, VII.

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generous spirit. The loans were originally contracted for doubtful purposes in many cases, their interest rates and costs of flotation were high, and the fall in the price of silver has increased the burden on the Chinese Government. It would be good business on the part of the creditors to make such a favorable composition as would enable the government to get ahead with its program of reconstruction and development. If dissension among the Chinese themselves could cease for a brief period the problem of settling the unsecured debt and balancing the budget would not present much difficulty.

(iv) The Prospects of Financial Reconstruction

A mere balancing of the budget, however, even if preceded by a composition and settlement of the unsecured debts, is but preliminary to China's real need, which is for a considerable measure of modernization. Since reconstruction along more or less modern lines would almost inevitably require the aid of considerable amounts of foreign capital and foreign expert assistance, the balancing of the budget and the reform of the currency and banking system are the first steps of economic progress.

Budget stabilization is equally necessary for the expansion of domestic enterprise, and at the outset of any discussion of economic reconstruction attention should be drawn to the mistake commonly made in underestimating the recuperative powers of the Chinese people themselves, and in overestimating the extent of the need for foreign assistance. That such assistance is necessary even the most patriotic Chinese from Sun Yat-sen onward have readily admitted; but the fact must also be stressed that there is a great latent

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power of economic enterprise within China itself. Capital now lying useless in hoards or locked up in inflated land values both in town and country, might be tempted into constructive enterprises. Indeed it is possible that, as occurred after the collapse of the Taiping rebellion, any lasting pacification of the countryside might well leave the rather forced urban development of cities like Shanghai up in the air for a time.²⁵

The activities and interest of overseas Chinese ought not to be forgotten. The great changes that have been wrought in such centers as Amoy by their remittances and ideas are very significant. There are many indications that, if a degree of budget stabilization and internal peace could be achieved and if foreign cooperation started the processes of reconstruction, they would quickly be reinforced from within China and from the activities of overseas Chinese.

The course of events appears, slowly and with many discouraging setbacks, to be vindicating the plans laid down by Sun Yat-sen early in the revolution. While China has not yet emerged from the period of military conflict and while the period of tutelage into which it has merged is proving more difficult than he anticipated, yet there are ahead possibilities of international cooperation in reconstruction. It is pertinent, therefore, to recall the broad outlines of the plans he put forward in 1922.²⁶ Like every other student of the situation he puts the development of communication in the forefront of his program, starting off with the need for 100,000 miles of railways and 1,000,000 miles of macadamized roads, and going on to stress the

²⁵ Cf. F. L. Hawks-Pott, *The History of Shanghai*.

²⁶ Sun Yat-sen, *The International Development of China* (Putnam's, 1922).

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need of canals, river conservancy, telegraphs, telephones and radio stations, commercial harbors, and modern cities before he comes to hydro-electric power schemes, iron and steel and cement works, mineral and agricultural development, irrigation, reforestation and colonization of outlying areas.

It is easy to pick holes in the detailed schemes he puts forward, but in the broad outlines of arrangement his plans appear sound. They still remain the basis of China's reconstruction program, but it is apparent that little can be done to realize them until the conditions are present which will tempt both domestic and foreign enterprise and capital. Dr. Sun himself counted heavily upon the latter.

The opportunities for foreign cooperation are obvious enough. Almost every practical observer has expressed the view that railways would be profitable in China under normal political conditions.²⁷ The experience of motor services and of the railways in Manchuria proves that the lines pay and in addition that improved transport quickly promotes other economic development.²⁸ China in fact provides a good potential field of investment, not only in railway, road and bridge construction, but also in the development of the simpler fundamental industries. For some time to come such expansion must involve increasing imports of construction materials, and the recent activity of commercial missions from various foreign countries in-

²⁷ Cf. P. H. Kent, *Railway Enterprise in China* (Arnold, 1907); H. Stringer, *The Chinese Railway System*; Julean Arnold, *Some Bigger Issues in China's Problems* (Shanghai, Commercial Press, 1928); J. Earl Baker, "Transportation in China," *Annals*, November, 1930, p. 160-172; and *Far Eastern Review*, January, 1931, p. 3.

²⁸ *Report on Progress in Manchuria 1907-1928* (Dairen, South Manchuria Railway, 1929).

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dicates that those most competent to judge are well aware of the possibilities.

Space will not permit any elaborate statement of the present situation of the Chinese railways. The mileage is still pitifully small, amounting in all to about 9,500 miles, of which over a third are in Manchuria. Even if this mileage were all in good running order, China would still be very badly off for transport facilities. J. Earl Baker has recently constructed a table showing the miles of railway per 100,000 of population. In the first group of countries he places Australia (404), Canada (378), the United States (261) and New Zealand (254). In the second group are various European countries, among them Switzerland (78), France (64), Germany (57), Britain (52) and Russia (28). In the third group are the more comparable Asiatic lands, Japan (12), India (11), Siam (9) and China (2).

When it is remembered that outside of Manchuria the only Chinese lines which have been able to maintain a steady service during the recent years have been the short lines from Shanghai to Nanking (327 miles) and from Shanghai through Hangchow to Ningpo (286 miles), the longer line from Peiping to Mukden (987 miles) and the Japanese controlled line from Tsingtao to Tsinan (353 miles), the weakness of the system is apparent. Four of the seven principal trunk lines, those from Peiping to Hankow, from Peiping to Suiyuan, the Lung-Hai, and the incomplete Canton-Hankow line, are in a bad state of repair. Civil warfare has played havoc not only with their finances but also with the rolling stock and permanent way.

Loans in default and unpaid bills were reported by the

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Minister of Railways in March, 1931, to be approximately equal to the capital valuation of the lines which, he said, "were now on the verge of bankruptcy, the total obligations amounting to the staggering figure of more than \$1,000,000,000 (silver)." This financial burden has been recognized as too great for the railways to carry and application has been made to the Ministry of Finance to devise some way in which to take care of this indebtedness, so as to enable the railways to make a fresh start. Various schemes have been propounded, the most promising of which is probably that which is said to have been recommended by the railway expert of the Kemmerer Financial Commission, who proposed the reorganization of the railways into a corporation somewhat similar to that which was set up in Germany under the Dawes plan.²⁹

The importance of railway control extends far beyond economic factors into social, military and strategic considerations. There is some danger indeed that strategic factors may lead to construction not strictly warranted by economic considerations. The fear of Soviet aggression on the northern and western borders and the distrust of Japan in Manchuria have been constant temptations in this respect.³⁰

The obvious economic procedure, however, is to begin first with the reorganization and reequipment of existing lines, working from the center of government outward and consolidating political and military control as the reorganization proceeds. After this comes the filling of important gaps in the trunk line systems. It is probable that

²⁹ *Far Eastern Review*, March, 1931, p. 138.

³⁰ C. S. Tung, "A Review of Chinese Railways," *Chinese Economic Journal*, January, 1931, p. 41.

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an important beginning may shortly be made by using the accumulated British indemnity funds for the completion of the Canton-Hankow line, of which 250 miles remain to be built. From its base at Nanking, commanding the rich Yangtze valley, the National Government is in a strategic position to equip its territories with modern transportation, increasing their productivity and enhancing the mobility of its troops.

The railway conference held at Nanking in March, 1931, apparently contemplated plans of this general nature, a funding of the debts with special financial provision, revision of fares, improvement of service on the lines around Shanghai, the use of the British indemnity funds to purchase new rolling stock, the closing of gaps in important trunk lines, the establishment of repair and construction shops and the early redemption of the Japanese-controlled Shantung line.

One of the most significant developments of the last few years in China has been the rapid extension of road-building, the importance of which as a supplement and feeder to the railway system can hardly be overestimated.²¹ As in almost every other work of reconstruction, there has been a combination of Chinese and foreign effort. The work of the China International Famine Relief Commission, following upon the experiments of the American Red Cross in the famine of 1920, has provided a convincing demonstration of the value of practical foreign cooperation; but much of the credit for the movement must go also to the so-called "Good Roads Movement" founded in 1921 under the presidency of the Minister of Foreign Affairs, Dr. C. T.

²¹ A. Viola Smith, *Motor Highways in China* (Washington, 1929).

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Wang. There are now estimated to be approximately 35,000 miles of road in China capable of carrying automobile traffic, nearly all of them built in the last ten years. They are not paved highways, many of them indeed are mere mud tracks, but their importance is considerable. The imports of gasoline multiplied eightfold between 1920 and 1928 and motor buses carry continuously increasing amounts of traffic.

These examples in the field of transport must suffice to indicate the problems of economic reconstruction and the spirit in which they are being faced. Further examples might be drawn from aviation, electrical communication and industrial experiment. It is important to remember that, in spite of wars and dissension, there remains a solid corps of trained workers behind the National Government, planning, experimenting, gaining experience and training themselves for the economic progress that lies ahead. It is, on a long view, not unduly optimistic to hope that the prestige of the National Government, not necessarily in its present form, will within a reasonably brief time reach the point where further factious opposition on a great scale will be difficult. When that time comes the economic rehabilitation of the country may well proceed fairly rapidly.

This prospect has already been brought appreciably nearer by the confidence and assistance extended to the present government by the foreign states. The nationalist movement went through a period of intense antiforeign propaganda, inspired at least in part by its Russian advisers from 1923 to 1927. Some very sore spots still remain, but the sobering responsibilities of power and the conciliatory policies of leading foreign governments have brought a gradual

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but definite change of attitude. The return of foreign concessions, negotiations looking toward the relinquishment of foreign privileges, acquiescence in tariff autonomy affording greater revenues, have brought better feeling. There still remains considerable distrust of the older methods of concession-hunting practised in the days of China's weakness and the banking consortium is still suspect; but a promising avenue of cooperation has been opened up by the arrangement in the spring of 1931 by which the Chinese Government asked and received the assurance of continuous assistance from the technical sections of the League of Nations dealing with health, transit and finance. The arrangement with the Health Section has been in practical operation since 1930 and the outlines of the cooperative plan have been published.²² While further progress must necessarily be slow, especially in the difficult field of finance, the liaison established is hopeful for the future. The Transit Section and the Committee on Intellectual Cooperation have dispatched missions of expert advisers, and the director of the Financial Section has visited China. There is apparently no intention on the part of the League to rush into ambitious schemes of reconstruction but rather to establish continuous consultative relations. Nor on the part of China is there any intention to look to foreign assistance for salvation. There is indeed a strong dislike of any arrangement from which might spring even the suspicion of foreign dictation or domination.

The work of the technical sections in the past, however, has not been unduly rigid. The elasticity of procedures

²² League of Nations. *Collaboration with the Ministry of Health of the National Government of the Republic of China* (C. H. 906. 1930. III. 14).

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and the varied successes attained offer hope that in course of time effective means may be discovered for giving China the assistance which she needs.³⁹ The communiqué issued by the government on April 27, 1931, outlines the arrangements made, which have since been approved by the Council of the League at its regular meeting in June, 1931. The communiqué is worth quoting in full as indicating the possibility of better things in store for China, despite its economic and financial weakness at the moment.

With the departure of Sir Arthur Salter and M. Maurice Frère from Nanking on April 27, the work of the League of Nations Mission, sent at the request of the National Government, terminates. The directors from the three technical organizations of the League, namely, Dr. L. Rajchman, director of the Health Section, M. Robert Haas, director of the Transit Section, and Sir Arthur Salter, director of the Economic and Financial Section, each accompanied by other members of the Secretariat, successively arrived in China between December and March.

