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Problems of Industrial Development in
China

**PROBLEMS OF
INDUSTRIAL DEVELOPMENT
IN CHINA**

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Problems of
Industrial Development
in China

A PRELIMINARY STUDY

BY

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To my wife

Preface

POLITICAL changes in China, and international relations in the Far East, which have centered in and around China, have tended to obscure and distract attention from the less dramatic economic movements which have been taking place since 1900. Consequently much of the recent literature on the so-called Republic has been political in character, or, where it has treated of economic development, it has been done incidentally or from the standpoint of foreign trade. There are notable exceptions to this, such as the social survey of Peking undertaken and reported by Mr. Sidney D. Gamble, the work of Mr. Julean Arnold, and the series of doctoral dissertations on particular phases of China's economic life prepared by Chinese students and published, most of them, in the Columbia University Studies in History, Economics and Public Law. But in spite of these exceptions the generalization remains true. Furthermore, the economic studies have been of particular interest to the specialist rather than to the general reader.

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This little study is not planned to improve the situation by giving to the special student of the Far East an exhaustive and definite analysis of industrial development in modern China, which in any case it is too early to undertake, but rather to sketch broadly some of the major problems to be solved before the new industry can establish itself on a firm and enduring foundation, or can progress much beyond the point at present reached. It should be regarded as distinctly a preliminary study of a large and important question. So considered, it is hoped that it will help to awaken a larger interest in the significant economic changes taking place across the Pacific. In sketching the problems the attempt has been made to indicate the probable or desirable lines of solution as they appear today. The method of treatment has been partly historical, partly analytical and to some extent frankly speculative, although the speculations engaged in have been based, as far as possible, on historical developments and on a careful analysis of the facts. Perhaps the study will lead to a more extensive analysis of the whole problem and to its more exhaus-

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tive treatment. If so, one of the purposes of this work will have been realized.

Acknowledgment should be made of the aid rendered by Professor J. B. Dennison, of the faculty of Miami University, who read and criticised the entire manuscript, and by Dr. Warren S. Thompson, of the Scripps Foundation, who read parts of it. Further indebtedness to others is revealed in the notes and the bibliography.

HAROLD M. VINACKE

Oxford, Ohio

July 1, 1926

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CHAPTER ONE

Industrial Development in China

PRELIMINARY to the attempt to set up a program of change which would have the effect of promoting the industrial development of a country such as China it is necessary to make a broad general survey in order to see what the status of her industrial life is, and what has retarded or promoted it in the past, bringing it to its present state of advancement. It is also necessary to investigate the resources of the country, both material and human, in order to determine the extent to which it possesses the essentials for transforming itself from an agricultural to an industrial state. A third part of this preliminary survey would consist of an appraisal of the existent economic, social and political organizations through which the contemplated development would have to take place. Finally in the case of China, it is necessary to consider the international situation and China's international commitments to see whether and to what extent they may be

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relied upon to facilitate the industrial development of the country.

The so-called Republic of China, succeeding the territories of the Manchu Empire, comprises a total area greater than that of the United States, including Alaska and the dependencies. Of this area 1,896,500 square miles constitutes China proper, including Manchuria; Mongolia, Tibet and Chinese Turkestan are the other regions which must be considered part of the Republic and which bring the total area up to approximately four and a quarter million square miles. It is, however, only China proper and Manchuria which will be considered in the course of this survey.

The greater part of the area of China proper is included within the northern and southern limits fixed by the forty-fourth parallel in the north and the twenty-fourth in the south. This gives climatic variation ranging from that of southern Canada to that of Mexico. Consequently it is possible to conduct a diversified agriculture. And, since the soil is, in the main, extremely fertile, China is able to support a large population without recourse to extensive importations of foreign food-stuffs.

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This large population, variously estimated at from three to four hundred millions, constitutes one of the chief assets of the country, considered either from the standpoint of agricultural life or of industrial development. It also affords one of the greatest arguments for the development of industry since, while the people can be fed and clothed under existing conditions, it is only at a low standard that they can live. With adequate communications they might be better distributed throughout the country, thus increasing the agricultural output; and the total food production of the state might be made available for all of the people, thus minimizing the dangers from famine conditions in one section. Yet such large numbers of people can only be ultimately provided for at a higher standard of living through the progressive industrialization of China.

But it is not only because of its size that the population is a national asset. All observers agree that the Chinese are an industrious, frugal and capable people, not essentially inferior, under a similarity of working conditions, to the peoples of any other state. "The Chinese," writes the American Commercial

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Attaché at Peking,¹ "are industrious people, possessed of remarkable endurance, splendid mentality, good ideals, and a fine spirit of reasonableness, but lacking as yet effective organization. When given the implements of modern civilization and the requisite organization China will, with the aid of the West, achieve wonderful things in commercial and industrial expansion." It may be added that while China has been and is primarily an agricultural state, the people have shown industrial and commercial aptitude already in their cottage industry, in their developing factory production, in their extensive internal trade, and in their activities in the Straits Settlements, the Philippines, and other places overseas. Consequently the conclusion is fairly justified that, in China, there is not only one of the largest supply-depots for labor, but this labor is better adapted to industrial pursuits than that of any other non-European peoples, and as well adapted as that of many or most European countries. While the Chinese are capable of adaptation to machine production, however, there remains the necessity for

¹ Julian Arnold in *Commercial Handbook of China*, Vol. II, p. 319.

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bringing into being a large body of men with a knowledge of the technique of modern industry and finance to serve as leaders and managers of the new activities. Furthermore, to make the Chinese workman an equal competitor of his fellow in the United States, Germany or England he must be educated or trained to the same extent. He must be made, in other words, at least a semi-intelligent workman, able to act somewhat on his own judgment, rather than one who is lost apart from routine. All of this demands a large educational program, with widespread elementary education and with adequate technical schools. The problem of education is part of the general problem of the transformation of China into an industrial state. The labor supply exists, it has natural capacity, but it must have its potentialities released through training.

Labor alone, however, cannot bring into being an extensive industrial activity. The modern industrial state has been erected on a foundation of coal and iron primarily, with a secondary demand for other raw materials and resources. Does China, then, possess the resources essential to industry?

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Unquestionably, since the days of Marco Polo, there has been a tendency for westerners to over-rate the resources, particularly in minerals, of China. Such characterizations as fabulous, beyond estimation, unbelievably great, appear frequently in the early and even in the more recent literature on the country. But today it is possible to estimate the natural resources of China more carefully. Actually the mineral wealth of the country would seem to have been greatly over-estimated in the past. If approached from the standpoint of present production it is found that the Republic, in 1916, contributed only one per cent of the total world production of coal, five-tenths per cent of the iron, six-tenths per cent of the sulphur, one-tenth per cent of the copper, six-tenths per cent of the lead, seven per cent of the tin, and five ten-thousandths per cent of the petroleum.³ These percentages, however, measure China's backwardness rather than her potentialities. It is part of the problem of development to expand this production to meet the needs of an industrial instead of an agricultural state, providing the potential resources exist.

³ *China Year Book*, 1921-22, p. 160.

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It is difficult to compare the different estimates of the coal and iron reserves of China because of a failure of the estimators to put their figures clearly in terms of either long or short tons or both. According to Arnold's *Commercial Handbook of China*, "Various estimates have been made of China's wealth in coal, and, according to Professor Fernald, of the University of Pennsylvania, China's coal resources can be estimated at about 1,200,000,000,000 short tons as compared to the United States' 4,200,000,000,000 short tons."³ The *China Year Book*, on the other hand, using the nomenclature adopted in the *Coal Resources of the World*, estimates an A reserve of 6,252 millions of tons, and a B, C, D reserve of 17,183 millions of tons, giving a grand total of 23,435 millions of tons.⁴ "These figures are however extremely conservative," the Editors say. "For the first twelve provinces they represent more or less the actual reserve, whilst those for the other twelve provinces are nothing more than guess work based mostly on the distribution of the various coal series. In all cases only seams

³ *Commercial Handbook*, Vol. II, p. 320.

⁴ *China Year Book*, 1921-22, p. 165.

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greater than 1 *m.* have been taken into account. If we include the smaller seams and increase the depth it is probable 40,000 to 50,000 million tons would be a good figure for the total Chinese coal reserve. Even then it will only form 79 per cent of the reserve of Germany, 33 per cent of that of Great Britain and rather less than 1.4 per cent of that of the United States, being only four times the coal already exhausted in that country.”⁵ But “if we look at the matter from the view of the countries on the Pacific, we see that China is certainly the only country with respectable resources in coal, for Australia has only 4,000 million tons; Japan perhaps not any more; and the Pacific coast of America lacks also the same material. As not only the consumption is bound to increase, but also such increase will be rapid and prolonged, it is safe to predict that the Chinese coal industry will before long become the most important factor in the economic development of the Far East.”⁶

Thus while China's present coal production is small as compared with that of other leading countries, she is great enough in reserve

⁵ *China Year Book*, 1921-22, p. 165.

⁶ *ibid.*, p. 166.

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to enable her to look forward to a substantial industrial development so far as coal is a factor in such a change. "The present output of the Chinese mines by modern machinery is estimated at 15,000,000 tons a year, and the total output at nearly 30,000,000 tons. The United States in 1880 produced 60,000,000 tons and in 1917 nearly 700,000,000." If this may be taken as a measure of the change when a country begins an industrial expansion under normal conditions, a comparatively rapid increase in China's coal production may be looked for in the future. This increase will not, of course, parallel that of the United States for some time because of the political instability of the country, because of the greater handicaps in the way of custom and tradition to overcome, and for a variety of other reasons peculiar to China which will be revealed in the course of this study.

Turning from coal to the question of the iron resources of China we find an estimate of, in round numbers, 700,000,000 tons of iron ore in her reserve. "The detail and reliability of the studies on which the estimates are based vary greatly in individual cases,

¹ Arnold, Vol. II, p. 320.

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consequently no great accuracy can be claimed except for such deposits as Tayeh where continued working has made reliable estimates possible. It is probable, however, that much of the error resulting from the inaccurate estimates will be found mutually compensating and that the total reserve arrived at is not far from the truth. Suppose we add to the 600 and odd million tons an amount equal to one-half of the known total for the unknown and undiscovered, as well as for the deeper part of the surveyed deposits, we will have the round number 1,000 million, which may be taken as of the right magnitude. . . . China has about one-fourth the reserve of America, eight-tenths that of England, and one-third that of France or Germany before the war . . . as in the case of coal the geographical position of the Chinese deposits is quite favorable for their industrial development."⁸

Iron production is even more backward than is that of coal. Arnold says⁹ that a conservative estimate of the production of pig iron in modern plants in China for 1918 was

⁸ *China Year Book*, 1921-22, p. 170.

⁹ Arnold, Vol. II, p. 320.

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only 500,000 tons as compared with a production for the United States in 1880 of over three and one-half million tons. Furthermore, production in recent years has not increased as rapidly as in the case of coal. This is due in part to the war which made it impossible to build new furnaces, and in part to the desire of the Chinese to retain control of their resources in the face of the necessity for developing them with the aid of foreign capital, as well as to the unsettled condition of the country, which has not encouraged investment of large sums in new undertakings of any great magnitude.

Of the other sub-soil resources of the country perhaps petroleum has attracted the most outside attention. Here apparently China is lacking. Oil has been known and used in many parts of the country for a long time, it is true, but whether or not it exists in amounts large enough to play a part in the future industrial life of the state is questionable. The Standard Oil Company found it unprofitable to make use of its concession in Shansi province, probably the richest in oil in the country, but it is not yet clear whether it did enough prospecting to indicate the

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barrenness of the field or not, and it is also uncertain as to whether its withdrawal from production was not due to the long distances which oil would have to be piped to make it of use, commercially. It may be that the future will reveal a petroleum wealth of some importance but it cannot be taken into account today with any assurance. And yet this cannot be considered to militate to any great extent against China's industrial progress because of the possibility of the exhaustion of the oil resources of the world in a reasonably short time, in which case it will cease to play an important industrial rôle. Possessing an adequate supply of coal, China can afford to disregard her petroleum resources for the present.

Of the other minerals it may be said, and need only be said, that China possesses supplies of them in quantities which will compare favorably with those of any other country. Her actual store, again, is not indicated accurately by her production statistics, except perhaps in the case of tin. She would seem to possess an adequate supply of copper, antimony, lead, mercury and other minerals with an industrial importance. Unfortunately no

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great deposits from which sulphur may be derived have been found, although there is a small sulphur production which may be increased. This is her only serious lack from the standpoint of those minerals essential to industry and as more comes to be known about the actual resources of the country it may be found that here too China possesses adequate resources.