After joint conversations between these officers of the League and the members of the government, the government has made a proposal to the League of Nations for regular collaboration, based on the principle that the technical organizations of the League shall be continuously available to advise the government and the new National Economic Council, which has just been created, in connection with the plans of national reconstruction.

Dr. Rajchman had already made an earlier visit to China in the previous winter, when he took back to Geneva a plan of collaboration proposed by the Ministry of Health, including arrangements for technical advice by experts from the League in regard to quarantine, a new Central Field Health Station in Nanking, medical education, cholera control in Shanghai and traveling fellowships in Europe and America provided by the League.

This plan was duly approved by the Health Committee and the Council of the League, and was put into effect in May of last year,

³⁹ Cf., e.g., League of Nations, *Principles and Methods of Financial Reconstruction* (1930. II. 16); also J. B. Condliffe (editor), *Problems of the Pacific, 1929* (Univ. of Chicago Press, 1929), p. 368-376.

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so that practical collaboration between the National Government and the League in health matters was already an accomplished fact when Dr. Rajchman came again last December. During this visit, however, it has been arranged, after conversations between him and the new National Health Administration, that the plan will be extended to cover additional activities.

As a result of the conversations with M. Haas, the government has requested the assistance of the Transit Organization of the League in connection with the final establishment of the scheme for the improvement of the Hwai River, and has also asked that experts of this organization should make a preliminary inquiry into the problems under consideration by the North China River Commission, and, in addition, be available for consultation on the technical aspects of the proposal relating to harbor development in the area of Greater Shanghai.

The Transit Organization has also been invited to help in the creation of a technical engineering field station to be established at the national capital, of which the main objects are to facilitate the training of civil engineers, to help in the preparation and supervision of future inquiries and surveys, concerning, in particular, road building and river conservancy work, and to form the nucleus of a national service of civil engineers.

Sir Arthur Salter has been asked by the government to discuss questions relating to the effect on China's economic activities of the present world depression; and a series of informal and personal conversations have taken place on a number of practical problems which now present themselves in the sphere of financial and economic policy. Procedure has also been arranged which is designed to secure that the League's Economic and Financial Organization shall be continuously available to advise the government and the National Economic Council, who will ask the assistance of the several committees associated with the Organization in advising, or collaborating, in the framing of schemes, on particular problems as they arise within the sphere of financial and economic policy.

The government hopes that during the first stages of reconstruction work it may be possible for the League to arrange for an adviser to come to China, who will assist the government to decide on the exact method by which, in regard to each problem within the sphere of any of the technical organizations, among them the Economic and Financial Organization of the League, ad-

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vice and assistance might best be obtained; and, on its side, the government is appointing an official to act as correspondent to the Economic and Financial Section of the League in order to secure a regular exchange of all requisite information.

The government trusts that these arrangements and proposals will result in a close, constant and fruitful collaboration between the National Government and its National Economic Council on the one hand, and the League of Nations on the other.

CHAPTER VI

BANKING AND CURRENCY REFORM

(i) The Need for Reform

Just as the balancing of the budget must precede any attempt at financial rehabilitation, so the reform and standardization of the currency must accompany if not precede the balancing of the budget. China is facing tremendous economic problems behind all of which lies the relentless pressure of numbers upon limited resources. Limitation of numbers is the only ultimate solution of China's difficulties but such limitation cannot be looked for under present conditions and at the existing standard of living. Nor is it possible to hope for any very immediate or considerable expansion of resources. Agricultural, mineral and power resources are relatively poor and there is little likelihood of their being much increased. What is possible is better utilization of existing resources, improved agriculture and industrial progress leading to greater productivity.

The initiative lies with the central government. Greater production will lead to greater numbers. Only if some substantial part of the newly created wealth is diverted to such social purposes as education, to capital investment in public undertakings and to regulatory policies will there be any hope of effecting improvements in the standards and

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ways of life which may in time lead to gradual control over population increase.

Under present conditions the government is hampered at every turn by lack of effective authority and particularly by financial weakness. It has been argued in a previous chapter that the present financial situation, given better political conditions and a cessation of civil strife, is not hopelessly unmanageable. If sufficient political stability could be achieved to warrant international cooperation and assistance the problems of public finance might prove moderately easy to surmount.

In the meantime, however, they are definitely made worse by the chaotic condition of the currency and the weakness of the banking system. Banking and currency reform is therefore one of the obvious steps that must be taken to break through the vicious circle. This does not mean that currency problems can be dealt with in isolation from the problems of public finance, with which indeed they are inextricably bound up. Improvement of the banking system is difficult if not impossible as long as the government must lean heavily on the banks for short-term loans. Conversely it is difficult to balance the budget while a series of silver and paper currencies are depreciating at various rates.

The necessities of public finance, therefore, constitute the first and most outstanding reason for currency reform. These difficulties have been increased by the fact that "the price of silver in terms of gold has fallen by half in the last two years." There are heavy foreign commitments that must be met in terms of gold; as the exchange goes against China the government's purchases of raw materials

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and munitions become more expensive; the same factor also checks private imports and consequently tends to reduce customs receipts. It is not surprising, therefore, that the Minister of Finance should report that "the crisis in silver has thrown into clear relief the necessity of currency reform, which is engaging the earnest attention of the government."¹

There are other, and in the long run more important, reasons for embarking upon currency reform. All China's commercial relations with foreign countries are handicapped by the fact that her merchants and bankers still have to struggle with a complicated, cumbersome and inefficient currency or series of currencies such as other countries have long since discarded. There are two main factors in this situation, the inefficiency of limited local currency systems inadequate for modern needs, and the effects, somewhat exaggerated and often misunderstood, of clinging to silver after other countries have linked their systems to gold.

The first of these factors has, ever since the beginnings of foreign trade, imposed extra costs by reason of the complicated exchanges necessary and the very risky speculative elements introduced into trade. The second factor has, except for brief periods, been a persistent dragging influence penalizing China's trade. The internal price level in China does not adjust itself readily to a steady depreciation in the silver money relatively to other currencies, but this depreciation is expressed in the exchanges. Imports cost rela-

¹ Cf. *Report of Minister of Finance for Year ending June, 1930*; also the Kemmerer Commission's report entitled *Project of Law for the Gradual Introduction of a Gold Standard Currency System in China, together with a Report in Support Thereof* (Shanghai, Ministry of Industry, Commerce and Labor, 1930), p. 57-63.

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tively more, and exports, because of lagging internal prices, can be obtained for less, than their value in world markets. This disadvantage has been very marked in the last decade and particularly in the last sharp fall of silver prices, but it has been at work at least since the United States demonetized silver in 1873. The period of rising prices from 1895 to 1920 masked the fact that the world's supplies of unwanted silver were being diverted to China as one country after another took steps to protect its currency either by adopting the gold standard or by setting up some form of the gold exchange standard. Silver has fallen almost entirely from its high estate as a "precious metal" and China, lagging behind world progress, has had to accept great stores of the constantly depreciating metal which no other country wanted.² While the effects of adverse exchanges and speculative fluctuations are most obvious in such trade and finance as China conducts with the outside world, the domestic results of the present chaotic currency system are very important also. This is less due to the inadequacy of silver, for which indeed a reasonable case can be made out on domestic grounds, though it is true that, as Mr. Soong has pointed out, "should crops prove bad, and wholesale importations of food become necessary, the situation might easily become critical." Moreover, the stocks of silver, both in bank reserves and in hoards, decline in value as the price falls.

But the greatest need for currency reform, after all, is to be found in the inefficiency and wastefulness of the present system in domestic trade and industry, and the cruel effects

² J. W. Angell, *Theory of International Prices* (Cambridge, Harvard Univ. Press, 1926), Chap. XVII.

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of the depreciation of subsidiary coinages upon a hard-working peasantry. There can be little economic progress until a stable, uniform and standardized currency, properly safeguarded and controlled, is available to at least the more developed sections of the country, and until a better organized banking system is erected upon it. It is, therefore, important to examine the recent history and present situation of banking and currency in China, together with the various proposals that have been put forward for reform.

(ii) *The Recent Development of Chinese Currency*

The history of coinage in China goes back much too far and is too complicated for any brief summary.³ It is quite clear that China went through much the same monetary evolution as Western countries but at an earlier date. Only gradually were the metallic emblems used as money specialized for currency purposes and dissociated from ornament. Representations of spades, knives, bells and other commodities in common use persisted for centuries, and the familiar copper or brass "cash," minted with holes to facilitate stringing, seem to have evolved from "armlets or rings of bronze, used as ornaments, without any emblem or legend."⁴ While the minting of inscribed coins goes back more than a thousand years before the Christian era and there is an equally long history of the public regulation of minting and issue, it remains true that no Chinese government has ever been able to standardize its currency or to get its coins accepted as "fiat money." It is an un-

³ There is a brief summary in the Kemmerer Commission's report, p. 47-56. The standard source of information is Eduard Kann's excellent and detailed study, *The Currencies of China* (Shanghai, Kelly and Walsh, 2nd revised edition, 1927).

⁴ Kann, *op. cit.*, p. 402.

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fortunate fact that even the copper coins which are the common currency of the Chinese laboring classes "are not token money in China. They are merchandise, subject to violent fluctuations."⁵

This fact renders more deplorable the profusion of issues leading to oversupply and debasement, and the widespread counterfeiting which has always been practiced in China. To make matters worse there has for long been a variable and largely unreliable complication of "copper-cash notes," issued apparently by almost anyone who could pass them into circulation.

Since the ancient copper-cash has largely, though by no means wholly, been supplanted by modern copper coins, the first mint for which was established at Canton in 1887, the situation has become worse. Writing as early as 1889, J. Edkins pointed out⁶ that

the subject of Chinese currency demands not a brief paragraph but a comprehensive essay, or rather a volume. Its chaotic eccentricities would drive any Occidental nation to madness in a single generation, or more probably such gigantic evils would speedily work their own cure . . . Under these grave disabilities the wonder is that the Chinese are able to do any business at all, and yet, as we daily perceive, they are so accustomed to these annoyances that their burden appears scarcely felt, and the only serious complaint on this score comes from foreigners.

Since this passage was written the state of the copper coinage has become worse by reason of overissue, debasement and depreciation, even in terms of the silver coinage which is itself depreciating. The Shanghai Tramways started operation in 1908 "when the ratio of depreciation

⁵ *Ibid.*, p. 432.

⁶ Quoted by Kann, *op. cit.*, p. 415-417.

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(of copper to silver) was $14\frac{3}{4}\%$ and the total loss, \$50,812. The percentage of loss in converting the depreciated copper coinage into dollars had grown, in 1926, to 61.8% which, when applied to the actual total receipts for 1926 (\$7,444,995), is represented by the enormous deficiency of \$4,557,640."⁷

If a single company is faced with this problem it is evident that there is an enormous loss through depreciation to be borne by someone. The foreign tramway company is presumably able to take such factors into account when fixing fares; but the laborer or the peasant-farmer cannot protect himself in this way. The multiplication of cash shops, solely engaged in money exchange, is evidence of the costliness and the speculative nature of these currency transactions. It is proverbial in China that a very few exchanges exhaust one's capital entirely.

Copper and paper money based on copper are, however, only the beginning of the story.

Strictly speaking (the Kemmerer Commission reported),⁸ 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. It is true that there are coins minted by the central and provincial governments, and notes issued by a central bank, but in no part of China does a complete and coordinated currency system exist, and none of the fragmentary currency systems that do exist are in general use throughout the country.

The various media of exchange that are in use, in addition to the copper coins and copper notes, and "cash," consist for the most part of silver dollars, fractional silver and bank notes based on silver. China is too poor for

⁷ *Ibid.*, p. 425-6.

⁸ *Report*, p. 47; *Kann, op. cit.*, Chap. X.

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gold coinage.⁹ All these various circulating media are based on silver as a standard of value. In addition to the actual coins "the currency is also encumbered with that peculiar monetary unit, the tael, which was historically a unit of weight."¹⁰ As a matter of fact there are many taels differing according to local usage. They might perhaps best be described as conventional units used for accounting purposes, seldom actually coined, but sometimes represented by bullion in the form of sycee or silver shoes. The Haikwan or customs tael in which customs duties were calculated is a different unit from the Shanghai, Peking or other local taels.¹¹ In almost every case local custom has incorporated various discounts or conventional usages which complicate the exchange of actual coins into the various accounting units. An excellent indication of the way in which these add to the confusion of domestic exchange is to be found in the explanation given by D. K. Lieu of what *p'ao* means in Peking.¹² Foreign exchange, even between countries which have simple stable currencies, is traditionally confusing. In China the intricacies of domestic exchange make the ordinary foreign exchange complications seem like kindergarten problems.

Besides the confusing taels, there are many foreign as well as Chinese silver dollars in circulation.¹³ Spanish and Mexican dollars began to drift in as early as the sixteenth

⁹ *Report*, p. 55; Kann, *op. cit.*, Chap. II.

¹⁰ *Ibid.*, p. 63-6.

¹¹ Kann, *op. cit.*, p. 83, lists seventy-two "principal taels current in China" of different values, and remarks also (p. 81): "How many different kinds of sycee taels are there in existence? Many hundred. Lack of uniformity limits the circulation of sycee taels to the locality for which they were originally created, and when obliged to migrate they are first cleaned in their new home, reassayed and revalued."

¹² D. K. Lieu, *China's Industries and Finance*, p. 74-5.

¹³ Kann, *op. cit.*, Chap. V, Kemmerer *Report*, p. 48.

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century, the American trade dollar, Bolivian, Chilean and Peruvian dollars, the old Saigon piaster, the Japanese silver yen, the British "standing-man dollar," and the Carolus dollar are also found. There are various Chinese coinages also, dragon dollars coined in various provincial mints, Yuan Shih-kai and Sun Yat-sen dollars, the two last being commonest. Though the weight of silver in these various coins differs somewhat, they are all regarded in general trade as being on a parity.¹⁴ Doubtless the heavier ones tend to disappear, and are already becoming rather rare, but for general trading purposes the standard valuation is set by the commoner Sun and Yuan dollars.

The real standard of value in China is none of these coins but silver bullion, since the exchange fluctuates in relation to the price of silver and the value of the coins is regulated thereby, immediately in foreign commerce and with more difficulty in domestic trade.¹⁵ But, in addition to the fluctuations of silver in terms of gold there is the extraordinary fluctuation of the various sorts of circulating currencies in terms of each other and in terms of silver. Copper, paper, fractional silver and silver are varying all the time.

Besides the silver dollars or "big money" there are many issues of fractional silver or "little money," mostly at a discount in terms of dollars.¹⁶ The foreigner is generally hopelessly at sea if he has to change a dollar and receives in return various units of small money plus some copper coins. Thus a dollar may be worth six 20-cent pieces

¹⁴ *Report*, p. 48.

¹⁵ Cf. Kann's authoritative and detailed discussion of the silver market, *op. cit.*, Chap. I and III-IV.

¹⁶ *Ibid.*, Chap. VI, and *Report*, p. 49-50.

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plus some coppers. Prices are quoted either in "big money" or in "little money." Moreover there is a confusion of provincial coinages, especially of small money, and these are not always acceptable outside of their local areas.

Large and often indiscriminate issues of paper money complete the confusion.¹⁷ The large, stable foreign banks are able to keep their notes at par in their local areas, but even a foreign Shanghai note is subject to a discount of perhaps 1 to 3% in Tientsin. There are Chinese bank notes also, particularly of the Central Bank of China, which are relatively stable, at least within the local area of their issuance; but the notes of provincial banks and treasuries are badly depreciated in varying degrees, and so are the notes of some private Chinese banks. The well-known Bank of China and Bank of Communications, which have government connections but are private corporations, are, however, leading examples of private Chinese banks which keep their large note issues circulating fairly near par. In the same way there are many of the multitude of private firms and nonbanking institutions,—“factories, public utility companies, chambers of commerce and even barber shops and private individuals,”—whose circulation of notes is restricted to local areas and carefully controlled so that a large proportion of them circulate at par. They recall in many ways the private bank notes of eighteenth and early nineteenth century England, and may well be described as “a peculiar element in China’s currency and also a very loose and undesirable element.”¹⁸

Even this brief and very summary sketch of currency

¹⁷ *Ibid.*, p. 51-5.

¹⁸ *Ibid.*, p. 55.

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conditions is sufficient to show that China is handicapped by a chaotic, out-of-date and unregulated monetary system or rather lack of system. This constitutes, in fact, one of the clearest examples of the high price which her people have to pay for lack of stable and effective government. They have been brought into commercial contact with the outside world before they had the mechanism with which to carry on commerce. Japan quickly got its currency on to a stable basis; British civil servants safeguarded India's currency by the invention of the gold exchange standard; but China is left weltering in a chaos of unregulated and uneconomical expedients.

The costs of this situation are to be seen in a fluctuating but generally depreciating foreign exchange, undue speculative risks which widen the margins of trading, limitation of trade within narrower areas than would otherwise be possible, and a costly and confusing domestic exchange diverting many thousands of people into unproductive money-changing, and distracting the thoughts of many millions more from their proper productive occupations. There is no clearer illustration of China's lag behind the rest of the world in economic organization. Metallic money which was invented to facilitate trade, and paper money whose advantages Adam Smith likened to a "wagon-way through the air" have not only largely failed in their functions because of mismanagement but have become a block to progress. There is a large and widely diffused vested interest engaged in the mechanics of money-changing, absorbing the energies of numbers of men who might otherwise be leaders in constructive industry and commerce.

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(iii) *Banking in China*

Banking institutions have existed for a long time in China and their origins seem to be independent of Western ideas. D. K. Lieu has stated that China developed most of the characteristic phenomena of credit organization before coming into contact with foreign traders. There were not only banking institutions, but bankers' banks, a system of clearings, paper money issues, the main credit instruments—checks, promissory notes and bills of exchange—money markets in the main cities, financial centers, official and market rates of discount and a system of domestic exchange, before foreign influence had penetrated China to any extent.¹⁹ Moreover these first Chinese banks developed in a province, Shansi, which is remote from the coast. Their origins are, however, not as ancient as is sometimes believed. D. K. Lieu dates them from 1796 to 1820, and points out that their more rapid development came after the Taiping rebellion in the middle of the nineteenth century, which made the shipment of coin and bullion more hazardous and therefore encouraged the use of credit.

These Shansi banks, and the other "native" banks which were modelled upon their success, presented many interesting features in their organization. They recognized "labor" as well as "capital" shares and developed a very rigorous and ingenious system of guarantees following upon long apprenticeship, to insure honesty of management. Like so many devices of Chinese thought, they were ingenious to a degree and well fitted to serve the needs of "traditional" China. But, as D. K. Lieu points out, they

¹⁹ *China's Industries and Finance*, Chap. II.

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can hardly be regarded as offering a complete banking or financial system. They were thoroughly private institutions, uncontrolled, unregulated and uncoordinated in their activities. In particular their activities were not related in any effective way to the currency system. They were devised almost wholly to facilitate current trading finance, with little or no relation to investment, and they were designed also for personal credit, with no mechanism for extending the "institutional" credit which plays so large a part in modern industry and commerce. They were not fitted therefore to play a large part in the financial evolution of a modernized China. The speculative rubber boom in 1910 hit many of them very hard. The Shansi banks seem to have disappeared soon afterwards; but some "native" banks have survived to play a minor part in China's trade.

At the present time, in addition to these so-called "native" banks, there are two main banking systems in China. The most impressive and important at the moment consists of the foreign banking institutions which operate mainly in the great coastal cities. The pioneer and still the largest and strongest of these is the Hongkong and Shanghai Banking Corporation, a British bank, organized at Hongkong in the middle of the nineteenth century. Twenty foreign banks now operate in Shanghai and most of them have branches also in other cities. They represent British, American, Japanese, French and other European financial interests and also an Australian institution, the Bank of New South Wales. Their financial strength is impressive, their policies are for the most part sound and progressive and they have rendered invaluable service to China, not

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only in their actual conduct of commercial, financial and investment transactions, but in the assurance of stability which they have offered in important developing regions, and not less in the practical object lesson they have been to Chinese merchants and bankers.

These foreign banks have, in addition to their own inherent advantages of stability and financial strength, gained somewhat fortuitously by reason of their commanding position in the profitable foreign exchange market, and also by the fact that they have for many years had the custody of important governmental revenues, particularly the Chinese Maritime Customs receipts and the salt revenues, from which have been drawn the payments on overseas debts and indemnities. In respect of the advantage in foreign exchange, little need be said beyond the remark that it is another illustration of the cost to China of her backward economic development. Foreign trade has been carried on by the initiative and through the facilities provided by foreigners. China has had no developed commercial organization to sell her products abroad. She sells them to foreign traders who come to her door. These traders necessarily have used the financial facilities provided by foreign banks.

The second advantage is, however, more anomalous and is resented by many Chinese as an unwarranted encroachment upon Chinese economic if not political sovereignty. Sun Yat-sen himself in a somewhat garbled argument, drew attention to it as an outstanding case of economic imperialism.²⁰ The situation has, however, developed naturally from China's financial weakness. Loans and in-

²⁰ "San Min Chu I" (China Council, Institute of Pacific Relations, 1928).

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demnities secured upon specific revenues called for regular, automatic payments of interest and capital installments. To insure such payments the foreign-controlled revenue services deposited the funds in the only stable financial institutions then existing in China, the foreign banks operating in the foreign concessions. The situation is obviously a standing challenge to Chinese national spirit and probably will not survive the establishment of a stable government, powerful enough to control and regulate an efficient national banking system; but it is difficult to see what other arrangements could have been made in the historical circumstances.

The beginnings of a true national banking system are making their appearance in China but as yet they are not very powerful. The place of the old "native" banks is being taken by modern Chinese banking institutions which show signs of increasing efficiency and stabilization. The Shanghai Chinese Bankers' Association now numbers 25 member banks, including the two semigovernmental institutions, the Bank of China and the Bank of Communications. On December 31, 1929, these banks had a total paid-up capital (in silver dollars) of \$125,000,000, reserves of \$31,600,000, current deposits of \$702,000,000, fixed deposits of \$231,000,000, and savings deposits of \$46,000,000. Statistics for other centers are more difficult to obtain; but from the note issues it would appear that Canton and Tientsin, the only other large financial centers, each have about one-sixth of the development in Shanghai.²¹

These statistics, incomplete as they are, indicate a steady growth when it is remembered that the first modern Chinese

²¹ M. T. Z. Tyau, *Two Years of Nationalist China*, p. 430-1.