It is not alone in the mineral realm that China is fortunate. Reference has already been made to the diversity of climate with the consequent possibility of a varied agricultural life. This means that China has the possibility of producing for herself many of the raw materials necessary to the establishment of national industries. The woollen industry, for example, while, according to Arnold, it has made very little progress up to the present time, offers an interesting opportunity of expansion in the future. "North China produces large quantities of wool, the annual exports of which are valued at about \$12,000,000, 64 per cent being exported during 1918 to the United States."¹⁰ It may be expected that in the future there will be an ever increasing

¹⁰ Arnold, Vol. II, p. 364.

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amount of the wool at present exported retained at home for manufacture. And there is great prospect of expansion of sheep grazing north of the Great Wall. Should the woollen industry develop it will be long before the Chinese manufacturer will have to look abroad for any part of his raw materials.

For cotton manufacturing the same holds true. China can grow her own cotton of a variety suitable for modern machinery. "It has been demonstrated that China can grow American cotton of good quality and long staple. It has also been demonstrated that the native cotton, which is of short fiber (and which, by the way, will not hybridize with foreign cottons) can also by the process of selection be greatly improved. It is estimated that China in 1918 produced 2,500,000 bales (500 pounds each) of raw cotton as compared to America's annual production of 12,000,000 bales.

"Chinese interested in the cotton industry are taking steps to improve the quality and quantity of the raw material, and arrangements have been made for the retention by these interests of an American cotton expert to work in conjunction with the Depart-

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ment of Agriculture of the University of Nanking."¹¹

Thus here, as in the case of wool, it is possible for China to develop an industry ultimately free from dependence on an outside supply of the necessary raw materials.

Silk spinning and weaving is more truly an indigenous industry than either of the others, but it is one that has been in a state of retrogression rather than progression until recent times. And yet with care and scientific attention it may be brought back to its original flourishing condition.¹² Steps are now being taken to weed out the diseased silk worms, and to prepare the raw silk in a way better suited to the needs of foreign high-speed looms. These efforts should ultimately result in the enlargement of the quantity and the improvement of the quality of the raw product.

In spite of the fact that both Japan and India have made heavy inroads on the China silk trade, due to a failure of the Chinese in-

¹¹ Arnold, Vol. II, p. 322.

¹² The exports for 1918 amounted to \$89,000,000 raw silk; \$7,330,000 for pongees; \$15,220,000 for silk piece goods; \$11,000,000 for silk waste; and an aggregate for all forms of nearly \$128,000,000. Arnold, Vol. II, p. 326.

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dustry to adapt itself to modern demands and to a failure to keep up the quality of the raw silk production, silk still represents the most important industry in modern China. At present it is in a state of transition from the old to the new. "The old style filatures are being replaced by modern plants, and the antiquated hand-looms are giving way to modern machine looms."¹³ According to the *China Year Book*¹⁴ there are upwards of 221 silk filatures, with 57,678 spindles, in operation. This represents the actual status of the industry today, giving rather a substantial foundation upon which to build a larger industrial structure in the future.

The cotton industry is also in rather a respectable infancy. There are at present more than 60 cotton spinning and weaving mills in operation¹⁵ in addition to the cottage industry. These contain 1,500,000 spindles and 7,000 machine looms in addition to which there are tens of thousands of hand looms in use. "By way of comparison, it may be stated that Japan has 3,000,000 spindles, and

¹³ Arnold, Vol. II, p. 326.

¹⁴ *China Year Book*, 1921-22, pp. 782-4.

¹⁵ *ibid.*, pp. 763-6.

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35,000 looms, the United States 34,000,000 spindles, and England 58,000,000 spindles and 900,000 looms."¹⁶

Of the development of cotton manufacturing in China, Arnold says:¹⁷ "The principal factors that have contributed to the establishment and growth of the Chinese cotton-goods industry have been the following: (1) A supply of native-grown cottons of sufficiently good quality for spinning low counts; (2) an enormous domestic demand for the production of the mills, which, in the case of yarn, by far exceeds that in any other country in the world; (3) low cost of power, which is secured through a good supply of coal from native mines and Japan, and, in Shanghai, by the unusually low rate charged for electric power generated by the municipality; and (4) an abundance of very cheap labor, which makes the cost of production lower than in any other part of the world, and which is not subject to any legal restrictions as to hours of work or age of employees.

"The cotton that is consumed in the mills is not as good in quality as American cotton, but

¹⁶ Arnold, Vol. II, p. 322.

¹⁷ *ibid.*, p. 354.

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it can be used economically for spinning the coarse counts, which are in greatest demand in China. Its low cost gives the mills a marked advantage in the production of heavy sheetings and drills, in which the value of raw materials constitutes a large percentage of the total cost."

From this it appears that Chinese production will be confined for some time largely to the cheaper and coarser grades of goods, both because of the nature of the domestic demand and on account of the raw materials available. But ultimately, as American cotton is more largely introduced, and as the standard of living goes up, it is possible that the finer grades of goods will come to be manufactured. At any rate the cotton industry bids fair to be one of the most important, if not the most important, in the China of the future.

The shipbuilding industry has also come to be of importance in China. The *China Year Book*¹⁸ lists 35 dockyards, shipbuilding and engineering works. Among the more important are those at Amoy, Canton, Dairen, Foochow, Hankow, Harbin, Mukden, Shanghai,

¹⁸ *China Year Book*, 1921-22, pp. 767-8.

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and Tientsin. The Shanghai plant has already assumed and successfully completed a contract with the United States Shipping Board for three cargo vessels. All of the plants are small, but as China herself begins to develop a modern merchant marine they may be expected to increase in size and capacity, and their number will also increase.

Among the other existing industries of some importance may be mentioned the upwards of 42 alumen factories, the 20 canneries, the 49 breweries, distilleries, etc., the large number of flour mills, the leather and match factories, the rice hulling and cleaning mills, the oil mills and bean-cake factories, the smelting works, the tobacco factories, and the woollen factories.

In all there are some 34 separate kinds of existing industries in China.¹⁹ Thus it is quite in order to make a study of the possibilities of development rather than of origination of industry in modern China.

It is even more justified to think in terms of development when it is realized that industry in China is old, older than in any of the other countries of the world. But until the

¹⁹ Listed in full in *China Year Book*, 1921-22, pp. 776-88.

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impact of the West was felt after the middle of the past century this industry was in a state of arrested development. The European states had almost all replaced the system of production in the home or the small shop with that of the factory; machine work had supplemented that of the hand. And yet China, with her older industrial life, still retained the cottage system of industry. Furthermore, in contact with the West for a longer period of time than the Japanese, the Chinese have failed to move as far in the direction of the introduction of modern industrial methods as has their neighbor. And this in spite of the fact that China is much more adequately supplied with the basic materials necessary to modern industry. Why is it then, that the beginnings in industrial development have come so slowly in China?

One part of the explanation lies in the size of the country and in the difficulties of communication over such a large area. Unless there are adequate means of rapid communication it is impossible to get a hearing for new ideas and practices in a large country, no matter how willing the people may be to experiment with the new. Of course the people of

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China are not, even today, easily interested in the new. But during the past century of intercourse with the West it has been very difficult to get the new idea before the people. Again factory production demands more than a local market, and, in order to widen the market it is necessary to have adequate means of communication.

Steam and electrical power for use in transportation of men and goods were unknown to the China opened to limited foreign intercourse in 1842. There was in existence a good system of waterways, both natural and artificial, consisting of such rivers as the Pei-ho in the north, the Yangtze and its tributaries in central China, and the West river in the south, supplemented by the Grand Canal and a large number of smaller canals. But many of these canals had not been kept in condition for use. And many parts of the country could not be readily reached by water, at best a slow medium of transportation.

Where waterways were not available use had to be made of carts drawn by ponies, mules or oxen, particularly in the north; of wheelbarrows, both for the transportation of people and goods; and of the human carrier—

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the cooley. These methods of communication meant only a restricted market for goods, and consequently set a limit to the industrial output—a limit which could be satisfactorily reached through the old methods of production.

The first attempt to apply steam power to transportation in China came in 1876 when a line was built from Shanghai to Woosung. The road was later torn up. From that time to the end of the century the idea of the railroad gained ground very slowly, but has gathered momentum during the present century so that now China has in the neighborhood of 6000 miles of line in operation, with twice that mileage contracted for construction. These roads are almost all trunk lines, China not yet having done much with subsidiary or feeder trackage. Here again it is just a beginning that has been made. The poverty of China's rail communications is most forcibly revealed when compared with the 300,000 miles required in the United States for approximately the same area and one-fourth the number of people. Lack of adequate means of transportation may be set down, then, as one

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of the greatest hindrances to the industrial development of China.

A fundamentally greater hindrance to development, however, has been the resistance to new ideas, since this has impeded the improvement of the means of communication as well as the change in industrial methods and organization. In an ancient civilization such as that of China, where a decade is as a day to the occidental, customary procedures have a tremendous power of resistance. Had industry had no life in the pre-modern China machine production might have been more readily introduced than into a state where the manufacturer and the trader had a recognized position, and where he had built up organizations capable of satisfying the primitive needs of the country.

The social and economic life of the United States is founded upon the individual as the unit. The state deals directly with the individual and controls him immediately no matter what organized groups he may be identified with. The reverse was true in the old China. Socially the family constituted the unit, rather than the individual. And economically the individual was controlled through and lived

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in the group. For China had, and has still, a highly developed system of organization through the gild. This takes us back in our thinking about the industrial problem to medieval Europe where a similar organization existed. And when one remembers the difficulties encountered by the new industry in Europe due to the opposition of the gilds he is in a position to appreciate one of the reasons why industry has only developed slowly along modern lines in China.

The government in China has left the regulation of the industrial life of the country entirely to those engaged in industry. This has had the natural effect of promoting an entirely extra-legal organization of those engaged in different phases of industrial activity, both for purposes of control of the activity and to protect the interests of those engaged in it. After these trade associations became established the government not only dealt directly with them, thus giving them an independent status as part of the governmental system, but it allowed them to develop and enforce, within certain broad limits, the rules for the government of the trade, and of individuals engaging in it. The internal organi-

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zation of the guilds was very democratic, but admission to it, and consequently to the trade controlled by it, was not easy. This had the effect of limiting the growth of industry through a limitation of the number engaged in any phase of it.

Since methods of work, quantity and quality of production, and inter-trade relations were all fixed by the guild there was no more of a premium put on innovation in industry in China than there had been in guild-controlled Europe. It seemed to be to the interest of the guild and its members to support the established method and practice. Innovations are always looked upon with disfavor by an established order. And since custom had vested control in the guilds it was difficult to show adequate cause why its fiat should not prevail.

It may be noted here that the guilds were of two sorts. In addition to the trade guilds there were provincial guilds in all the important centers, either of trade or government. "The provincial guilds developed as an essential agency for the necessary protection of a group of strangers in any given section of the country."²⁰ A group of Cantonese, due to the

²⁰ Arnold, Vol. II, p. 248.

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lack of communication facilities, were, in Shanghai or Tientsin, as much strangers—out-landers—as was the Englishman on the Continent in eighteenth century Europe. They were separated from the inhabitants by differences of language, of food, and of custom. So it is little wonder that they drew together for purposes of intercourse and of protection. Acting as a group their interests were much more easily safeguarded than they would have been if they had acted as individuals. With the development of communications, however, these provincial guilds have been losing their original importance as provincial barriers are being broken down, and as there is a greater intermingling of the peoples of the several provinces.

Similarly, the development of communications has had the effect of weakening the force of local regulation of industry; as it has broadened the outlook of industry to comprehend the entire country; and as it has, consequently, tended to bring a national program developed outside the councils of the guilds.

The gradual introduction of the factory system has also inevitably weakened the position of the guilds since it has resulted in the

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separation of the worker from the employer in his interests and his activities. The old guilds, as part of the cottage system, comprised in the one organization the proprietor and the artisan, generally speaking one and the same, and the apprentice. If this closeness of contact is to be preserved through the guild it will have to be through an adaptation of the old organization to the new conditions of production.