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bank was not organized until 1897. This bank, the Commercial Bank of China, which is still operating, preceded the better-known Bank of China and Bank of Communications by almost a decade.²³ The checkered careers of the latter are not easy to follow.²³ After the Boxer rebellion of 1900 the various foreign powers attempted to negotiate treaties which would force upon the Manchu government some measure of modernization, particularly in regard to commerce. The British (Mackay) treaty of 1902 was the first to be signed and the model for most of the others.²⁴ "Had it been observed, it would have been a sort of Magna Charta in the reform of Chinese commerce. It promised early reform in currency, mines, trade-marks and patents, bonded warehouses, navigation, corporations, treaty ports, barrier taxes, and other important matters."²⁵

As a result of this pressure, and later of a report by an American financial commission, plans were begun for a national bank. In 1904 such a bank was established at the instance of the Board of Revenue (Hu Pu) and became known as the Hupu Bank. It was a private limited liability company, but under the control of the government. This bank, which became known about 1908 as the Ta Ching, was very profitable for a time, but fell into difficulties in the closing years of the Manchu régime and after the Revolution of 1911 was reorganized as the Bank of China. The

²³ D. K. Lieu, *op. cit.*

²³ Cf. the very illuminating account in Ray O. Hall, *Chapters and Documents on Chinese National Banking* (Shanghai, Commercial Press, 1917).

²⁴ For the political importance of this treaty see S. K. Hornbeck, *China To-day: Political* (Boston, World Peace Foundation, 1928). The failure to take advantage of this opportunity and particularly of the offer by the foreign powers to agree to increased customs duties, is one of the tragic indications of the weakness of the Manchu government.

²⁵ R. O. Hall, *op. cit.*

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various branches of the old Ta Ching Bank were affected in different degree by the revolution, and it is significant that even at that date the Shanghai branch was the strongest, and relatively independent, powerful enough at any rate to throw its weight on the side of the revolution and seriously embarrass its head office by draining it of funds which were soon badly needed by the government.

In the meantime the Bank of Communications had emerged in 1907 as a rival, intended primarily to facilitate the financial enterprises of the post office, the railways, the telegraphs and the steamship lines of the government. Like the Bank of China it was a private bank, in this case, however, with shares taken by the government and with government control. The tortuous political struggles in which the two banks became involved after the revolution are difficult to disentangle now; but two facts seem to be clear. The Bank of Communications was weaker than its older rival and more under political domination despite the fact that government assistance had been necessary to reconstruct the Bank of China. And the struggle weakened both banks, preventing what might have been the normal evolution of the latter into a strong central bank. It put up a strong fight, particularly from its Shanghai branch, and was supported by the foreign banks; but in May, 1916, during the crisis precipitated by Yuan Shih-kai's effort to make himself emperor, a moratorium was declared for both banks. This was probably an unnecessary step for the Bank of China, though not at that time for its rival, and the Shanghai branch of the former virtually disobeyed the moratorium. The development of a proper central bank, however, was delayed, and in the final

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outcome neither bank was chosen but a new institution was created.

Not until the new revolutionary government was established at Canton in 1924 was such an effort possible. Then the Central Bank of China was created by the initiative of the new Minister of Finance, T. V. Soong. It functioned with considerable success until after the government shifted to Hankow in 1926-7; but then, as the government passed for a few months into the hands of the revolutionary left wing, a disastrous overissue of paper money temporarily ruined the project.

When the National Government was reconstituted at Nanking in 1928 with Mr. Soong again in control of finances, a new Central Bank of China with headquarters at Shanghai was created by the advance of \$20,000,000 from the budget of 1928-9. This bank is intended to be a pivotal part of the mechanism for the reform of Chinese currency and banking. The Kemmerer Commission in 1929-30 recommended a Central Reserve Bank with a monopoly of the privilege of note issue.²⁶ It is too soon yet to identify this proposal with the Central Bank of China, but the presumption is that any such functions would be devolved upon that institution.

It may be said, therefore, that China now possesses a fair number of stable commercial banks, among which one should probably include the two semigovernmental banks, and that the Central Bank of China is capable of being transformed into a central reserve bank. On March 27, 1931, the National Government took a further step by promulgating a new banking law intended to regulate the

²⁶ The report on this project is not published at the time of writing.

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modern banks. Another law is expected to regulate the "native" banks. While the government's authority at present is limited, it does prevail in the region which includes Shanghai, and since the new law is in the best interests of the larger modern Chinese banks which support the government, it will probably be enforced. It would be premature from these facts to conclude that the Chinese banking system has been reorganized; but it is evident that plans have been made for the reorganization, and, what is more important, that there now exists an important body of responsible conservative Chinese bankers around whom and by whose initiative reorganization is now more possible than it has been in the past.

(iv) Projects for Currency Reform

The most urgent economic step in China at the present time is the regulation and control of the coinages which are in general use among the common people. It is encouraging that stable, soundly managed Chinese modern banks should be appearing, and that the government should have been able to create a central bank; but as long as the government is unable to regulate coinage and the central bank to control note issues, China will remain upon an unsatisfactory silver bullion standard of value. The silver coins in circulation command purchasing power determined by the value of the silver in them, the notes and deposits which are redeemable in silver follow the same course, and the subsidiary coinages also fluctuate at their merchandise value in terms of silver. Silver has been an unsatisfactory standard of value, fluctuating widely in terms of gold, and depreciating heavily. China is placed in a worse bargain-

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ing position as the foreign exchanges go almost continuously against her, and this is a very serious handicap when she so badly needs foreign capital and foreign imports. The effects of the depreciation of silver reach her domestic trade more slowly and therefore a series of dislocations is set up in the established equilibria between various sets of prices adding still another element of confusion to an already chaotic situation.

It is significant that the first real attempts to place China's currency upon a gold standard or gold exchange standard and at the same time to systematize and regulate the currency within China, were made largely upon the initiative of foreigners in the late nineties and the first decade of the twentieth century, at a time when the price of silver had fallen heavily.³⁷ There is a large measure of unanimity in the recommendations that have been made by successive expert commissions, but the problem is a very complicated one and there has as yet been little progress even in the standardization and regulation of the subsidiary currency, a measure which does not involve the questions of principle which a more ambitious scheme of reform would raise.

In 1897 Japan adopted the gold standard; from 1893 onward India had been working under the gold exchange standard. In 1902 Siam followed suit, to change over to a definite gold standard six years later. In 1903 the Philippines adopted the gold exchange standard also, and between 1903 and 1906 the Straits Settlements followed suit. The Dutch East Indies had preceded these other Eastern countries and had indeed shown the way to the

³⁷ Kann, *op. cit.*, Chap. XV; Kemmerer *Report*, App.

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important Indian experiment.²⁸ China alone of the great Eastern lands remained on a silver basis. Silver was falling heavily in price and when the indemnity after the Sino-Japanese War of 1894-5 and the Boxer indemnities of 1900, in addition to most of China's other foreign indebtedness, added heavily to the external obligations which had to be met in gold, Chinese leaders began to awake to the necessity of placing their currency upon a more modern basis. Unfortunately at that time very few of the Chinese leaders knew much of currency principles or practice. Nor was the Manchu government strong enough to have carried through any practical reforms.

The first rather vague suggestions of Chinese statesmen in 1895-6 were therefore of little practical importance, just as some earlier attempts to introduce some gold coins to circulate together with silver and copper were largely abortive. After the shock of the Sino-Japanese War and the punitive Boxer expeditions, followed by some realization of the heavy burdens these experiences had imposed for the future, China sought ways and means to reform her currency. The Mackay treaty of 1902 contained a clause, subsequently copied into treaties with other foreign powers, stating that "China agrees to take the necessary steps to provide for a uniform national coinage which shall be legal tender in payment of duties, taxes and other obligations throughout the Empire, by British as well as Chinese subjects."²⁹ While this promise was not fulfilled, some

²⁸ For these and other experiments in the gold exchange standard see E. W. Kemmerer, *Modern Currency Reforms*.

²⁹ The text of practically all Chinese treaties is to be found in the invaluable work of J. van A. MacMurray, *Treaties and Agreements with and Concerning China*, and the more recent *Treaties and Agreements with and Concerning China, 1919-1929*, both published by the Carnegie Endowment for International Peace, 1919 and 1929.

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steps were actually taken in 1901 and 1902 to reform the copper and silver coinages, steps that unfortunately were not followed through to their necessary and logical conclusion.

In January, 1903, the Chinese Government appealed to the United States in a memorandum which has a remarkably modern ring, praying for the initiative of the United States in investigating the problems created in silver-using countries by the fall in the price of silver.⁸⁰ The United States Congress promptly responded by the appointment of a Commission on International Exchange, consisting of Jeremiah W. Jenks, H. Hanna and Charles A. Conant. This commission visited the various European capitals, and in 1904 Professor Jenks proceeded to China where he urged upon the government the first scientific plan for a gold exchange standard.⁸¹ The general idea had been anticipated by Sir Robert Hart, the famous Inspector-General of the Customs Service, and by various Chinese officials, but Professor Jenks' scheme was the first thoroughly thought-out, practical proposal.

The fundamental soundness of the scheme at that time was never in doubt. Though details have differed, each of the four expert foreigners to whom China has at various times turned for advice in this matter—Jenks (1904), Vissering (1911), Baron Sakatani (1918) and Kemmerer (1929)—has laid down the same general principle of a gold exchange standard. No Chinese government up to the present, however, has had the power and prestige necessary to carry out such a reform. Jenks in 1904 made for-

⁸⁰ Text in Kann, *op. cit.*, p. 362-6.

⁸¹ Report published as *Gold Standard in International Trade: Report on the Introduction of the Gold Exchange Standard.*

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eign administrative control an essential part of his plan; but rising national feeling in China made such a suggestion impracticable and none of the later advisers recommended it. In the stress of revolution and civil war no government has been able to command sufficient authority within China or sufficient confidence abroad to attempt any extensive scheme of reform. In the meantime the currency has gone from bad to worse, and undoubtedly presents a more difficult problem now than it did a quarter of a century ago.

It is probably sufficient to summarize the main outlines of the most recent scheme put forward by the Kemmerer Commission which, at the invitation of the National Government, visited China in 1929-30. In essence the currency scheme proposed is the creation of a uniform token currency within China, or rather such part of China as is ready for it, consisting of silver and subsidiary coins, supplemented by bank notes. The value of this token currency is to be maintained by strict limitation of issues of notes through the monopoly issue of the central bank, and strict control of coinage by the government. It is to be kept at a constant ratio with the gold standard in other countries by operation on the foreign exchanges. From the profits made by the minting of coins which circulate at values above the commercial value of their bullion content, supplemented at first, if necessary, by a foreign loan, reserve funds are to be built, partly in gold, partly in silver, and held partly in London and New York, partly in Shanghai. If more coins are issued than are necessary for domestic trade at existing prices, the price levels will tend to rise and the foreign exchange to fall, indicating that the coins have depreciated in value. The government under

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these circumstances will restrict the issue of coins, building up its reserves in China and buying exchange by utilizing its funds abroad. Prices in China will fall as the volume of circulation is restricted, and exchanges will rise. Provided the original mechanism of such a gold exchange standard is sound, and there is now abundant experience in many countries to draw upon for its construction and operation, it is not a difficult matter to maintain the token currency at parity in relation to gold prices.

The introduction of such a scheme into a country in China's condition is, however, not a simple matter. In India, the Philippines, Java, the Straits Settlements, and even Siam, there existed governments strong enough to enact and enforce the new system. In China the case is different.

Before the Chinese Government can carry out Dr. Kemmerer's recommendations it must be powerful enough to enforce the use of the new money and the withdrawal of the existing money after a reasonable time limit. It must be able to insist that all bank notes must have adequate backing of the new gold standard money, or, better still, it must adopt the recommendation of the Kemmerer Commission which states that the note issue should be a monopoly of the Central Bank of China reorganized into the Central Reserve Bank of China. It must be able to close provincial mints and keep all coinage operations under its exclusive control, so that the profits arising from the issue of the fiduciary coins shall be free from the depredations of local war lords and officials. To say that such a happy state of affairs is not yet in existence in China, and is not likely to be for some time, is not to make any criticism of the ability or honesty of government officials, though such officials the world over receive and expect plenty of such criticism. It is merely to state the well-known fact that China is still in the chaotic state which existed a few centuries ago in many parts of Europe. Even the two provinces of Kiangsu and Chekiang—the closest to Nanking and Shanghai—still have their

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banditry and lawlessness. Obviously there are big political problems to be worked out before China can hope to apply such a wide scheme of currency reform, hence the statement of the Minister of Finance, Mr. T. V. Soong, when bidding farewell to Dr. Kemmerer, that he hoped one of his successors would one day be able to carry the scheme into effect.⁸²

In face of this situation there is little need to enter exhaustively into the technical details of the plans which have been suggested at various times. They are adequately described by Kann, and by the first section of the Kemmerer report, the only section which has so far been published.⁸³ If the basic political conditions could be achieved there is no doubt that sufficient experience is available and that a much larger body of Chinese opinion now understands and supports such a scheme.

Two main questions of policy arise at the moment. The first is whether China should attempt to go directly on to a gold exchange standard or whether the transition should be taken in two steps by first reforming the silver and subsidiary currencies, and then at some later date changing over to the new standard. Both methods, the direct and the indirect, have been tried at different times in different countries. The pros and cons were canvassed in detail by the Kemmerer Commission which pronounced in favor of the direct method. But in practical politics it seems the obviously sound policy to proceed meanwhile, as occasion offers, with improvement of the existing currencies, preparing the way for a change-over to gold at some more propitious time. At the moment of writing, the prospects of gold do not seem to offer much hope of stability, and to

⁸² A. W. Pinnick, *Silver and China* (Kelly and Walsh, 1930), p. 73-4.

⁸³ *Report, op. cit.*

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demonetize silver at the moment would entail enormous losses. Local experts recommend the indirect plan.²⁴ If nothing else were attempted for a time than the reform of the subsidiary coinages while remaining on a silver basis, it would be an enormous improvement. Meantime the government appears to be proceeding upon the policy of the direct plan, doubtless for immediate reasons of public finance. Customs duties are now collected in terms of a gold unit and notes are being issued in terms of this unit also.

The second question concerns the possibility of carrying out reforms, either partial or complete, province by province, as the authority of the National Government becomes consolidated. The Kemmerer Commission contemplated such a procedure and laid down the machinery and policies necessary. A national currency commission supported by provincial commissions is to be created. Copper coins will have to be withdrawn from circulation at a rate set by the commission in each province; bank notes will need to be retired and debts adjusted to the new units of currency. Because of the chaotic state of the present currencies these will be difficult and delicate operations. There is a real danger of counterfeiting if the value of the new currency is set too high; if set too low there is the danger of the new coins being driven from circulation. These problems, given a stable government in the areas concerned and competent technical direction, would probably not be insoluble; but they are not easy to handle.

Some measure of foreign technical assistance and probably financial support for any considerable scheme might

²⁴ E.g., Kann as quoted by Pinnick, *op. cit.*, p. 76.

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be necessary if only because a foreign loan, while not absolutely indispensable, would be helpful in the initial stages. Even with good government and with outside assistance, however, no miracles can be expected. Currency reform is a long and at times disappointing process, full of pitfalls and dangers, involving much unpleasant self-discipline and probably individual and group hardships if not injustices. The vested interests affected are very powerful and moreover are not concentrated but dispersed, while the power of government is weak and credit is low. China has a long uphill road to tread in the search for even the elements of modern organization.

CHAPTER VII

FOREIGN TRADE

(i) *The Importance of Foreign Trade*

It is natural that there should be more reliable information concerning foreign trade with China than about most other aspects of its economic life. The subject has been treated in detail by many authorities, and the statistics which are regularly compiled by the Chinese Maritime Customs give a reasonably reliable basis for analysis.¹ It is true that these statistics, even more than in most countries, must be treated with considerable care, particularly in regard to their completeness, and to the valuations placed upon the goods, and that calculations of the balance of trade and the terms of trade are more treacherous than usual. But, even with these limitations, a good deal is known about the character of the overseas trade, and it is possible to make deductions from the known facts with reasonable accuracy.

The foreign trade which is now important for China

¹ The primary source is the annual report of the Chinese Maritime Customs, published since 1920 in two parts—Part I, *Foreign Trade of China: Report and Abstract of Statistics*, and Part II (in two volumes) *Foreign Trade of China: Analysis*.

The annual issues of the *China Year Book* and Julean Arnold's *China: A Commercial and Industrial Handbook* (Washington, 1926), are useful secondary sources.

The most accessible sources for early trade information are the various volumes by H. B. Morse, *The Trade and Administration of China* (London, Longmans, Green, 1914). C. F. Remer's *The Foreign Trade of China* (Shanghai, Commercial Press, 1926) is invaluable for the prewar period. The author has also been able to consult an unpublished MS. by W. L. Holland, *The Foreign Trade of China, 1910-1928*.

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and which is commonly analyzed is a comparatively modern phenomenon. Ancient China was eminently a trading community; but such overseas contacts as it had were limited and very much less important than its foreign trade has recently come to be. For many centuries before European traders opened up the coastal ports adventurous Chinese junks had penetrated the Malay Archipelago. There was indeed some settlement of Chinese in Java and similar areas, and more or less regular connection was maintained with the Philippines, Japan and Formosa. There was contact also with central and southern Asia by the great overland caravan routes and it was by this means that Marco Polo reached China.

Such external contacts, however, were not a necessary part of the ancient Chinese economy and were tolerated rather than encouraged. In certain instances indeed trade was definitely discouraged and Chinese who chose to settle abroad for trading purposes were looked upon as deserters unworthy of the imperial protection. The much-quoted answer returned to the first British ambassador who sought trading relationships with the Empire had more truth and historical justification than the modern Westerner who reads it with a smile is apt to realize at first. It was neither a pose nor a bluff that prompted the Emperor Ch'ien Lung to write: "Strange and costly objects do not interest me. As your ambassador can see for himself, we possess all things. I set no value on objects strange and ingenious and have no use for your country's manufactures." After all the China of 1793 had not as much to learn from European arts and crafts as Europe had to learn from Chinese handicraft skill.

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The present position is entirely different because in the meantime European and other modern nations have undergone an industrial revolution, while China has not even been able to maintain her former skills. A representative of modern China feels humiliated because "the rest of the world is flying while China is still in the wheelbarrow stage." The rulers of China to-day are thoroughly conscious of the extent to which their country has lagged behind in scientific progress and realize also that the extension of foreign trade is necessary in order to help remedy the situation.

The most dramatic illustration of the part which foreign trade has come to play in the life of China is to be found in the growth of the great coastal cities, particularly Shanghai. China has turned her back on the past. The old caravan routes to the west are of little importance and the inland cities which were the seats of former greatness have decayed. Even Peiping is suffering an eclipse by no means wholly due to the shifting of the seat of government. Shanghai is the commercial capital of China and one of the great ports of the world. It is also the gate of modernization and the chief source of support for progressive government.

The traders who established foreign communities in the various ports and opened up trade were instrumental also in promoting a "commerce of ideas" that has been influential in disrupting the old traditional order and preparing the way for a new type of organization, political and economic. Their methods and example, their organizing skill, and settled if somewhat arbitrary government, their standard of living and commercial usages, have been at least

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as potent an educational force as the schools and universities and hospitals established by missionary effort.

Moreover, foreign trade is, for a long time to come, the only means to which China can look for the provision of those capital goods which are necessary if it is to use the new techniques. Railways cannot be built nor factories established except by the importation of machines and materials, and the time when China will be able to provide such capital for itself is far distant. Already the importation of manufactured goods and the use of new methods of transport such as steamers on the great rivers has upset the equilibrium of its simple traditional industry, and there is no putting the clock back. The only possibility of reaching a new equilibrium is by pushing on with the process and modernizing as fast as the means and capabilities will allow.

By historical accident also the revenues derived from foreign trade have recently become a potent instrument for self-government. The ancient revenues of China, particularly the land taxes, have fallen into confusion, but the customs revenue, regularized and stabilized by foreign treaty rights secured after humiliating defeats, and for long administered by a foreign controlled service in the interest mainly of stability for foreign traders and certainty in the payment of foreign debt obligations, has now become the chief financial resource of the National Government if not the chief preservative of Chinese unity. The dissident tendencies of Chinese politics are such that more than once the customs has been the only governmental service which has functioned steadily over China as a whole. It is a curious paradox that has made foreigners, concerned for the adequate service of their loans to China, insistent on

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maintaining the unity of an essential service, and therefore readier to recognize the National Government and to build up its resources by agreeing to tariff autonomy.³

The nature, extent and direction of foreign trade is therefore an important matter for the Chinese people as they set their faces towards modernization. The development of their export products is as necessary as the power to purchase imports of capital goods, or the revenue which the government derives from customs duties. Upon the development of trade and the terms on which it is conducted the future progress of China largely depends.

(ii) *The Nature of the Trade*

When the British and other merchants first sought trade with China their main object was to secure the rare and valuable Chinese silks, tea, lacquers, artistic and craft products. In the days of long sailing voyages only those objects which, like the Jew of Malta's ideal of avarice, combined "infinite riches in a little room," were worth the costly effort of such distant trade. It is perhaps for this reason that the legend grew up of the fabulous wealth of the Indies and equally of China.

In the first exchanges indeed, there was some difficulty in finding commodities which the Chinese desired in exchange for their merchandise, a difficulty that led to the introduction of opium as a convenient import product. This position, however, has long been reversed. There is normally a considerable import balance of commodity trade.

³ The custody of the revenues collected and the use made of them in the troubled period after the revolution is described in detail by Stanley F. Wright, *The Collection and Disposal of the Maritime and Native Customs Revenue since the Revolution of 1911* (Inspectorate-General of Customs, Shanghai, 2nd revised edition, 1927).

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In the course of the present century there has been within the total volume both of imports and of exports, a series of very considerable and significant changes. On the export side first of all there has been the notable and rather pathetic decline of the once flourishing tea trade. There was a time, hardly a hundred years ago, when the tea-clippers from both Old and New England competed for the blue ribbon of ocean supremacy by racing valuable cargoes of tea from China to Europe. But little or no effort has been made by Chinese tea growers and merchants to maintain their position of virtual monopoly and they have more and more been ousted by more aggressive rival producers. India, Ceylon and Japan have captured the growing market, and Chinese exports have failed to keep pace. There is no better example of China's lag because of reliance upon traditional methods. Even in 1913 tea provided more than 8% of the total value of China's exports; but by 1928 this proportion had fallen below 4%.³

The export of silk has also met with strong competition, but there has not been the same decline in the quantity exported. Between 1913 and 1928 the exports of tea fell from 87,000 to 51,000 tons; but in the same period the exports of silk and silk goods rose from 17,500 to 25,400 tons. Even this increase, however, has not secured for China the large share in a growing world demand which its early predominance in the trade would seem to have promised. Moreover, the supplies from other quarters, despite a growing world demand, have caused a fall in price and

³ *Nankai Weekly Statistical Service*, October 5, 1931; also Boris P. Torgashev, *China as a Tea Producer* (Shanghai, 1926).