Another reason why modern industry has developed more rapidly in Japan than in China is indicated in the statement that the government in China had no vital relationship to industry. In modern Japan the government has taken the lead in developing the industrial life of the country. This has been possible there because the people were already accustomed to the idea of governmental leadership and direction.

But in China the rôle of government has always been a negative one. Its sole functions have been to protect the country from external enemies and to preserve peace and order at home. In return for this the people have been willing to support it by the payment of taxes. Thus they have never been accustomed to the intervention of govern-

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ment in their everyday affairs, even to their own advantage. Birth, marriage, death, the accumulation of wealth, even the settlement of disputes, all took place with only the minimum of governmental activity. Individual disputes were settled through the family; industrial disputes through the gild. Now this system worked fairly well so long as the number of relationships was not very great and their nature simple. But modern society is too complex and its relationships are too complicated, too closely interwoven, to be carried on and developed entirely through a system of self-control, even that through the family and the gild organization. Family control breaks down as people move about more freely. Gild control breaks down as industry becomes more highly specialized, and as the need for close integration appears. Furthermore, small groupings are not capable of the broad experimentation necessary to the enlargement of the industrial activity of the state. Consequently the idea of the position and function of the government will have to change, as it is already tending to change, if industrial progress is to be made. Education is becoming a governmental activity, as it was

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not in the past, and the public education program must be constantly expanded; the importance of government will constantly increase as railroads are built, particularly as construction and operation of railroads has been definitely undertaken as a government activity; industrial as well as agricultural experimentation must be undertaken by the government in lieu of private interests; the law of the state must be expanded to supplement or supplant the old guild regulations for industry; and political and civil order must be maintained if the stability necessary to industrial progress is to obtain. In fact it will be found that the whole problem of industrialization of the country centers around the question of government in China just as it does, although perhaps not so obviously, in all countries. Communications, currency reform, industrial organization, the customs and general fiscal system, all of the specific questions which will have to be treated in the course of this study, center around the problem of government. This is particularly true in the case of international handicaps to industrial and commercial development. If a protective system is found to be necessary to

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promote the national industry, as other countries have felt it to be, it can be established only through treaty revision since the Chinese tariff is fixed in that way. And customs autonomy can only be gained if and when China has become strong and well organized. The carrying out of a program of railway construction may demand that China be sufficiently strong to insist that certain concessions for construction be taken up or considered as cancelled and awardable elsewhere.

Since, then, it appears that the question of government and its relation to industrial development is of basic importance we can turn to it for detailed examination as the first part of our more careful inquiry into the problem of the expansion of industry in China.

CHAPTER TWO

The Government and Industrial Progress

THE premise on which this chapter is based is that in every country political stability is necessary to industrial progress, or in fact, to progress of any kind. At times, undoubtedly, it is necessary that stability shall be temporarily lost in order that it may be regained in a more permanent and satisfactory form. But there are times when all other considerations must be subordinated to the establishment of peace and order.

The Chinese state has been in a condition of more or less complete ferment for a dozen years—longer than that if account is taken of the instability due to the weakness of the Manchu rule from the middle of the last century to the time of the revolution. Today there is presented, at least to the westerner, an appearance of complete chaos. The recognized government at Peking finds its authority flouted in many parts of the country; even where its mandates are nominally accepted its

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rule is as often disregarded as acquiesced in. Brigandage is rife in the inland provinces, and piracy flourishes on the seas. Civil war recurs with monotonous regularity. Military officials in the provinces levy irregular contributions on the people either in place of, or in addition to, the usual taxes.

Under these conditions what chance is there of industrial development? And yet it is clear that development has taken place. Taking the import and export trade as the measure, in terms of gross values, it is found that from 1910, the beginning of the period of revolution, to 1920, there has been a steady if slight increase in foreign trade. Such fluctuation as there has been is to be explained in large part by the outbreak of war in Europe in 1914. Imports, may be noted, have shown a more constant tendency toward increase than exports, although in the latter case advance has been more rapid, but more spasmodic. The changes in the value of silver may also help to explain this fluctuation. And the increase in its value of recent years may serve to account for an increase in the value of goods imported and exported during the recent years of disorganization.

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Another measure would be internal trade, if reliable figures on it over an extended period of years were available. Since they are not we can only guess at what they would show. In all probability they would reveal the same thing as the foreign trade statistics—growth of trade rather than its lessening. This may be considered a safe inference from the fact that rail transportation facilities have been increased during the last ten or twelve years, and this would have the effect of enlarging the movement of goods.

The carrying out of a program of railway construction, even to a limited extent, and the fact that movement on the railways has been almost uninterrupted, tends in itself to show that there has been an advance in spite of the political instability. This fact is further revealed by the steady increase in coal and iron production; by the increase in the number of iron smelters and foundries; by the growth in cotton manufacturing, from the standpoint both of output and of the number of establishments; and by the erection of new factories of all kinds.

There has been development in spite of the political instability. This must be admitted,

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but it must be emphasized at the same time that it has been in spite of, rather than because of it. That the growth would have been greater and more rapid had there been stability instead of uncertainty cannot be questioned.

But that there should have been development at all is the thing that Americans find it hard to understand. The explanation lies in the fact, already pointed out, that, in China of the past, politics and governmental action have been almost entirely divorced from the economic life of the country. Consequently the paralysis that business would feel in either the United States or Japan if the governmental system began to disintegrate has not been so clearly manifested in China. It will be more apparent in the future as machine production develops for that demands so much greater an initial investment than is required under the cottage system, and it produces so much more complicated a set of economic relationships that a halt will be called on development whenever the political equilibrium is upset or threatened.

Then the fact that modern industry can have only a limited progress until government

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takes an initiative hitherto lacking, both directly in the way of performing necessary preliminary services, and indirectly through effecting certain necessary reforms which it alone can undertake, indicates that the premise is still true that an extensive industrial progress can take place only after political stability has been restored.

An analysis of the political system with a view to ascertaining the explanation of the existing chaos cannot be undertaken here except in a very general way. It may, however, be stated as an indisputable fact that the sole basis of authority has come to be military power. As the late Dr. Paul S. Reinsch, former American Minister to China, summed up the situation as it had developed by 1916, "The political authority of the central government in China rested upon military organization. Other sources of authority, such as customary submission on the one hand, and the support based upon the intelligent cooperation of all classes of citizens in the achievement of the purposes of government in accordance with public opinion on the other, were only of secondary importance."¹ If he had been writing

¹ *An American Diplomat in China*, p. 53.

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about the conditions of today, he would have been forced to go a step further and point out as well that the central government had become the creature of the strongest of the military governors of the provinces. Thus the sole basis of authority has continued to be military power—the control of troops—but there has been no one strong enough to centralize this military authority in his own hands since the overthrow and death of Yuan Shih-kai.

This is, of course, not a new situation. The primary support of the Manchu authority when it was first established was military power. Then through custom which led to acquiescence, and through administrative organization, the real nature of authority came to be lost to view. But as the Imperial government allowed the control of the army to devolve on the provinces it paved the way for its own eventual overthrow. When the revolution broke out in 1911 Peking had no real military power. In spite of the attempt at centralization of control of the army after 1907 most of the troops were under the command of the governors of the provinces. Those in the south went over to the revolution, and those in the north were more faithful to Yuan

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Shih-kai than to the Manchus. Consequently when he reached a settlement with the revolution by which the rulers were to abdicate, and he to become president of a republic, the Manchus had no other resource to fall back upon.

The original revolutionary idea was to replace government by force with that by consent, expressed through representatives. The country was not ready for that, and if it had been the power remained with Yuan Shih-kai as long as the northern commanders were faithful to him, to prevent the successful operation of a representative system. Consequently, as Dr. Reinsch points out, the basis of power remained the ability to control troops.

During and immediately following the revolution many men were brought under arms, and each force was loyal primarily to its own leader, since he fed and paid, or hoped ultimately to pay, the men. Consequently the country has been infested by a horde of small armies, some no better than bands of brigands except in name. After the death of President Yuan in 1916 the power of the central government steadily declined, while in the prov

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inces there went on a grouping of those in command of troops, until there appeared by 1922 only three distinct lines of cleavage. Manchuria was in control of Chang Tso-lin, and he had alliances with some of the military governors south of the Great Wall. Sun Yat-sen was in nominal control at Canton, but his real authority outside of the city depended on the support of the militarist in control of the province.² And Wu Pei-fu was dominant in most of the provinces between the Wall and Kuangtung province, and, by virtue of his superior power, he has been in control of the Peking, or central, government. Since 1922 a struggle of elimination has been going on between these three strongest elements. The initial successes were with Wu Pei-fu, but owing to the treachery of one of his supporters, he was pushed into the background, and Chang Tso-lin took his place as the power making and unmaking governments at Peking. He in turn was supplanted at Peking by the Christian general Feng Yu-hsiang, formerly a supporter of Wu Pei-fu. The next turn of the

² Dr. Sun's death has removed him as a factor, but his ideas and his following at Canton still must be reckoned with.

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wheel eliminated Feng, power having been regained by General Wu and Chang Tso-lin in alliance. The next logical step, judging by the past few years, should be a struggle for dominance between the present allies. If one or the other should gain the unchallenged supremacy stability might temporarily ensue for China.

If this should happen she will be brought back to where she has been in the past politically, with a government depending for its permanence on military force. Then it will be incumbent on her to find the only ultimate basis of stability—the replacement of force by consent as the sanction for the exercise of power.

The foundation of authority on consent will come as an inevitable result of the development of the economic life of the country to the point where the various types of economic interest feel that their welfare is dependent on the activity of government. This is already being felt as the new industry and finance is finding a development. Government and the economic life of the state, it may be repeated, were very little inter-related in the China of the nineteenth century. Such commerce and

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industry as there were had developed on the basis of self-control. They were very little affected by the nature of the government so long as it was able to maintain peace and order. No one undertaking demanded a great initial investment, and none was so great as to attract unduly the cupidity of officials. When there was disorder the shop could be closed until it came to an end, or through the gild it could purchase immunity at a reasonable price. Industry and commerce were confined to the locality or the province. Neither was tremendously affected by national conditions since transportation was by wheelbarrow or cart. The bulk of the population was largely self-supporting, consuming its own produce, or disposing of it in the locality.

Now all of this is being changed. The factory system, with the large initial investment necessary to start in business, is replacing the cottage industry. This means that disorder is felt as a more serious evil, and one to be combated positively instead of acquiesced in as a visitation from above. Markets have been enlarged through the building of railways, and the access to these markets can be kept open

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only through the maintenance of a strong and energetic government.

Furthermore, through western education, new ideas of government have been brought into the country. In addition to the purely political idea of constitutionalism and of government participated in by the people, an understanding of the way in which economic interests can be served by governmental action has been gained. At present the cry is merely for any government strong enough to preserve peace and order. That is, of course, the primary reason for the existence of the state. But given order in place of confusion it will be strange indeed if the new industry does not call forth the same changed conception of the function of government in China that it did in Europe.

It must be remembered that western states were, prior to the industrial revolution, merely military-legal entities with the sole function of preserving peace. Now they are that and much more besides. As a consequence of the industrial revolution political power passed gradually into the hands of new economic groups which supplanted, both economically and politically, the territorial, or landed, gen-

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try who were the relics of feudal and agrarian Europe. The new industrial and commercial magnates then transformed the state from an entity designed to preserve peace and order and guard the country from external foes into an agency for the promotion of the complex economic interests of the modern state, and for the establishment of rules of conduct for each one of the several parts of the national economy in its relations with the others. Peace and order was the first demand, made even more insistently by the commercial and industrial interests, when they had become powerful enough to insist, than by the agricultural interests. Then came the demand for a share in the determination of the policies of the state in order that their needs might be given adequate consideration, and that they might be protected from adverse action. And this was followed closely by the demand that the state should perform positive services as well as negative.

Now in China the economic demand for stability, as it becomes so strong as to demand a hearing, synchronizes closely with the demand for power, and for service, because industry has begun its development at a time

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of the greatest instability. After stability is restored, through the dominance of one of the military groups perhaps, it will be perceived that the economic interests of the country cannot be entrusted safely to those whose sole interest is in power, and whose power may not be used constructively, who may use their control of the funds of the state merely to enrich themselves, as has been the case in the past few years. This will lead to a demand for a voice in the government, a demand which will have greater force because it is closely associated with the entire revolutionary movement, and has thereby already been given a hearing.⁸

This demand will be respected by those in power because their own continued authority will depend on the disbandment of all the provincial troops not under their control. All experience since the revolution of 1911 points to the fact that this is a problem of finance which can only be solved by recourse to loans, either domestic or foreign. Domestic loans

⁸ The above statements have been put in terms of the future. As a matter of fact, the business men are already expressing themselves in those terms. Thus it seems entirely reasonable to make the above predictions about the future.

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can be floated successfully only if there is confidence in the government's ultimate willingness and ability to pay. The same is true of foreign loans. Given the willingness to pay, the ability will depend on an augmentation of the revenues of the state. This will bring the government into contact with those who can pay new taxes. And here we have the beginning of the process which has brought the governments of the West to accept the principle of representation—a recognition that it is easier to extract if consent has first been given to the extraction. This led first to consultation with representatives of the more powerful economic interests in England and in other countries.

This feeling that "he who pays the piper should call the tune" has already been manifested in China. The National Banking Association offered to lend to the government on condition that it should specify the purposes for which the money should be used and supervise its expenditure to be sure that it was used for the purpose specified. This new attitude may be expected to show itself not only when it comes to the making of loans but to the payment of taxes as well. Thus experience

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in other countries and the attitude of the Chinese as well leads to the belief that ultimately there will come into being some sort of representative system of government. The failure of Yuan Shih-kai's attempt to make himself Emperor indicates clearly that the slogans of republicanism have taken too firm a hold on the mind of China to make feasible a restoration of the monarchy. Too many groups have grown self-conscious and articulate to make possible the permanent establishment of the dictatorship of an individual, supported solely by military power. Education, while it has only scratched the surface of the national life, has begun the development of a public opinion demanding some share in the responsibilities of government. Only a government commanding the support of the articulate and self-interested groups of the country can bring about more than an artificial stability. This support can only be gained by associating them with the processes of government, particularly in the way of helping to shape public policy.

China is not ready, however, for a representative government based on the individual. That was the mistake made during the

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early years of the Republic. Only a small proportion of the people are literate, and still a smaller number have any vision beyond the bounds of their localities. This localism is just as great a handicap to the establishment of a national system of representative government as is the lack of widespread education.

Consequently the government should be based upon already established group interests in the country. First and foremost would have to be placed the interests of the provinces as such, for they are as jealous of their special position as were the American states in 1787. The agricultural interests of the country could, for the present, be heard through the provincial representatives. Then the literate class, long the most powerful and only really articulate group interest in the state, should be given adequate representation. This could be readily accomplished through a utilization of the National Education Conference as an electoral college. Another type of interest to be represented is that of business or industry. Here resort could be had to the guilds or to the more recent Chambers of Commerce which have sprung up in the larger cities, and which have grouped themselves into a national as-

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sociation. The modern bankers are also separately organized in an association which could serve as a medium for the selection of representatives.

Resort to this type of representation would almost inevitably throw the direction for the present into the hands of the commercial and industrial interests of the country.⁴ And this, at the existing stage of her transition, is exactly what China needs if industrial development is to be promoted through the agency of government. Too one-sided a control would be prevented, or hindered, through adequate provincial representation, which would, in the main, constitute a representation of the agricultural interest. It would also be checked if the principle of labor representation through the unions which are even now being formed should be accepted from the start.

Territorially the unitary rather than the federal principle should be accepted, both for international reasons, and in order that as

⁴ Since the agricultural interests are not organized, and are not yet articulate. Furthermore, they have not yet grasped the significance to themselves of the change in conception of the rôle of political authority.

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many policies as are ultimately of national importance shall be nationally agreed upon. For the present, however, the varying needs of the country demand that most of the work of government shall be carried on under provincial direction.

This raises the question as to the functions to be undertaken by the government of a stabilized China. Does the need of government in that country cease with the maintenance of peace and order and the protection of the country from external foes?

The Chinese have already recognized education as a function of modern government that is of vital importance. This is indicated by such school statistics as are available. Tyau⁵ gives the number of schools in 1910 as 42,444, as compared with the 134,000 of 1919. The number of teachers in the public schools has virtually been doubled, and the number of students has tripled, there being 4,500,000 students in 1919. This may be considered a slight advance in comparison with that which should have been made, but it is impressive enough when the unsettlement of the times, and the inadequacy of the finan-

⁵ *China Awakened*, p. 4.

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cial resources of the government are remembered. At any rate it shows that the principle has been accepted.

Furthermore the Chinese have come to recognize the importance, in their national life, of vocational education. A National Association of Vocational Education has come into being and has mapped out the following program: "(a) To introduce vocational courses in the higher primary schools, such as manual training for boys, and cooking and sewing for girls; bookkeeping and shop-keeping for city schools and gardening for country schools. (b) To establish commercial, industrial, or agricultural departments in the middle schools. (c) To introduce commercial, industrial, or agricultural courses in the lower normal schools to train vocational teachers for higher primary schools. (d) To establish commercial, industrial and agricultural departments in the higher normal colleges to train teachers for vocational courses in middle schools. (e) To establish more vocational schools of elementary grades, such as elementary commercial, industrial or agricultural schools. (f) To establish more vocational schools of middle grades, such as middle com-

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mercial, industrial or agricultural schools."⁶

This ambitious program is of course still on paper, but it shows the direction of thinking in present-day China. It will undoubtedly be transformed into actuality as rapidly as funds become available. That in turn is dependent upon the ending of the present political strife.

At present, then, many of the elementary and secondary schools give some attention to vocational training. In many of the large cities there are to be found commercial schools which are giving a valuable training. This type of work is supplemented by that of the Y.M.C.A. schools in such places as Shanghai, Tientsin and Peking. In some of the more advanced provinces there are to be found one or more technical schools of a higher type. A good example of this is the Peiyang University at Tientsin which has become largely an engineering college. Then many of the universities have technical departments or schools attached to them. This is true of the Peking Government University, the Nanking University and others. These schools are also beginning to establish experiment stations of various sorts which will undoubtedly help to

⁶ *China Awakened*, p. 15.

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promote the development of industry in China. All of these beginnings are most admirably supplemented by the work of the mission schools and colleges which are becoming increasingly concerned with vocational and technical education.

Thus through government and private schools alike an increasing number of men are being equipped with the necessary technical knowledge to enable them to lead in the development of a purely native industrial life. This cannot help but stimulate industry and add to the number of industrial activities of the country.

Here again it must be emphasized that only a start has been made. As compared with the United States there is about the same deficiency, if not a greater, as in the case of communications: as 6,000 is to 300,000. Progress is dependent upon finance, which is again dependent upon the establishment of a stable government and the consequent restoration of order in China.

Another activity which the government will have to undertake in the future is closely related to the work of education and may be in part always connected with it. This is the

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establishment, or the extension, of experimental work of various kinds. The raw materials of industry, to say nothing of the food supply of the people, must be improved if industrial development is to come. Experimentation with cotton growth, including the introduction of various foreign cultures, can best be undertaken by the government, the results being made available to all interested in cotton growing. Private interests are not in a position to carry on this work on a sufficiently wide scale to meet the need. The same is true of the study of the silk worm and its diseases, and of its food, the mulberry. These are but a few of the activities which may legitimately be assumed by the government of a state such as China. She can well afford to study the relation of the government to the industrial development of Japan to ascertain the best way of promoting a rapid industrialization of the country. Of course a difference of tradition and of problem makes it impossible and undesirable for China too closely to follow the Japanese example. But certainly many of the same things could be done by the Chinese that the Japanese government has done with good results. Every modern gov-

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ernment undertakes more or less of this type of service to industry, but in addition the Chinese government will for some time need to do a great deal of the work that in the United States, for example, is done in the big industrial laboratories of private corporations.

The Japanese government has performed another kind of service not so often undertaken by governments. It has proceeded to develop new industries itself, turning them over to private capitalists after they have been made profitable, but often retaining an interest in the enterprise. Another example of this sort of activity has been the development of the American merchant marine as a government enterprise with a view to its eventually being taken over by private interests. It is questionable whether this direct participation of government in the development of industries should be favored for China. Industry has been so largely self-developed and self-regulating in the past that the tradition of the country points entirely in the other direction. But there are examples of this practice in the modern history of China, the most notable being the establishment of the Han-Y'eh-p'ing Corporation as the largest coal and iron

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producing unit in China. Chang Chih-t'ung, one of the notable Viceroys during the last era of Manchu rule, took the lead in the establishment of this company, and his official initiative must be considered largely responsible for bringing it into being.

The method of subsidy rather than participation is one usual as a means of promoting industrial activity. Subsidy may be indirect as in the establishment of a protective tariff system, or in the form of direct payments or the granting of special privileges to those making the venture into new fields. The indirect method is impossible for China except with the permission of the Powers, since the tariff is a conventional one, and treaty revision would have to precede protection. This revision would have to be accomplished in the face of the fact that several of the Powers are interested in retarding rather than promoting the establishment of competitive industries.⁷ And, judging by the past, the Powers would exert a strong pressure to prevent the granting of favors to Chinese not

⁷ For a discussion of this problem see chap. III, pp. 74-81. It may be pointed out here, however, that the Powers have conceded the principle of tariff autonomy, to be realized by 1929.

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extended at the same time to foreigners. This would be more difficult for them to justify, however, than a refusal to revise the treaties.

Another function of government of vital importance is the improvement of the means of communication and transportation. At present there is maintained a national telegraphic as well as postal system. Both are apparently as well administered as the troubled condition of the country will permit. They both need extension, however, which will only be possible as political stability is restored, and as their revenues and perhaps government subsidies increase. It is also desirable, and feasible as well, that the foreign postal systems operated on Chinese soil be discontinued and withdrawn. This the Chinese urged on the Powers at the Washington Conference, where they secured promises of action if, after investigation, it was found that the Chinese service was being efficiently operated.

Wireless communication also needs to be established. The Chinese government has shown itself desirous of doing this, but has gotten into trouble due to monopoly grants made to the Japanese Mitsui Company by one of the temporary governments of the past.

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American capitalists have shown an interest in wireless construction as have the British, and when the international tangle is finally straightened out China will rapidly develop in that direction, much to the advantage of the commercial and industrial interests of the country.

Then there is the work of up-keep and extension of the roads and waterways of the country, which had so completely fallen into disrepair under the Manchu rule as to greatly retard intercourse. Work on the Grand Canal would have been undertaken before this had it not been for the World War, the American Red Cross having been much interested in the project of its restoration. Of good roads suitable for motor transport there are almost none except in the immediate environs of the foreign concessions, so that there will ultimately have to be extensive expenditures on road building.

Dr. Sun Yat Sen, in his book *The International Development of China*, has laid out a very extensive program of development, including the improvement of all means of communication, the building of totally new harbors, and the extension of the facilities of

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those already in use. His project is of too great a magnitude to deserve more than mention, but certainly there is a vital need for harbor improvement at such places as Shanghai, Tientsin and other ports. This has already been undertaken in many places, and when carried to completion will have important effects on commerce and industry, both foreign and domestic.

But most important of all is the construction and efficient operation of railways. This will have to be continued as a government function of the first magnitude, at least so far as the construction of trunk lines is concerned. This problem is so immediate, and so vitally related to industrial development that it will have to be reserved for subsequent and fuller treatment.

Among other new functions of the government may be mentioned here the development of a legal system for industry and commerce to replace the old system of self-control. Incorporation, financing, the conditions of competition, labor relations, will all have to be made matters of immediate governmental concern if China is to escape many of the unsound conditions which have accompanied indus-

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trial development in other countries. The establishment of law will have to be accompanied by the organization of adequate courts for its administration. Codes of law have been promulgated and courts established up to the present time, indeed, but in the main they still exist on paper and the administration of justice in the provinces is about where it was in the last days of the Manchu rule.

Another immediately important problem confronting the government of a stable China is that of currency reform, and with it the promoting of the present extra-official move towards the introduction of modern banking methods. No one but the central government can deal with these questions, together with that of reform of the entire fiscal system.

It has been noted time and again that other changes or developments were conditioned on financing. This fact is restated here merely to emphasize further the importance of reform of the currency and taxation system.

This of course by no means exhausts the list of functions to be undertaken by the government of a modern industrial state. The attempt has been made to enumerate the most important from the standpoint of industrial

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development, preliminary to a more exhaustive examination of some of them. To this attention can now be turned.