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therefore the value of silk in the export trade of China has fallen from 24 to 16%.

In these years, 1913 to 1928, it is significant that beans, beancake and bean oil increased from 13% to more than 21% of the total exports.⁴ This fact indicates an important development often overlooked when Chinese trade is considered as a whole. There are very wide differences of development in different regions within China. In particular the northeastern provinces, known to the outside world as Manchuria, have been developing very fast with a considerable export surplus, while in the rest of China the export industries have made much slower progress and the balance of imports for those regions is therefore even greater than the statistics for China as a whole would indicate.

The principal facts to be noted about the export trade, therefore, are that China has now come to rely primarily upon simple products such as various foodstuffs and raw materials rather than upon the rare and costly objects which provided the basis of early trade, and that the surplus of these raw materials and foodstuffs available for export varies greatly in the different regions which make up the Chinese Republic.⁵

W. L. Holland has listed the main exports as "raw silk and silk piece goods, beans and the allied commodities of beancake and bean oil, raw cotton, tea, millet and kaoliang (or native sorghum), eggs and various egg products, hides and skins, wool, coal, tin, antimony, groundnuts, sesamum

⁴ See "The Marketing of Soya Beans and Bean Oil," *Chinese Economic Journal*, September, 1930.

⁵ Cf. Julean Arnold, "The Commercial Problems of China," *Annals*, *op. cit.*, p. 142-159.

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seed, cigarettes, vegetable oils, timber, bristles and straw braid," and has shown that over a long series of years, raw materials have provided the great bulk (approximately 50%) of the total exports, with foodstuffs rising slowly to perhaps 33% of the total, and manufactures, stimulated by the overseas demand in the period of the European war, stationary in the postwar period at about 17%.

The classification of imports by the same methods reveals many interesting and some disquieting phenomena. In the first place the import of gold and silver, always a fairly considerable item, has on the whole fallen rather heavily from about 10% of the total in the prewar years and rather more in the years of war and immediate postwar prosperity, to about 7% and even less in certain years. Evidently China is less able to attract the precious metals for hoarding. The increased percentage of foodstuffs now imported, almost 25% in 1927 as against 17% in 1913, is probably not a sign of prosperity. The doubling of the percentage of raw materials imported (to 24.6% of the total imports) and the falling off of the percentage of manufactured imports, from 62 to 43% are complementary and reflect mainly the growth of such simple domestic industries as the various textile manufactures. The imports of machinery are also increasing and this is even truer of automobiles, indicating some progress in the provision of capital equipment.

(iii) The Volume and Direction of Trade

The fact that statistics of imports and exports are usually quoted in terms of a silver currency has helped to create the illusion, both in and out of China, that the volume of

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trade has increased steadily and cumulatively. There is no doubt of the increase, steady before and rapid just after the war period, but since then there are all the evidences of stagnation. The peak of imports reached in 1920 has, if the statistics are converted into gold dollars, not been reached since and this is even truer of exports. The actual figures are given in an appendix.

This apparent stagnation is regrettable especially in view of the very low total value of the trade in relation to the population and to China's needs. It is a significant indication of the backwardness of her economic development that China's per capita trade is the lowest in the world. While there is always optimism concerning the potentialities of such a vast market, it is nevertheless true that China plays at present an extremely modest rôle in world trade.

The postwar period has also seen very radical changes in the direction of both imports and exports. Britain has lost ground very considerably, while Japan and the United States have both gained heavily. In part this changed direction of trade is due to the after-effects of the war period, but it is mainly due to more fundamental factors, such as the increased Pacific trade of the United States since the opening of the Panama Canal in 1913, the changed nature of the trade following upon local industrialization and the different pace of development in the various regions of China. The statistics are somewhat open to criticism, but between 1913 and 1929 the customs figures indicate that the direct trade from and to Great Britain fell from 11.4 to 8.5%, while that from and to Japan rose from 19 to 25.4% and American trade also rose from 7.5 to 16.1%. Great Britain still remains the dominant fac-

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tor in shipping though its position here also is weakening, while Japan is gaining and the United States is becoming a stronger competitor. It is probable indeed that it is only in respect of past investments that Great Britain can claim to be the leading power in China to-day, and recent studies by C. F. Remer seem to indicate that even in this respect Japan's position is rapidly approaching that of its older rival.

These facts are very significant. It is evident that foreign trade, with all it means to China and particularly to its industrial development, is tending more and more away from Britain and the other European countries and towards the other Pacific countries, particularly Japan and the United States. This recent trend, and especially the growing dominance of Japan in the external relations of China, is a fact too often forgotten.

It is of course largely though not wholly due to the fact that Manchuria, under Japanese leadership, if not control, has in recent years developed at a much faster rate than any other region in China.⁶

The development of this region is indeed one of the outstanding economic facts of modern China. It is not easy to divide a political entity, even one so loosely organized as China is, into separate regions for a study of international trade. It is obvious that there are large tracts of China where such trade is of extremely small importance. The province of Szechwan, for example, with an area of over 200,000 square miles and a population perhaps equal to that of Germany, or half that of the United States, has very

⁶ *Report on Progress in Manchuria, 1907-1928* (Dairen, South Manchuria Railway, 1929).

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little contact with the outside world since it has no railways and can be reached for trade only by way of the Yangtze gorges. The importance of foreign trade everywhere in China diminishes as one proceeds inland from the coast.

To separate the trade of such a region as Manchuria from that of the rest of China involves either its treatment as if it were an independent country, or the ignoring of what may be a large volume of exchanges between the region in question and the remainder of the country. Japanese reports on the progress of Manchuria usually choose the former alternative; but it will be sufficient if the external trade of Manchurian ports is compared with the figures for China as a whole less these Manchurian figures. A calculation made in this way shows that exports from Manchuria increased in value between 1913 and 1928 in the proportion of 100:428, the similar proportion for the rest of China being 100:200. For imports the figures were of much the same nature, in Manchuria from 100:298 and in the rest of China from 100:196.[†]

The difference in the proportions of imports and exports, moreover, draws attention to the fact that Manchuria, unlike China as a whole, has in recent years normally had an active trade balance, the excess of exports over imports in 1927 and 1928 running up to 132 and 123 million taels. The Chinese statistics as a whole show a very substantial import balance, so that if the Manchurian export balance were deducted the excess of imports into the rest of China would appear considerably larger,—in 1928 304 million taels, or well over 30% of the recorded imports.

[†] Cf. also *Problems of the Pacific*, 1929, p. 380 ff.

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(iv) The Balance of Trade

Attempts to formulate a satisfactory account of the balance of international payments are always difficult even in countries where statistics are more adequate and more accurate than those of China. There are many reasons for hesitation in accepting the customs statistics of commodity trade as more than an approximate basis for calculation. The lack of complete import returns for various reasons—such as smuggling, the difficulty of getting reliable valuations, and the probable undervaluation of exports—introduces very uncertain factors into the problem.

On the other hand there is not, even under a régime of fluctuating silver exchanges, quite the same complexity in China's balance sheet as there is in more normally developed countries. The chief reason for this is that the credit and capital movements which so greatly complicate the calculations are largely absent in China. Another reason is the comparatively small amount of most of the remaining items.

The very substantial import balance which regularly appears in the Chinese commodity trade is largely due to the remittances which Chinese residents abroad send home to China. There are of course many other items such as the investment of foreign business capital in China, the cost of upkeep of foreign establishments, military, naval and diplomatic, the remittances to philanthropic and missionary institutions and receipts from the tourist traffic. Against these there are obvious offsets such as the profits on foreign businesses in China, Chinese establishments abroad, and some considerable sum to be allowed for China's imports of specie and for payments of debt and

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indemnity services. Estimates of these various items must be to some extent speculative; but it is perhaps permissible to revert to the rather simplified statement that the main reason why China is able consistently to show a passive import balance on her commodity trade is because there is such a steady and substantial flow of emigrants' remittance from her subjects domiciled abroad.⁸

(v) The Terms of Trade

Economists attach a technical meaning to the expression "terms of trade," and various measures have been devised to test whether changes in world market prices bear favorably upon a given country's export trade or not. While these devices, used with care, may suggest interesting lines of analysis, it is obvious that, applied to a country like China, they must be used with even more caution than usual. There are two reasons in particular for this. First, the degree of accuracy of the basic statistics is a limiting factor. The most skillfully devised indices and mathematical measurements cannot insure an accurate result if the material which must be used is open to more than usual suspicion. In the second place it must be remembered that China is more a continent than a country. Local divergences of product, and often of prices, make any index of import or export prices a more than usually meaningless average. Trade may be operating in China under different conditions at the same time in different regions. For example, in many regions of China, including Manchuria for many years, there have been inflations of paper currency, while most of the rest of China has been carrying on with a silver

⁸ Julean Arnold, *op. cit.*, p. 156-7.

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bullion currency. Moreover, this illustrates a further important consideration. Prices, particularly of exports, registered at the coastal ports in silver currency, may often differ widely from the various local price levels within China. It is, in fact, of doubtful accuracy or value to calculate the terms of trade, unless those terms are understood as being largely confined to the treaty-port merchants who have direct relationship with foreign traders.

Bearing these limitations in mind, however, the available indices are useful as indicating a general trend if not explaining all the factors involved in it. There are two such attempts to analyze the drift of China's terms of trade. The first and most elaborate is contained in Dr. Franklin L. Ho's *Index of the Physical Volumes of Trade in China*.⁹ His indices of import and export prices are derived indirectly by dividing the values of large samples of the goods traded by their quantities. In averaging the prices thus obtained he uses different weights each year according to the actual importance of the articles in the trade returns. The series of index numbers thus obtained is built up by the chain method.

The official calculations by the Bureau of Markets of the Ministry of Finance¹⁰ refer to Shanghai prices (whereas Professor Ho uses Tientsin prices) and are calculated directly from price quotations, but the compilation of the index is not as theoretically adequate particularly in regard to the system of weighting.

While differences are therefore to be expected in the results obtained from the two measurements, the fact that,

⁹ J. B. Condliffe (editor), *Problems of the Pacific, 1929*.

¹⁰ *Import and Export Prices* (Bureau of Markets, Ministry of Finance, Shanghai).

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at any rate in the postwar years, they are in broad agreement as to the general trend suggests that this trend is probably correct if incapable of precise measurement. A similar calculation made by W. L. Holland arrives at the same result, namely that in the years of recovery after the depression of 1920 the terms of trade were moving in China's favor till about 1926 or 1927. This improvement is indicated more sharply in Professor Ho's calculation and the reverse movement from 1927-30 is clearer in the Shanghai index. While it is difficult to say which is the better measure, the trend indicated accords sufficiently well with theoretical considerations.

It seems probable that, after the sharp fall in agricultural prices in the depression of 1920-1, China like all other agricultural exporting countries gained some relative advantage from the fact that agricultural prices recovered faster in the upswing of the cycle than the prices of manufactured imports from the industrial countries. There are some imports of particular importance to China, particularly raw materials for her developing industries, which have helped on this trend.

Throughout this period, however, it is probable that the falling price of silver (and inflated paper currencies) acted as a drag preventing China from reaping the full advantage from this favorable price situation.

As the recent world depression developed, on the other hand, agricultural prices fell faster and further than those of manufactured goods so that the terms of trade went against China as they did in the case of all other agricultural exporting countries. This, rather than the fall in the price of silver, is probably the most important factor in China's

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recent economic difficulties. The fall in soya bean prices is a particular example of the way in which these movements of prices within the general level may have extremely important effects upon the welfare of a whole trading community.

It should be emphasized again, however, that the terms of trade thus indicated refer to the trade between foreign merchants and those Chinese merchants operating in the coastal treaty ports, rather than between the foreigners and Chinese producers. There is a considerable lag between movements of internal prices paid to producers and the more sensitive values in treaty ports. In times when the terms of trade are running in favor of China much of the advantage probably sticks with the wholesale merchant, and this may be one factor reinforcing the many others which have made for treaty port prosperity in recent years. On the other hand, when the movement is reversed or when a sharp fall in the price of silver or an inflation of the paper currency pushes down export prices (measured in terms of gold) the first impact falls on the traders. There is a large customary element of inertia which has apparently made the effects of the depression less felt in China than in most lands, though, for other reasons, economic conditions are anything but good.

(vi) The Prospects of International Trade

It is customary in all discussions of China's trade to make some reference to the oft-quoted statement of Wu Ting-fang concerning the demand for cotton cloth that would result if the 400 millions of the Chinese people could be persuaded to lengthen their nether garments. There are many variants of this illustration but behind them all lies

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the notion of a vast latent demand for imported products.

It is clear that this notion is nearer the truth than that which sees in the economic development of the Chinese people a potential menace to the trade and well-being of other nations. Unquestionably the development of Chinese manufacturing industry may strike further shrewd blows, for example, at the trade in imported cotton goods. Certain groups of interests, and perhaps certain nations, are always affected by the advent of new competition. Certain vested foreign interests in China may dwindle also as they did in Japan after the rapid economic development of that country. But broadly speaking a more prosperous and wealthy China is likely to be a better customer for the other trading countries and in this way to contribute materially to the economic betterment of the world as a whole.

The extent to which this development may be expected is another matter. Potential demand can be translated into the reality of effective demand only by the improvement of production and purchasing power within China, and this is a long and toilsome process. The economic as well as the social and political difficulties in the way of its realization have been stressed sufficiently in earlier chapters. The most immediate, if not ultimately the most important, lie in the sphere of government with which this volume is concerned only indirectly and incidentally. The chief need at the moment is a breathing space from civil warfare to give scope for the admirable recuperative powers of the Chinese people. Such a breathing space is hardly less necessary to enable the constructive effort at the provision of effective modern services of government to be carried forward without the distraction of political dissen-

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sion and the diversion of much-needed funds to wasteful purposes. It would be impertinent for a foreigner to suggest that the provision of such governmental services is more important than the abolition of foreign privileges. The Chinese people themselves must be the judge of what is and what is not the most urgent object of political policy. Nor does it lie within the competence of foreign observers to do more than note with sympathetic appreciation the tremendous difficulties of improvising governmental machinery for a country as vast and varied as China and with such a deadweight of poverty and popular ignorance. From the strictly economic point of view, however, it seems obvious that wherever a modicum of settled government and security has been established even for a comparatively brief period prosperity has quickly followed. The cultural tradition and unity of the Chinese people is so deep and strong that the development of national consciousness is only a matter of time. The size and diversity of the country, the strength of local groupings and attachments, and indeed the whole social genius of the people make it almost inevitable that there shall be a large element of decentralization and federalism in any effective government of China as a whole. The principle of national unity and integrity must doubtless be maintained intact, but from the point of view of economic development the essential need is that there shall be security and freedom from oppressive and arbitrary taxation in local areas of government and (an obvious corollary) peaceful cooperation between those areas in order to establish what is, after all, the central principle and driving force of the revolution, the Principle of the People's Livelihood.

APPENDIX

APPENDIX

TABLE I

SOME RECENT ESTIMATES OF CHINESE POPULATION

DATE FOR WHICH ESTIMATE MADE	AUTHORITY	MILLIONS
1895	Rockhill	275-300
1901	Supan	320
1903	Board of Revenue	422
1910	Rockhill	330
1910	Willcox	342
1919	Maritime Customs	439
1920	China Continuation Committee	350-400
1926	Post Office	485
1926	Maritime Customs	448
1928-9	Ministry of Interior ¹	474
1930	Willcox	342
1930	Chang-heng Chen ¹	457
1930	D. K. Lieu	470-480
1930	M. T. Z. Tyau	463
1930	Warren H. Chen	445

¹ An estimate of 473,100,000 is given by Cheng Tchan-heng, and one of 474,787,000 was published in 1931 by the Ministry of the Interior of the National Government (League of Nations, Economic Committee, *The Agricultural Crisis*, II, p. 25; C. 239. M. 105. 1931, II. B. 12).

APPENDIX

TABLE II

DENSITY OF POPULATION IN CHINA BY ECONOMIC REGIONS ¹

REGIONS	AREA	POPULATION ²	DENSITY	CULTIVATED LAND 1915	PERCENTAGE OF TOTAL AREA CULTIVATED ³	ACREAGE CULTIVATED PER PERSON
	<i>Sq. Miles (000's)</i>	<i>Millions</i>	<i>Per Sq. Mile</i>	<i>Sq. Miles (000's)</i>	<i>%</i>	<i>Acres</i>
North China Plain . . .	125	81	647	83	66	.65
Loess Highlands . . .	203	44	211	35	17	.51
Mountains of Shantung, Liaotung and Jehol . .	91	26	286	18	20	.43
Manchurian Plain . . .	138	12	89	20	15	1.07
Mountains of East Manchuria	100	5	47	6	5	.81
Khingan Mountains . . .	168	2	12	—	—	—
Central Asiatic Steppes and Deserts	982	5	5	—	—	—
Central Mountain Belt . .	128	37	290	19	15	.31
Yangtze Plain	76	68	897	53	71	.37
Red Basin of Szechwan . .	75	44	581	30	39	.43
South Yangtze Hills . . .	155	65	421	29	19	.28
Southeast Coast	71	30	417	11	15	.23
Hills of Liangkwan . . .	144	41	285	12	8	.18
Southwest Tableland . . .	157	25	157	6	4	.15
Tibetan Borderland	290	4	14	—	—	—
Total Agricultural China ⁴	1,463	477	326	323	22	.43
Total Political China ⁵ . .	3,098	486	156	328	11	.43

¹ From George B. Cressey, "The Geographic Regions of China," *Annals of American Academy of Political and Social Science*, November, 1930, p. 3.

² Chinese Post Office Estimate, 1926.

³ Figures for 1915.

⁴ Omitting Khingan Mountains, Central Asiatic Steppes and Deserts, and Tibetan Borderland.

⁵ Twenty-eight provinces, but omitting Outer Mongolia and Outer Tibet.

APPENDIX

TABLE III

FARM LAND AND CROPS IN NORTHEAST, NORTH AND EAST-CENTRAL CHINA ¹

	NORTHEAST (KIRIN AND LIAONING)	NORTH (HOPEI AND SHANSI)	EAST-CENTRAL (KIANGSU AND CHEKIANG)
Total farm households	2,716,000	6,098,000	8,222,000
Percentage of all households . .	78.5	84.0	74.0
Total acreage of principal crops .	20,754,150	28,282,200	30,212,850
Average acreage per farm household	8.76	4.20	2.33
Percentage of irrigated land . .	2	7	49 ²
Percentage of nonirrigated level land . .	75	71	45
Percentage of nonirrigated hilly land . .	23	22	6

¹ From R. H. Tawney, *Memorandum on Agriculture and Industry in China*.

² Kiangsu 38.7%, and Chekiang 72.5%.

APPENDIX

TABLE IV

GROWTH OF RURAL COOPERATIVE MOVEMENT IN CHINA ¹

	1923	1924	1925	1926	1927	1928	1929	1930
Societies recognized	—	9	44	97	129	169	246	—
Nonrecognized	8	2	56	220	432	435	572	—
Members recognized	—	403	1,270	3,288	4,354	5,624	7,862	—
Nonrecognized	256	47	1,062	4,744	8,836	9,677	14,072	—
Loans granted to societies	—	3,290	10,450	32,440	60,975	89,374	122,414	—
Total loans outstanding	—	3,290	6,860	24,215	29,922	35,331	43,226	49,395

¹ From Walter H. Mallory, *Quarterly Journal of Economics*, May, 1931.

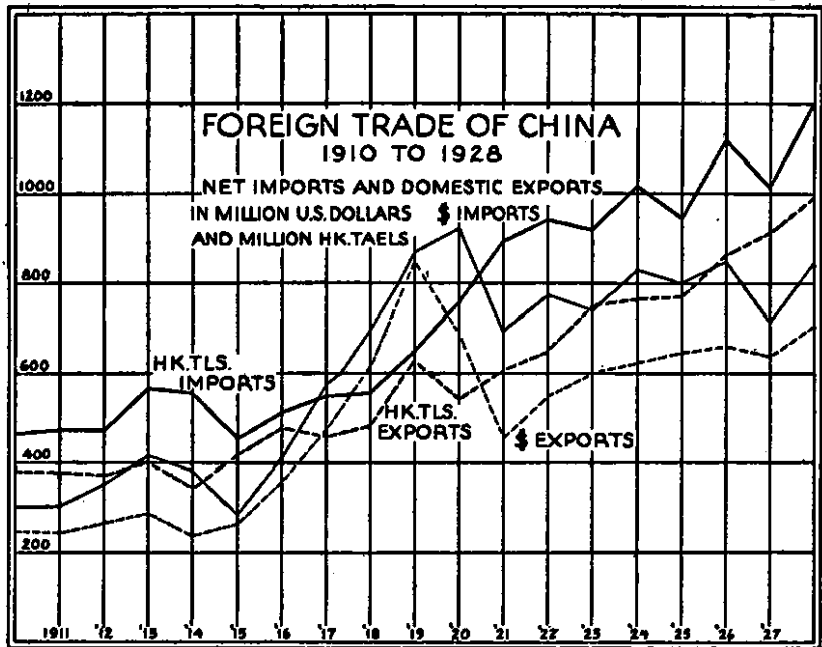
TABLE V

APPRENTICES IN TIENTSIN INDUSTRIES ¹

TRADE	APPRENTICES %	JOURNEYMEN %
Carpet making	28	72
Rayon and cotton weaving	65	35
Hosiery knitting	72	28
Total	45	55

¹ From H. D. Fong, *Hosiery Knitting in Tientsin*.