CHAPTER THREE

Governmental Finance

ONE of the most pressing problems confronting every government in China since the revolution of 1911 has been that of finance. This will continue as an increasingly important and complex part of the governmental problem even after political unification and stabilization have been effected. This will be particularly the case if the government expands its functions to include those normally undertaken by the government of a modern state, and if, in addition, it endeavors by constructive activity to forward the process of industrialization of the country. Many of its developmental activities such as railroad building and currency reform will have to be financed immediately through foreign loans. That will necessitate the establishment of a sound internal revenue system, for if loans are made abroad on advantageous terms it will be because of confidence on the part of foreign bankers in the ability of China to take up her obligations

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as they fall due. Furthermore, as there is established a sound financial system it will be possible to finance many undertakings in the home market through a resort to domestic loans. At present there is lacking confidence in the government, both for political and financial reasons, so that it is doubly difficult to float domestic loans. And foreign loans are in the nature of speculative investments which, to be justified, must have the diplomatic support of foreign governments. This in turn is liable to result in the establishment of dangerous relationships between China and foreign Powers.

It is not the purpose of this chapter, however, to discuss in detail the financial problem in China, but merely to consider such aspects of it as seem to relate immediately to the question of industrial development. But before proceeding to this task it will be necessary to indicate in general terms the nature of the revenue system as a preliminary to the narrower discussion of its relationship to the industrial life of the country.

It is only comparatively recently that governmental finance has assumed outstanding importance in China. Prior to the opening of

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the country to foreign intercourse in 1842 the needs of the central government were so slight that they could be readily met. This had been true during the entire period of Manchu control, and it was under these conditions, of virtually static expenditure, that the revenue system became fixed. The basis of the system then, as now, was the land tax. By the period of foreign intercourse this tax had become fixed and inelastic as a revenue producer. "Two hundred years ago, in 1713, the Emperor, quite in keeping with the Manchu practice of considering and conciliating their Chinese subjects in every way, decreed that the land tax throughout the Empire, as shown by the records of that year, was to be fixed and immutable for all time, no increase being permitted under any circumstances. This permanent settlement endures, in theory, to this day; the tax-note for each lot of land today gives the rate of assessment for 1713, and the returns of the total collection are based upon the permanent settlement, subject to authorized reductions for the effects of rebellion, drought, and flood, and to re-augmentation on recovery when reported by the provincial

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authorities."¹ There have been accretions of various sorts from that time to the present but they have not been of material benefit to the government, having rather gone into the pockets of the tax-collectors and the higher officials.

In addition to the land tax the Imperial government received tribute of various sorts—payments in kind—of which the most important was the grain tribute. Toward the end of the pre-modern period the practice of commutation of the grain tribute became partially established, so that income from that source fell into two divisions, the payment in kind, and the payment of its equivalent in money. To these must be added as a basic source of revenue the salt tax. Then there were other less important sources of income which altogether brought in less than any one of the three mentioned.

With the development of foreign trade on a permanent basis following the establishment of treaty relations between China and the outside world a new source of income was found in the import and export duties. The Canton trade had furnished revenue when trade was

¹ Morse, *Trade and Administration*, p. 98.

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restricted to that one place, but the returns to the government were nominal, due to the methods of levy and of collection. After the negotiation and ratification of the Nanking treaty (1842) with England, however, China established a regular system of charges on foreign trade, that treaty stipulating that "His Majesty the Emperor of China agrees to establish at the ports which are by the second Article of the Treaty to be thrown open for the resort of British merchants, a fair and regular tariff of export and import customs and other dues, which tariff shall be publicly notified and promulgated for general information."² A "Declaration" issued by the Chinese government in 1843 fixed this "fair and regular tariff" at approximately five per cent ad valorem for both exports and imports. In 1858, at Tientsin, the earlier treaties were revised and, among other provisions of the so-called Tientsin treaties, the tariff schedules came in for change. The five per cent rate of levy was retained, but a shift was made from an ad valorem basis to that of specific duties, the schedules of which were

² Willoughby, *Foreign Rights and Interests in China*, p. 105. Text of Treaty in *I. Customs Treaties*, p. 352.

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incorporated into the treaties. The next revision came following the Boxer uprising and its suppression, and affected only imports. The five per cent rate was again retained, but the specific duties were based upon the current prices prevailing in 1897-99. Periodically thereafter as price levels advanced the Chinese government sought further revision in order that an actual five per cent might be realized on imports, but any change had to be agreed to by the group of Powers with treaty relations with China and it proved to be impossible to get such agreement until 1917, when, in return for China's participation in the World War on the side of the Allies, agreement was reached to a revision of the schedules to an effective five per cent. Further revision was agreed to at the Washington Conference.⁸

This sketch of China's customs relations serves to bring to attention the fact that China

⁸ Treaty Between the Nine Powers Relating to Chinese Customs Tariff. Senate Document No. 126 pp. 897-901. This revision, again, was merely to bring the levy up to an effective five per cent. Provision was made also for a special conference to prepare the way for the abolition of likin, following which special surtaxes would be levied on imports and exports.

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does not have the power freely to make such adjustments in her tariff system as her increasing financial needs or the problems of internal development may make imperative.

The other important new tax introduced since 1842 which needs to be briefly described is the likin. This is essentially a transit tax and means literally a contribution of a thousandth. Likin was introduced at the time of the Taiping rebellion, being first heard of in 1853, and being applied to all of the provinces in 1861. It was the need for greater revenue to aid in putting down the rebellion, at a time when the ordinary taxes were yielding a smaller return than usual due to a loss of Imperial control of some provinces and to a devastation of many others, which caused the imposition of the new tax. While not an undue handicap to trade in its original form it soon exhibited the normal tendency to accretion as well as to extension, so that since 1900 it has been one of the most objectionable taxes possible from the economic standpoint. Dr. Chin Chu describes the present application of the tax as follows: "Likin stations exist at all large towns and along the main routes of trade—both by land and by

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river. The rate of likin is not uniform in the country. But, as a rule, the tax collected is three per cent at the station of departure and two per cent at each inspection station. The amount collected within a province, however, does not perhaps exceed ten per cent, but when goods are transported through several provinces it may amount to fifteen or twenty per cent.”⁴ This represents quite a change from the original levy of one-tenth of one per cent. It will also be noted from the above quotation that the tax is not collected merely on goods passing from one province to another but operates as an impediment to the movement of goods within the province. Its continued levy must be ascribed to the fact that it produced, according to the budget of 1911, almost as much revenue as any one of the other important sources of income, and, according to more recent figures, still must be rated as one of the more important revenue producers. Consequently something must be found to take its place before it will be given up.

This description needs to be concluded with a few paragraphs of explanation of the

⁴ *Tariff Problem in China*, p. 103.

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methods of administration of these taxes as that is a matter of vital importance if one is to have a clear understanding of the problem of governmental finance.

Beginning at the top and working downwards, it may be said first of all that the modern practice of covering all receipts into a common treasury was not followed during Manchu days. Instead, receipts from the different sources were assigned to various specific needs. The consequences of this practice may be illustrated as follows: "One province, for example, may be assessed Tls. 500,000 as the Likin collection for the year; instead of remitting this to the Imperial Treasury, or holding it subject to the order of the Treasury, Tls. 100,000 will be remitted direct to the Shanghai Taotai for the service of the foreign debt, Tls. 50,000 will be remitted to the same officer for account of Legations abroad, Tls. 200,000 will be sent to Honan for Yellow River Flood Prevention Account, Tls. 50,000 will be retained for renewal of the provincial coast defences, Tls. 50,000 will be sent to Peking for the Imperial Household, and Tls. 50,000 will be assigned for the upkeep of the Imperial mausolea. From some

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other source of revenue grants may be made to supplement the revenues of a poorer province; of the eighteen provinces, thirteen forward such grants-in-aid, and nine receive them, five both granting and receiving. We may even have province A remitting to B, B in turn to C, and C remitting to A, but each one of the three will remit in full; no attempt is ever made to strike a balance and receive or remit the difference; to do this would deprive some hard-working official of the fruits of his industry, in the profit derivable from the mere act of remitting.”⁵

Another source of great complication is encountered in the chaotic currency system. The payment and transmission of taxes, except tribute in kind, involves a number of exchange transactions which are exceedingly expensive. Morse⁶ gives an account of what happens in a typical case in which ten exchanges are made, each of which yields a profit of at least one-half of one per cent. This part of the cost of administration will continue until the currency system is reformed.

But the most serious defect in administra-

⁵ Morse, *Trade and Administration*, pp. 94-5.

⁶ *ibid.*, p. 96.

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tion lies in the fact that it is and has been decentralized in practice, collection being in the hands of provincial and local officials who are not required to transmit the sums actually collected but fixed sums assessed on the province and on the district within it. It has been considered perfectly legitimate for the officials to retain for their own uses all of the collections in excess of this fixed sum which, although assessed as a minimum to be sent to the Imperial Treasury, automatically became a maximum, no matter what the collections actually were. This system has many points of similarity to the method of "farming" the taxes at one time used in some of the occidental states. It also suggests to many foreign observers the idea of graft.

In explanation of the system, however, it must be remembered that the salaries of officials have always been extremely low, and that each official has had to equip and maintain his own establishment, including making financial provision for his underlings who have no official status. This forced him to add to his stipend in the most convenient way, which was to add to the sums assessed on the territory under his jurisdiction an amount

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sufficient to enable him to maintain himself, his family and his establishment. Until adequate salaries are paid to officials the system of "squeeze" may be expected to perpetuate itself.

In the case of the land tax the additions to the old, established and "unchangeable" levy are made in such forms as a meltage fee; the addition of the "costs of collection," an indeterminate amount; through a conversion of the tax into the "cash" at one rate and reconversion into the tael at another. Altogether Morse estimates that it is entirely safe to say that the amounts collected are at least three times as great as those actually returned to the central government.[†] In the case of the commuted taxes the difference is even greater.

Before the reorganization of the Salt Gabelle under foreign supervision the same system obtained. The large accretions to the tax went into the pockets of officials in charge of its collection or administration. The changes instituted under the direction of Sir Richard Dane as Associate Chief Inspector of the service more than doubled the actual returns to

[†] Morse, *Trade and Administration*, p. 104.

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the government.⁸ Certainly a similar reorganization, not necessarily under foreign supervision, of the land tax administration would make it a far more productive tax without any addition to the burden of the taxpayer. The same may be said of the likin collections, where the accretions have been the most marked and the most easily made. Instead of the reform of this tax, however, it should be altogether abolished, for reasons which will be further set forth in another connection.

Of the external customs it may be said that its administration has been altogether satisfactory. Since the time of the Taiping rebellion the customs administration has been under the direction of foreign inspectors appointed by and responsible to the Chinese government. Thus it is strictly a Chinese service but one under the administrative supervision of foreigners. It is safe to say that it has been the most honestly and efficiently administered of any of the Chinese services. Ultimately, of course, it will be made a Chinese service so far as the personnel is con-

⁸ This reorganization was brought about as a condition of the acceptance of the salt tax as security for a foreign loan—the Comprehensive Administrative Loan of 1913.

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cerned, but that time will not come until the system of "squeeze" has been eliminated as an important part of the financial equation. At the time of the Washington Conference the Chinese delegates admitted it to be operating satisfactorily from their standpoint and declared that there was no present intention of making any change in the administration of the foreign customs.⁹

We are now in a position to turn our attention directly to the problem of government finance in relation to the industrial development of the country. Enough has already been said to indicate the necessity for an increase in the revenues of the state both to enable it directly to finance new activities and to borrow on satisfactory terms for productive undertakings such as road and railroad construction and the improvement of the system of internal waterways.

The first step in reform should be the re-

⁹ What is described here throughout is the "Maritime" or "Foreign" customs, so-called to distinguish it from the "regular" or "native" customs, which affects the Chinese junk traffic and trade across the land frontiers. This latter service should be amalgamated with the former and the duties made uniform so far as the place of entry is concerned.

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organization of the existing system of internal taxation in order to produce the maximum of return. The reorganization of the Salt Gabelle points the way for reform. Additional revenue may also be gained through the extension of the system of excise taxes already existing. Thus the wine and tobacco tax could be extended and other luxury taxes introduced. This would afford an increased revenue without serving in any way to retard the development of industry. And the beginnings could well be made in the introduction of a corporation tax when the corporate form of organization is just being brought into use. Here it should be kept in mind that the tax should not be so framed as to discourage the formation of corporations as that would retard rather than promote industrial development. This would have the further ultimate effect of limiting the revenue which might be derived from this source.

The flexible part of the revenue system of any country, however, is the foreign customs. There is a greater possibility here of increasing the charges so as to bring in revenue than in the case of any other tax. Furthermore the customs tariff is of most immediate impor-

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tance, to a country at China's stage of development, from another than the purely fiscal point of view. It needs to be so framed as to enable the national industry to develop in the face of an unequal competition from more advanced states. American, German and Japanese experience, as well as that of other countries, indicates the necessity of affording reasonable tariff protection if an incipient industry is to develop. There is no reason to believe that different factors will affect China than were operative at analogous stages of development in other countries. For both reasons there has been agitation in China for not merely revision of the tariff schedules which would serve to augment the revenue, but for a complete restoration of tariff autonomy, in order that the schedules might be fixed and rates differentiated in the interest of national development.¹⁰

¹⁰ This interest was revealed, to a certain extent, in the remarks of Mr. Wellington Koo in the discussion of the Chinese tariff question at the sessions of the Committee on Pacific and Far Eastern Questions of the Washington Conference. See Senate Document, No. 126, pp. 594-7. See also Dr. C. T. Wang, "What China Expects to Get from Tariff Autonomy," *China Weekly Review*, supplement to issue of November 1, 1925, pp. 9-10.

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The Washington Conference rejected the Chinese request for autonomy, agreeing however to immediate revision of the schedules to make effective the five per cent levy provided for in the treaties. This was expected to increase the returns by about \$17,000,000. It also agreed to the holding of a special conference to work out plans for an additional levy of two and one-half per cent, and for the imposition of a special surtax on luxuries of not over five per cent. These increases it was estimated would bring in an additional \$27,000,000 and \$2,167,000 respectively, but the offer to increase the rate of levy was made conditional on the abolition of the likin charges on foreign goods.

This special conference was not convened until October 1925 due to the delay in completing the ratifications of the Washington treaties and agreements. When it met it was confronted with a demand from China that it agree to the restoration of complete tariff autonomy, a demand which was complied with to the extent that it was agreed that a Chinese national tariff might go into effect January 1, 1929, provided the Chinese government succeeded in carrying out its simul-

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taneous undertaking to abolish the likin system by the same time. It appears now¹¹ that China will be enabled to lay duties ranging from five to thirty per cent in the interim before the national tariff becomes effective.

Assuming that likin is actually abolished and China has complete control of her customs levies by 1929 it is part of our problem to estimate the consequences of the new régime so far as industrial progress is concerned. The most obvious consequence will be an increased revenue, provided it is not all absorbed: 1) in meeting loan charges, for it is probable that the present unsecured loans will be secured on the new customs surplus; and 2) in compensating the provinces for the loss of the income from the likin.

A second and more directly important consequence, from the standpoint of this study, will be the possibility of differentiating the rate of levy to promote industrial development. One reason alleged in the past for not granting China tariff autonomy has been a fear lest she should attempt to break off trade

¹¹ The Conference has not completed its deliberations up to the present time, May 1926.

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relations with the West and Japan by imposing prohibitive charges on imports. Judging by the laws which have been promulgated fixing the principles of a national tariff and by the tariff enforced on the non-treaty Powers since 1917, this fear is groundless, the highest rate proposed, except on tobacco, wine and articles controlled under government monopoly, being forty per cent. In distinguishing between classes of goods the future rate will naturally be fixed solely by fiscal considerations on goods which China cannot produce herself and which are not essential to her production. Thus the highest levy would be made on luxuries. In fixing a differential rate for non-luxuries, foreign goods such, for example, as machinery which are necessary to Chinese development and which cannot be produced at home at present will tend to be taxed less heavily than non-essential commodities. Fine grade cotton goods, to take another example, will probably be less heavily taxed than the coarser grades which can be more readily produced by the Chinese manufacturer. The protection thus afforded should have the effect of stimulating the internal production of the commodities protected.

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It cannot be denied that a Chinese national tariff framed with a view to protection as well as making higher charges than at present for fiscal reasons will have an unsettling effect on foreign trade and will have particularly serious consequences for such countries as Japan because of the character of their imports into China. To evaluate these possible consequences, however, is outside the scope of this study. Unfortunately, no matter how reasonable the Chinese tariff charges are made they will have their critics abroad, but it must finally be judged, when promulgated and put into effect, by its internal rather than its external results. It may safely be said, however, that it will be some time before domestic industry is in a position to dominate the national market in the great staples of foreign trade.

At present the Chinese manufacturer is not able to satisfy the demand of the country for many types of goods which should be afforded tariff protection, so that another result of the establishment of a protective system perhaps will be to raise the price of goods to the consumer, even if only sufficient protection is afforded to equalize the cost of production for

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the Chinese manufacturer. The foreign goods will still be needed to satisfy the existing demand but they will necessarily be sold at about the present price plus the tariff addition. This will set the price for the internally produced commodity perhaps higher than it would be under present tariff conditions. But to offset this increased cost of goods to the consumer there will come a greater economic capacity as industries develop and the machine economy becomes established. At any rate, if it is to the national interest to foster industrial development, any reasonable sacrifices of an immediate nature to realize the ultimate good must be made.

Another important consequence of China's securing tariff autonomy will be that, through reciprocal treaty provisions, she will be in a position to protect her own export trade. At the present time commercial relations between China and the other states are on a non-reciprocal basis. The Powers enjoy an extremely favorable position with respect to the Chinese market, but, in order to maintain that position, they are not, either singly or collectively, compelled to grant any privileges to Chinese goods imported into the sev-

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eral foreign countries. In fact they may directly discriminate against Chinese goods in favor of those of other competitive countries without there being any possibility of retaliation by China. Thus England might, if she wished, discriminate against Chinese teas and in favor of Japanese or Indian teas, without any fear of action adverse to the interests of her China trade, except possibly the popular boycott in extreme cases. This she might be tempted to do in order to secure concessions from Japan which would have the effect of fostering British trade with that country.¹² This would apply also to the products of Chinese industry, and, particularly in the future, would have had the effect of handicapping the development of industry by a restriction of the markets opened to Chinese goods on favorable terms¹³ if tariff autonomy had not been gained.

¹² In this connection it may be noted that the "most favored nation" treatment stipulated for in the commercial treaties is not inserted on a reciprocal basis.

¹³ The following news item from the *China Weekly Review*, January 17, 1925, p. 198, is of interest in this connection: "Representatives of the U.S. Treasury, who are travelling in China, are making an exhaustive study of the vegetable oil products in regard to establishing production

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Thus it must be conceded that the action of the Powers in giving up their privileged position under the treaties is one of the most important events of the past decade from the standpoint of future economic development in the Far East.

It goes without saying that any tax which unduly impedes the movement of goods within the country constitutes a hindrance rather than a help to industry as well as trade and consequently would have the effect of retarding development. Such a tax is the *likin*. Therefore it is an excellent thing that it is to be abolished as a preliminary to tariff reform. It was recognized by the Powers as a hindrance to foreign trade many years ago, and by the terms of the Mackay treaty of 1902

costs, quantities available for export, and other collateral questions, according to Julean Arnold, American Commercial Attaché, Peking, in his report to the U. S. Department of Commerce. The study will cover the subjects of soya bean oil, peanut oil, sesame oil, and other vegetable oils produced in China. The chief purpose of making this study is to decide whether it is desirable or not of affording tariff protection to the growing American vegetable oil industry." Here we find revealed the proposed use by the United States of its tariff for protective purposes, and a case where, because of her restrictions, there is no possibility of China's protecting herself by threatening retaliation.

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Great Britain agreed to permit China to raise her import duties to a total of twelve and one-half per cent if and when the likin charges upon articles of import and export should be discontinued, providing the other western states accepted the same provision. The United States and Japan agreed to substantially the same provision in 1903, but the other Powers had never accepted it until the Washington Conference and so likin charges are still levied on foreign goods. However, for the foreign merchant, some of the evils of the likin have been mitigated by the provision for payment of a transit tax which is supposed to exempt his goods from all further levies.¹⁴ These transit dues may not exceed a nominal two and one-half per cent ad valorem. This enables him to move his goods throughout the country without the vexatious delays incident to the levy of likin.

The transit pass system as a substitute for likin is not entirely satisfactory as is indicated in the following quotation: "The main diffi-

¹⁴ It should be said, however, that an apparent attempt to exact further charges in the form of "destination" or "consumption" taxes has been made, sometimes successfully.

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culties are, that in order to see that the goods being conveyed are those covered by the pass, the authorities at the various barriers must have the right of examination. This is just, as, did they not, the dishonest merchant would be able to profit by it. But the power of examination gives them the chance of making additional squeezes, for they can always demand a *pourboire* for not examining; threatening to examine if it is refused, and so causing a delay of three or four days at each of the barriers to be passed. These difficulties will cease only with the total abolition of the barriers. . . . If the merchant elects to move his goods without a Transit Pass, he must make his own arrangements with the authorities. This is usually done by large Chinese firms on the basis of a fixed monthly payment, or fixed sum for each movement of goods. The government is doubly defrauded by this system, since the merchant pays on less goods than he moves, and the official reports less duty than the merchant paid. . . . It sometimes happens that Likin officials will compete with the Transit Pass system, by offering a rate which is just cheaper than the cost of the pass, and of course arranging to the merchants' sat-

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isfaction that there will be no delays, disputes, or attempts to avoid the bargain. This can only be done where the goods have not far to go, or they would pass other barriers than those under the control of the man with whom the original bargain was made."¹⁵

This indicates that the transit pass system, even if it were extended to cover all goods, not merely those imported or destined for export, would not prove a satisfactory substitute for likin. No change would be satisfactory if it substituted one pretext for delay for another, for it is the delays attendant upon the imposition of likin just as much as the charges themselves which are objectionable. If the barriers were found only at the provincial boundaries the objection would not be so serious, although that would constitute an indefensible handicap to trade. But it is quite the exceptional case where, as in Hunan, there is only the one levy, that at the provincial border. Actually, of course, that means two if the goods are being transported through Hu-

¹⁵ From article by Gerald King, "China's Taxation of Imports and Exports," *Far Eastern Review*, February 1919. Also quoted by Willoughby, *Foreign Rights and Interests in China*, pp. 125-6.

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nan. "Kwangtung," says Morse, "is more nearly typical of the Empire; here between Canton and Wuchow, a distance of about two hundred miles on the West River, there are six likin 'barriers,' each constituting a barrier to the free movement of traffic, and each involving delay, vexation, and payment. Along the Grand Canal between Hangchow and Chinkiang, likin stations, alternately collecting and preventive, are established at distances averaging ten miles one from the other."¹⁶

If China is to be regarded as an entity, then sound economic policy demands that she be unified economically by the elimination of these interior barriers. They serve no useful purpose politically and they do handicap the development of trade, upon which industrial development depends more than anything else. The first step in the unification of Germany came with the gradual establishment of the common customs union. If the internal trade barriers had been maintained, whether with or without political unification, the tremendous expansion of German industry and commerce in the years following 1871 would

¹⁶ Morse, *Trade and Administration*, p. 121.

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have been impossible. When Italy became one political entity she signalized the political achievement by making of herself an economic unit. The desire to break down trade barriers between the states was one factor in bringing about the establishment of the United States. And in each of these instances the abolition of trade barriers justified itself from the economic point of view. China, then, is going counter to all the experience of other states in maintaining the likin barrier. This has been long recognized by the more enlightened officials of the country and by the business community. There must, therefore, be some reason for the retention of the likin system.

This reason is twofold. In the first place, the local and provincial officials profit by it, and, up to the present time, the central government has not had the power to force them to act against their personal and private interests. It will only be with the establishment of a strong central government of a non-military character and the reorganization on a national basis of the revenue system that it will be possible to secure the abolition of the likin. Even then it will be necessary to overcome the

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second obstacle to such a reform. This lies in the fact that likin is a revenue producer, even if an unsatisfactory one. There will have to be found other sources of revenue capable of taking the place of likin if it is to be brought to an end.

The expected additions to the national income from the tariff both immediately and after 1929 should compensate for the loss of likin. But since the latter is controlled by the provincial authorities, as has been pointed out, while the former will accrue to the Peking government, it will be necessary to secure the assent of the provinces before the pledge to abolish likin can be fulfilled, unless and until the provincial governments are again completely subjected to Peking. Whether the present impotent central government will be able to secure this assent by 1929 is problematical. This may be the reason why some of the Powers were willing to accept the principle of tariff autonomy, contingent for its application on the abolition of likin.