FOREIGN TRADE OF CHINA 1910 TO 1928 IN MILLION U.S. DOLLARS



APPENDIX

TABLE VI

CHINA: NET IMPORTS AND DOMESTIC EXPORTS

(In Million U. S. Dollars)

YEAR.	MERCHANDISE			SPECIE ¹			TOTAL			VALUE OF \$ IN HK. TLS.
	IMP.	EXP.	BAL. ²	IMP.	EXP.	BAL. ²	IMP.	EXP.	BAL. ²	
1910	306	251	55	32	18	14	338	269	69	1.52
1911	307	245	62	42	16	26	349	261	88	1.54
1912	350	274	76	40	20	20	390	294	96	1.35
1913	416	294	122	43	17	25	459	312	147	1.37
1914	381	239	142	12	30	-18	393	269	124	1.49
1915	282	260	22	14	36	-22	296	296	0	1.61
1916	408	381	27	45	59	-14	453	440	13	1.27
1917	566	477	89	42	55	-13	608	532	76	0.97
1918	699	612	87	47	18	29	746	630	116	0.80
1919	900	877	23	157	26	131	1,057	903	154	0.72
1920	945	672	273	219	126	93	1,164	798	366	0.81
1921	689	457	232	90	78	12	779	535	244	1.32
1922	784	544	240	71	35	36	855	579	276	1.21
1923	739	602	137	84	35	49	823	637	186	1.25
1924	825	625	200	42	29	13	867	654	213	1.24
1925	797	652	145	64	12	52	861	664	197	1.19
1926	854	657	197	61	27	34	915	684	232	1.32
1927	698	634	64	59	15	44	757	649	108	1.45
1928	850	704	146	84	4	80	934	708	226	1.41

¹ Gross figures for imports and exports of bullion and specie.

² Apparent discrepancies in subtractions to show balances of trade are due to rounding off millions for presentation as units.

APPENDIX

TABLE VI (continued)

CHINA: NET IMPORTS AND DOMESTIC EXPORTS (In Million Haikwan Taels)

YEAR	MERCHANDISE			SPECIE ¹			TOTAL			VALUE OF H.K. Tls. IN \$
	IMP.	EXP.	BAL. ²	IMP.	EXP.	BAL. ²	IMP.	EXP.	BAL. ²	
1910	463	381	82	48	27	21	511	408	103	0.66
1911	472	377	95	65	25	40	537	402	134	0.65
1912	473	371	103	54	28	26	527	399	128	0.74
1913	570	403	167	59	24	35	629	427	202	0.73
1914	557	345	212	17	44	-27	574	389	185	0.67
1915	454	419	36	22	57	-35	476	476	0	0.62
1916	516	482	34	57	74	-17	573	556	17	0.79
1917	550	463	87	41	54	-13	591	517	74	1.03
1918	555	486	69	37	15	22	592	501	91	1.26
1919	647	631	16	113	19	94	760	650	110	1.39
1920	762	542	220	177	102	75	939	644	295	1.24
1921	906	601	305	119	103	16	1,025	704	321	0.76
1922	945	655	290	86	42	44	1,031	697	334	0.83
1923	923	753	170	105	43	62	1,028	796	232	0.80
1924	1,018	772	246	52	35	17	1,070	807	263	0.81
1925	948	776	172	76	14	62	1,024	790	234	0.84
1926	1,124	864	260	80	35	45	1,204	899	305	0.76
1927	1,013	919	94	85	20	65	1,098	939	159	0.69
1928	1,196	991	205	118	5	113	1,314	996	318	0.71

¹ Gross figures for imports and exports of bullion and specie.

² Apparent discrepancies in subtractions to show balances are due to rounding off millions for presentation as units.

APPENDIX

TABLE VII

PERCENTAGE COMPOSITION OF CHINESE TRADE IN CLASSES OF COMMODITIES

Gross Imports					
CLASS	I	II	III	IV	V
YEAR	LIVE ANIMALS	FOODS	RAW MATERIALS	MANUFACTURES	GOLD AND SILVER
	%	%	%	%	%
1912	0.1	16.0	12.0	61.8	10.1
1913	0.1	16.8	11.5	62.5	9.1
1921	—	15.9	19.9	52.9	11.3
1922	—	20.2	21.2	50.5	8.1
1923	—	23.6	21.2	45.3	9.9
1924	—	23.3	23.3	48.7	4.7
1925	—	21.6	25.5	45.6	7.3
1926	—	23.0	25.1	45.3	6.6
1927	—	24.8	24.6	43.1	7.5

Domestic Exports					
CLASS	I	II	III	IV	V
YEAR	LIVE ANIMALS	FOODS	RAW MATERIALS	MANUFACTURES	GOLD AND SILVER
	%	%	%	%	%
1912	1.5	27.0	50.3	14.2	7.0
1913	1.6	25.5	52.3	14.9	5.7
1921	0.7	22.6	44.2	17.9	14.6
1922	0.8	24.6	51.5	17.1	6.0
1923	0.7	26.0	51.0	16.9	5.4
1924	0.7	31.1	46.4	17.5	4.3
1925	0.5	31.0	49.7	17.0	1.8
1926	0.2	30.6	48.7	16.7	3.8
1927	0.5	33.1	46.8	17.4	2.2

APPENDIX

TABLE VIII

DISTRIBUTION OF THE FOREIGN TRADE OF CHINA

IMPORTS FROM	1913	1921	1923	1925	1927	1928
	%	%	%	%	%	%
Hongkong . . .	29.27	24.78	26.15	18.27	20.56	18.68
Japan	20.36	22.55	22.25	31.06	28.41	26.39
Great Britain .	16.53	16.07	12.69	9.65	7.26	9.40
United States .	6.04	18.84	16.28	14.77	16.13	16.99
India	8.24	3.80	5.82	5.06	4.10	3.92
Germany . . .	4.83	1.43	3.42	3.37	3.80	4.60
EXPORTS TO	1913	1921	1923	1925	1927	1928
	%	%	%	%	%	%
Hongkong . . .	29.04	25.43	23.35	14.78	18.47	18.37
Japan	16.25	28.63	26.37	24.00	22.74	23.06
Great Britain .	4.05	5.14	5.74	6.14	6.31	6.16
United States .	9.34	14.89	16.84	18.45	13.25	12.83
Russia and Si-						
beria	11.14	3.80	4.53	6.18	8.40	9.05
France	10.10	3.98	5.26	8.51	5.60	7.27

APPENDIX

TABLE IX

FOREIGN TRADE OF MANCHURIA, 1910-28¹

Net imports and domestic exports in million Haikwan Taels

YEAR	IMPORTS	%	EXPORTS	%	EXPORT BALANCE
1910	73.1	78.1	80.2	85.3	7.1
1911	83.7	89.4	92.5	98.3	8.8
1912	86.9	92.8	83.1	88.3	-3.8
1913	93.7	100.0	94.1	100.0	0.4
1914	92.2	98.4	88.4	93.9	-3.8
1915	84.6	90.3	102.6	109.1	18.0
1916	105.4	112.5	112.2	119.3	6.8
1917	130.1	138.9	120.9	128.5	-9.2
1918	142.1	151.7	125.1	132.9	-17.0
1919	190.1	203.0	164.9	175.3	-25.2
1920	169.0	180.4	180.0	191.4	11.0
1921	185.1	197.6	200.3	212.9	15.2
1922	164.1	175.2	239.6	254.6	75.5
1923	175.7	187.6	263.1	279.6	87.4
1924	177.4	189.4	247.3	262.7	69.9
1925	216.6	231.3	282.0	299.7	65.4
1926	251.2	268.2	340.9	362.3	89.7
1927	242.0	258.3	374.4	397.9	132.5
1928	279.6	298.0	402.8	428.0	123.2

¹ Figures for 1910-27 are from Hsiao, "Manchuria: A Statistical Survey," in *Problems of the Pacific 1929* (University of Chicago Press, 1930). Mr. Hsiao's figures are compiled directly from the Customs reports.

APPENDIX

TABLE X

FOREIGN TRADE OF "CHINA PROPER"¹

(In million Haikwan Taels)

YEAR	IMPORTS		EXPORTS		IMPORT BALANCE
	Hk. Tls	%	Hk. Tls	%	
1910	405	81	323	96	82
1911	404	81	309	92	95
1912	403	81	312	93	91
1913	497	100	335	100	162
1914	483	97	277	83	206
1915	391	78	351	105	40
1916	432	87	393	117	39
1917	442	89	366	109	76
1918	448	90	377	113	71
1919	498	100	475	142	23
1920	634	128	394	118	240
1921	773	156	447	133	326
1922	817	164	490	146	327
1923	795	160	557	166	238
1924	884	178	563	168	321
1925	790	159	562	168	228
1926	936	188	599	179	337
1927	826	166	630	188	196
1928	975	196	671	200	304

¹ Trade of "China Proper" represents the net imports and domestic exports of all China less the net foreign imports and direct foreign exports of Manchuria.

APPENDIX

TABLE XI

ESTIMATES OF CHINA'S BALANCE OF PAYMENTS

\$ Mex. (000,000's)

	1903 (MORSE)	1912 (WAGEL)	1913 (SEE)	1920-23 AVERAGE (COONS)	1925 (MON- TAGU)
I. Current Income:					
1. Merchandise exports (as recorded) . . .	354.8	555.8	605.0	956.4	1,187.8
2. Bullion and specie ex- ports	49.6	41.5	36.3	108.4	21.9
3. Land frontier trade (estimated excess of exports)	30.0	6.0	6.0	10.0	—
4. Adjustment of mer- chandise figures for 1925 (nature not in- dicated)	—	—	—	—	191.3
5. Expenditure in China by:					
(a) foreign legations .	—	10.5	10.5	15.0	} 30.6
(b) foreign garrisons .	—	13.5	13.5	18.0	
(c) foreign war ves- sels	77.2	30.0	30.0	35.0	
(d) foreign merchant vessels	—	30.0	30.0	45.0	6.1
(e) foreign missions, schools, etc.	—	13.5	15.7	25.0	} 15.3
(f) foreign tourists .	—	15.0	15.0	22.5	
6. Remittances from Chi- nese abroad	109.5	60.0	115.0	150.0	198.9
TOTAL	621.1	775.8	877.0	1,385.3	1,651.9

APPENDIX

	190s (MORSE)	1912 (WAGEL)	1913 (SEE)	1920-23 AVERAGE (COONS)	1925 (MON TAGU)-
II. Current Expenditure:					
7. Merchandise imports (as recorded) . . .	465.7	709.6	855.2	1,326.0	1,450.3
8. Government purchases of munitions of war	7.5	5.3	—	4.5	—
9. Bullion and specie im- ports	55.5	81.6	88.0	182.1	115.9
10. Freight and insurance	—	15.0	15.0	—	15.3
11. Expenditure abroad by:					
(a) Chinese legations.	—	2.2	3.0	2.7	3.8
(b) Chinese tourists and students . .	6.5	4.5	4.5	5.0	2.6
12. Remittances by for- eigners in China . .	34.1	30.0	30.0	45.0	18.4
13. Service of foreign loans	66.3	76.5	87.0	90.2	83.8
TOTAL	635.6	924.7	1,082.7	1,655.5	1,690.1
Deficit on account of current items . .	14.5	148.9	205.7	270.2	38.2
III. Capital Inflow:					
14. Foreign loans raised by the government . .	—	—	—	60.0	22.9
15. Foreign capital in- vested in railways and mines	40.5	30.0	30.0	10.0	15.3
16. Foreign capital in- vested in trade and treaty ports	—	120.0	120.0	150.0	
TOTAL CAPITAL INFLOW	40.5	150.0	150.0	220.0	38.2
Discrepancy due to errors and omissions	26.0	1.1	55.7	50.2	—

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