It is beyond the scope of this work to consider in any detailed way such other aspects of the financial problem as the existing debt situation, both internal and foreign, and the

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problem of the budget.¹⁷ It is well known that China's credit abroad and the government's credit at home is bad. This is, however, only a temporary condition, and is not due to the present existence of a staggering burden of debt. The burden already assumed is light in comparison with that of other states with potential resources far inferior to those of China. Her poor financial standing is due to the backwardness of her political arrangements, the decentralization of the country, and the retention of the taxes in the provinces for provincial uses, leaving the central government with totally inadequate means of maintaining the national credit. Given a satisfactory solution of the political problem, and the application of sound principles in the reorganization of her financial system through the consolidation of all payments in a common treasury, with adequate methods of accounting introduced, together with a system of collections which insures that the government shall receive the sums actually collected, and

¹⁷ It would be futile to consider the budgets of recent years because they have been largely paper work in the Treasury Department. Furthermore the political condition has been so confused that the budgetary problem has been abnormal.

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the government will be able to maintain all of the present debt services, pay higher salaries to its officials in return for the ending of the practice of "squeezing," and be able to expand its administrative activities. If disbursements are wisely made, with a view to the development of the country, the people will be able to pay even higher taxes than at present without feeling the burden to be heavier. And, finally, if the needs of the industrial and commercial community are kept in mind, and the tax system is established with a view to fostering industrial development rather than in disregard of the interests of business, then out of the reorganization should come a real stimulus to the industrial development of China.

CHAPTER FOUR

Currency Reform

THE modern national industrial state is fundamentally an economic entity just as the agrarian state is largely a legal society. Its creation as well as its continued existence depends on the establishment of conditions under which there can take place the widest possible interchange of goods with the minimum of inconvenience. The production and distribution of goods, in other words, is the main function of an industrial society. For, with the division of labor, the specialization of production, which has come in the train of the factory system, no man, and no community, is in a position to satisfy all of his or its own wants. Because of the necessity for exchange of the products of industry our economy has become to a great extent a money and credit one. "Our modern economic life," write Foster and Catchings,¹ "is founded on money. Our whole industrial order is based on production of goods for sale

¹ *Money*, p. 5.

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at a money profit. The economic value of virtually everything, except consumers' goods already in the hands of consumers, is based on the expectation that it can be sold for money, or will have a part in producing something that can be sold for money. In our warehouses, factories, shops, and stock-yards are vast stores of wealth—apples and amethysts, beets and barrels, carriages and cattle, and so on to the end of the list that, in its detail of grades, sizes, and styles, would outrun the pages of the biggest dictionary; and in all these multifarious things the owners have one common, dominant interest, namely, to exchange them as soon as possible for the largest possible amount of money." In addition to money, credit and faith underlie the activities of an industrial society. Confidence in the money standards and in the paper currency flowing from a belief in the willingness and ability of the government to sustain it at a fixed exchange value is necessary to a stable economic life. Confidence that contracts entered into will be carried out at a future time in good faith in the terms agreed upon must be present. The element of faith that is a necessary concomitant of the corporate form

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of organization must exist before the concentrations of capital requisite for the development of industrial life are possible.

All of these elements demand as the first condition of their existence a sound currency system without which the element of certainty in the economic life of a country cannot establish itself.

It is for these reasons that the currency system furnishes one of the first points of attack in the development of a reform program for China. One unfamiliar with the Chinese monetary system can scarcely appreciate its chaotic condition. Once he appreciates it he will have little difficulty in estimating its effect on the industrial life of the country. Our first task then is one of description.

In the first place, the principal standard of value has always been the tael, which is not a coin but a weight of silver. All business transactions must be put ultimately in terms of the tael although it is not a measure which can be seen and handled as can the American dollar. In international exchange, it may be said in passing, the tael has a fluctuating value in terms of gold varying with the price

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of silver. This may mean changes of as much as thirty to forty per cent in the value of a tael in international transactions in the course of a year. If the tael were one uniform, standard, and accepted measure of value for the entire country it might perhaps serve its purpose as a fictitious money standard even though it has no existence as a coin. But there is no standard tael with a uniform accepted value. The situation is well described by Wagel² as follows: "Money, as it is commonly understood in civilized countries, does not exist in China. There is certainly supposed to be a tael, or a Chinese ounce, which, for all ostensible purposes, is a common measure of value. But if this tael performed the functions of money, there would have been no occasion for the existence of the large variety of taels—the values of which are regulated not only by the weight, touch or fineness, but also by what is known as old custom. It is well known, of course, that there are seventy-seven distinct varieties of the tael in China, and Mr. Morse states that he has notes of 170 different currencies. There is of course no coin known as the tael, which is a Chinese ounce

² *Finance in China*, p. 222.

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of silver of varying standards of purity and weight. Every commercial center has, apart from the various government taels, its half-a-dozen, or dozen, or score of local taels, all generally current; that is, each of them is a recognized currency when it is so stipulated." Out of this condition arises such a situation as that described by Mr. Morse³ as true of one town where there were at least sixty possible currencies. That one town, he says, is typical of the whole country. Among the taels in use in parts of the country, or, for certain purposes, throughout the entire state, are: the Haikwan or customs tael which is the standard in all foreign trade and customs transactions; the Tsao Ping, which is the standard for all general purposes; and the Kuping, which is used in estimating the value of all revenue payments to the government. Then there is a Tientsin tael and a Shanghai tael, each with its own standard of weight and purity, and many others with a local use.

Next to the tael we have the dollar, or rather the dollars, which have come into use more recently. Of these there are three principal types: the Mexican or Spanish, the

³ *Trade and Administration*, pp. 164-5.

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Peiyang, and the Yuan Shih-kai. These are all minted coins, with a supposedly definite amount of silver of a fixed purity or fineness. Their use as a medium of exchange has been increasing in the past fifteen years, but they have not displaced the tael as the standard of value. Their exchange value in terms both of gold and of the several official taels varies considerably during the course of a year.

The subsidiary coins consist of twenty- and ten-cent pieces of silver; copper cents; and the brass cash which is still largely used in the interior. While the ten-cent piece is theoretically valued at one-tenth of a dollar, actually it is a rare occurrence to get only ten ten-cent pieces in exchange for a dollar. During parts of 1916, for example, the exchange shops in some places gave twelve ten-cent pieces and some coppers as the equivalent of a dollar. The same is true of the twenty-cent piece and the copper, the value varying with the shifts in the price of silver, and with the actual intrinsic value of all of the coins.

As if the currency system as above described were not complicated enough, the paper money issue adds greatly to the general confusion. There has been no effective

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governmental supervision or restriction of the issuance of paper currency. Consequently there are many kinds of bank notes in circulation, some only locally and some over a wider area. The banks are not legally required, as a condition for the issuance of notes, to maintain a reserve which would enable them to redeem their issues when called upon. The result is that there has been an over-issue by many of them and this has been followed by depreciation. The exceptional cases are those where the bank itself has established its own policy on sounder lines than is usual, or those where within a limited area the notes circulate at par because of the local confidence in the honesty and capacity of the men connected with the institution. The foreign banks also furnish exceptions to the general rule.

Among the leading banks of issue are the Bank of China, which is really the fiscal agent of the central government, and which maintains branches throughout the country, and the Bank of Communications which bears a similar relationship to the Ministry of Communications. Then there are provincial banks which serve in somewhat the same way the

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needs of the provincial governments. These latter have been the worst offenders in the over-issuance of paper. For this, however, their managers are not entirely to blame as they have been forced to resort to the printing press to help finance the provincial governments. The policy of the Bank of China has been similarly affected by its governmental connection.

This necessarily brief description will perhaps help to explain why China is the money-changer's paradise. Every transaction of any importance involves the exchange of money through several mediums, in all of which the exchange-shop plays a part, and from which it draws a profit.

The bare description also shows why it may be truly said that the chaotic currency system of China circumscribes trade and limits the possibility of its development. The daily currency fluctuations inevitably inject an element of uncertainty into the business life of the country which becomes less and less tolerable as, with greater differentiation in the economic life, and with a production which demands a market wider than that of the locality, the medium of exchange becomes of

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primary rather than of secondary importance. Under present conditions the currency of the country enters into business transactions as an object of barter as well as a standard of value, whereas the life of an industrial state demands that it shall be fixed and unchanging to the greatest possible extent and be uniformly accepted over the widest possible area as the standard.

It goes without saying, then, that currency reform is necessary if China is to realize to the full her industrial possibilities. The question that remains is how this reform can be effected. The first solution that is offered by the foreigner is that the gold standard should be introduced, and that a decimal system of subsidiary coins should be brought into use, based on the silver dollar: in other words China should follow the Japanese example and take over the monetary system of the United States or one of the other western countries. This course would certainly be the simplest if it were practicable, but it overlooks the complications coming from the existing confused system with its many coins and values, all of which must be taken into account and disposed of in such a manner as to gain the

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confidence of the people in the new system. Mr. Passeri⁴ appears to be correct when he writes:⁵ "It seems quite impossible now that so many parts of China have nearly independent monetary systems and local peculiarities of exchange, depending in many cases upon nothing more than local taste and prejudice, to consider adapting the Chinese currency system to any foreign standard. The first task in reform must be the adoption of coinage standards within China itself so that the numerous kinds of money now circulating will at least exchange at a fixed rate with the selected standard." Furthermore, the coinage standards must be of such a nature as to win voluntary acceptance among the people. This in the face of the fact that at present there is only a limited support for reform while there is much opposition to it which would have to be overcome.

It would seem at first view that, since simplification of the currency would certainly benefit all, ultimately there would be great popular support for any plan which would

⁴ Financial Adviser to the Chinese Government.

⁵ *Far Eastern Review*, May 1918, p. 169.

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have that result. But, says Mr. Morse,* "this presupposes that the four hundred millions are crying for relief, but we must first see who it is that calls for currency reform. The foreign merchant stands in the first place, with his crying need for fixity of exchange between gold and silver, which requires for its establishment a fixed unit of currency, which in turn can be obtained only by coinage. That he will also be freed from bondage to his comprador does not appeal to him, since he is unlikely to realize their respective positions, and the activity of his advocacy will be weakened by so much; moreover, there are in China less than a thousand firms of European and American nationality, even including the protected races, such as those from British India, and including branch firms. Then come the foreign banks, ten in number; they may consider that their profits from rapid fluctuations in exchange, of the causes of which they have prior knowledge, will be made good by the development of legitimate trade resulting from certainty of exchange; and they may set against their profits from changing funds from one standard of currency to another

* *Trade and Administration*, pp. 188-9.

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their newly acquired ability to keep their own treasuries. The government of China will welcome any measure which will set a limit to the amount which it must take from its revenues to pay the indemnities due to the foreign Powers; and, as a corporate entity, may be willing to have a uniform currency in which the revenue may be paid and received. No other element of support can be brought in by any stretch of the imagination. All the vested interests in China will be against the change. The members of the government as individuals, from the highest Minister of State in Peking to the humblest assistant-deputy sub-district magistrate, will give it their tacit, if not openly expressed opposition. The tax-collector, with his assistants and his servants, and backed by his family in all of its many branches, will fight strenuously against any obligation to pay into the treasury the exact coin which he has received from the taxpayer. The powerful body of Chinese bankers, organized as such when Europe did not know the science, will accept the change only if they are shown the possibility of greater profits than under existing conditions. The compradors and shroffs may be trusted to do

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their best to resist any attempt to curtail their privileges and profits. Even the native merchants and tradesmen, who will benefit enormously by simplification of the currency, will also oppose a change from the present system, in which each man counts confidently on getting the better in the encounter of wits. Ordinarily the proletariat remains neutral in such a question; but in China the merest coolie, earning six pence by a long day of hard work, will spend an hour of his time to gain on exchange the equivalent of ten minutes' work."

This discouraging lack of support for currency reform, however, is not so extensive today as it was when Mr. Morse wrote the above characterization. Nor will it be as apparent tomorrow as it is today for trade is developing more and more completely on a national scale, a development which will be more pronounced as more adequate communications are established, and this has the effect of emphasizing and dramatizing the currency chaos and the need for the development of standards uniform throughout the country. The fact that this situation exists is pointed out not to show the impossibility of reform

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but to indicate that any plan of simplification must be adapted to gradual introduction.

The discussion of reform in the past twenty years, while it has not had any really noticeable effect, has helped to focus the attention of the country on the problem and to win support for any practical plan of reform. It has further served to emphasize the basic elements of reform, and the limitations under which it must be undertaken.

The first serious consideration of the problem came after the government had agreed, in the Mackay treaty of 1902, to reorganize the currency system. Shortly thereafter, at the request of the Chinese, the United States took the lead in studying the question for all of the silver standard countries. Mr. J. W. Jenks of the American Commission went to China and made a report, based on his observations, in which he advocated the introduction of the gold exchange system. No action was taken on the so-called American plan because of unfavorable memorials from some of the high-placed officials, notably Chang Chih-tung. The opposition was due largely to misunderstanding of the essentials of the scheme proposed, but was partly due to the

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proposal for foreign supervision during the first stages of the reform. From the time of the rejection of the American plan,⁷ but after considerable discussion of an intermittent sort, the proposals which came to be considered by the government involved the retention of silver as the standard. Plans for change were definitely embodied in law in 1910-11,⁸ and a loan was secured for currency reform in the latter year, just before the outbreak of the revolution. This event led to postponement. But a second series of regulations was promulgated in 1914,⁹ to be put into effect immediately. Unfortunately the disorganization following the death of Yuan Shih-kai again resulted in the postponement of reform. But both of these plans left as their aftermath further complications, rather than simplification, since large amounts of the new coins which had been agreed upon as the standard were struck off and put into circulation.

Both of these governmental plans were defective in that they did not embody a work-

⁷ A detailed summary of the plan may be found in Wen Pin-wei, *The Currency Problem of China*.

⁸ For Regulations, see *China Year Book*, 1912, pp. 281-8.

⁹ Translated in *China Year Book*, 1921-22, pp. 295-300.

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able means for introducing the new coins and driving out of circulation the old. Furthermore they involved a measure of legal coercion in the use of the new coinage which might readily have caused suspicion among the people. Their essential soundness, however, lay in the partial realization that reform must be based on the internal situation first of all, rather than on the need of the foreign trader or that of the government in the payment of its foreign obligations. In other words, the first essential is the establishment of a uniform and simplified currency which must, under present conditions, hold to the silver standard. After that is accomplished the gold exchange system should ultimately be introduced. Theoretically, as has often been pointed out, it would be best to give a gold exchange value to the silver coinage from the first. Ultimately this would also probably prove cheaper. But it would introduce complicating factors which would more than counterbalance the advantages to be gained. It would also encounter such serious objection that it might hinder the undertaking of any reform.

A workable plan of simplification which

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embodies all of the good features of the previous projects, and which also indicates the procedure to be followed in bringing to acceptance a uniform currency has been suggested by Mr. Passeri, financial adviser to the Chinese government. This plan will be outlined in the following paragraphs as the one best calculated to attain the desired end of bringing order out of the currency chaos.¹⁰

In the first place Mr. Passeri believes that in spite of the advantages to foreign trade which would flow from the successful introduction of the gold standard the beginnings of reform should not take it into account. "If a gold standard were adopted now without preparation the problems of internal trade relations and the problems arising out of the thousand and one antiquated and cumbersome systems of monetary relations in China would be thrown into unspeakable chaos. The old mediums of exchange with their tenacious accompaniment of prejudices, could not be abolished in a day; the introduction of a gold standard would have no effect for instance

¹⁰ "How to Standardize the Chinese Dollar," in *Far Eastern Review*, May 1918, pp. 169-72. All the following quotations are from this article.

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upon the old system of transfer taels and its accompaniment of evils, and would, as long as the internal system remained unadjusted, simply give the ingenious Chinese exchange profiteer another gambling element to introduce into his transactions.”

Proceeding, then, on the apparently sound assumption that silver must be the standard in China, at least until internal reform and simplification has been accomplished, the plan is built up on the foundation of use of the Bank of China¹¹ as the agency for carrying it into effect. This, however, involves two other essentials to make the scheme a success. One is that the Bank of China should be normally efficient, by which Mr. Passeri means as efficient as it was in 1916. To reach even that standard at the present time demands a strengthening of the Bank and a modification of its organization and present policies. This depends, in turn, on a government existing which is normally effective. In other words, before the plan could be put into operation a re-consolidation of the provinces under the direction of at least as strong a central gov-

¹¹ The general organization and the functions of the Bank of China are described in chap. VI, pp. 187-8.

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ernment as that existing during the régime of President Yuan Shih-kai would have to be accomplished. Thus a successful reform of the currency system is dependent on a solution of the problem of government, as has already been pointed out.

After these conditions are realized the first step would be to select a standard from among the many existing in the country.¹² The tael should be discarded as a possible standard because it is not money in the sense in which the word is used, being only a weight of silver. Among the dollars in use the most logical selection would be the Peiyang. It would have to be a uniform dollar, as it is not altogether today, both as to appearance and fineness. "The arguments for its adoption, which fall in line with the principle that for China the easiest way is the best way, are that a greater number have been minted than of any other dollar, and that it circulates already over a wider area than any other. It was said some time ago that there were 200,000,000 in circulation in China and there is good reason to believe that the circulation has been recently increased.

¹² Rather than the introduction of a new standard.

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“After the adoption of a standard the next step would be to insure its constant value and to guard it against the fluctuations in value which in China have so little to do with intrinsic worth and so much to do with taste, unaccountable preferences, and manipulation of exchange.”

This dollar would have to be legalized as the standard and its value fixed by law. This would not by itself make it acceptable to the Chinese people, nor bring it into wide use. That work would devolve on the Bank of China. This it could accomplish by “the judicious use of the standard, by insisting in all exchange upon the maintenance of the constant value and by exercising every influence to render it popular in districts in which other dollars are in fashion.”

No attempt should be made by the government to force the standard dollar into use for that would create dislike and suspicion of it immediately. The people would in all probability in that event look upon it as another source of squeeze for the officials. Speculation at the expense of the masses would probably also follow which in turn would lead to further mistrust. “The standard should be indi-

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cated, not enforced, and then it should be the business of the banks to persuade the people themselves to conform to the standard."

After the standard has been agreed upon Mr. Passeri proposes the development of his plan in three phrases. First "the Bank of China should issue bank notes, as it has done with some success in the past, bearing the name of the place or province of issue. It should be the Bank's first duty to try to level up the differences now existing in the quotations of the various dollars and to pay them in the adopted standard—the Peiyang dollar, if it were adopted. Such a levelling up of quotations might at first seem an expensive undertaking, but it has been achieved in at least one instance by the Bank of China. If all the branches of the Bank were to work together to this end in absolute good faith and abandon the old policy of 'squeezing' each other on rates, thereby causing unjustified losses, the levelling up of quotations and the gradual introduction of the standard would cost little or nothing.

"It would be a distinct advantage in a note issue to have the names of the places or provinces of issue printed on the notes. The Bank

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would be under legal obligations to cash them at the place of issue only, and while for the working of the scheme of reform it would be advisable to cash all notes at par wherever presented, the bank could legally reserve the right to pay at the point of issue only. It is probable that at the beginning until the Bank had learned by experience where there would be the heaviest demands for silver, according to the season, crops, conditions of trade, etc., the distribution of silver reserve would not be wholly judicious, and the right of restricting payment to the place of issue would be a convenient precaution in case of an abnormal demand. In the ordinary course of business under normal conditions the cashing of the notes at par at all banks would be regarded by the public as a favor and a convenience and would tend to make the note issue popular.

“In the cashing of bank notes, the Bank of China would of course use the standard dollar throughout the country, and to provide for this no special fund should be needed, as a sufficient silver reserve would be provided at the time of the issue of the notes; for if notes were put out it would be only against

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silver, or against credit of such nature that it could be converted into silver.

“Much of the silver that would come into the branches against notes would not be of the standard, and it would be the Bank’s duty to remind all such silver at once and to pay out no silver that was not standard. The process of issuing notes payable in a standard dollar, of putting the standard into wide circulation through the redemption of the notes in the ordinary course of business and of accepting and reminding all coinage other than the standard, should be continued until notes to the value of \$75,000,000 had been put into circulation, which under normal conditions should not require much more than one year. The Bank of China would then be prepared to enter upon the second phase of the scheme of reform.

“When the circulation of notes of small denominations (they should not be higher than \$10 during the first phase of the reform scheme) had reached approximately \$75,000,000, it would be time for the Bank of China to announce to the public the withdrawal of all notes bearing the name of the place of issue against new notes, also payable

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in the standard dollar and circulating at par throughout the country. In this issue notes of \$50 and \$100, not higher, could be introduced. As a measure of safety in this issue it would be well to have the notes redeemable at only three places besides Peking; namely, Tientsin, Shanghai, and Canton. No other branch of the Bank of China should be legally liable to cash notes, although it would be good business for all other branches to cash them as a favor to the public whenever they were in a position to do so. By this arrangement, China would be divided into three districts, northern, central, and southern, and only one branch in each of these districts would be under legal obligations to cash notes, besides the head office in Peking. This arrangement should be satisfactory and give sufficient accommodation to the public and it would permit the Bank of China to distribute its reserves satisfactorily. At the same time the restriction of the issue to denominations of \$100 or less, coupled with the fact that redemption of the notes would be limited to three branches of the Bank, would effectively check speculation.

“These measures designed to popularize

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the notes, ought to bring the value of the note issue up to \$100,000,000 in a very short time, and since these notes of the Bank of China would be the only ones based upon the constant standard in China, the public would undoubtedly prefer them to the notes issued by any other institution. . . . Having accomplished this much, the Bank of China should have a total reserve equivalent to at least eighty per cent of the total value of the note flotation, and if all silver received against the notes were consistently reminted the stock of standard dollars in reserve should be large.

“The one object of issuing great numbers of notes, of reminting dollars, and of doing away with provincial limitation upon the circulation of notes, would be to convince the people of the value of a standard coin and of the value of notes based upon that standard. It would be a campaign of persuasion, much more likely to succeed in China than a campaign of coercion, especially in financial matters. The sole end of the processes which have been outlined would be to educate the Chinese people, who are extremely reasonable and intelligent in such matters, up to an apprecia-

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tion of mediums of exchange of constant value. The third step in reform would come whenever it was felt that this had been attained, and this third step would be the establishment of a constant ratio between the chosen standard dollar and all other forms of coinage or mediums of exchange in use in China.

“Possessing a standard dollar, something of constant value, together with its substitute, the bank notes, a table of equivalents should be compiled showing the value of all other kinds of money in their relation to the standard. The ratio in the case of each kind of coinage should be established according to the silver equivalent of each coin taking into consideration of course fineness, touch, scale, etc., less a very small proportion of the minting charges of the standard dollar. This table of equivalents should be given the widest possible publicity by the Ministry of Finance, mentioning that the Bank of China was prepared in all its branches to receive in exchange for standard dollars at the fixed ratio all coins, shoes, bars, and the like, circulating as mediums of exchange. The banks should be under no obligation of course to pay out other

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coinage than the standard in exchange for standard dollars, though it would continue to cash its notes at the four branches stipulated.

“There should be no attempt, even at this stage of the reform, to force the standard upon the people for any such attempt would undoubtedly make the Chinese public suspicious of the whole scheme. They should be left to realize the advantage of a standard of constant value and of constant exchange in all other coinages and mediums, and to take their own time about bringing forward whatever other dollars or mediums they possessed to exchange for standard dollars or standard notes. When the public had shown some such tendency it would be time to issue notes of larger denominations, rising gradually to \$500, to take the place of mediums of exchange now used in big transactions. Chinese merchants would soon prefer to carry notes with them on a journey, as it would not take long for one to appreciate the advantage of carrying one hundred \$500 notes instead of about eleven cases of sycee, especially when the notes would be negotiable anywhere for actual hard silver of standard value.”

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Thus far nothing has been said about the reduction of the welter of subsidiary coins to a standard exchange value, which would naturally have to be fixed in terms of the dollar. They are not, however, neglected in the proposed plan. "The easiest and cheapest way to standardize the value of small coins would be for the Bank of China, say in the second phase of the standardization of the dollar, to advertise its readiness to exchange small coins against the standard both ways. The following values would probably strike an average between the values of the various coins of nominal value of 1 cash, 1 copper, 10 cents, and 20 cents; 1,250 cash to the standard dollar, 120 coppers, 10 ten-cent pieces and 19 coppers, and 5 twenty-cent pieces and 19 coppers. This would be an expensive arrangement for the Government but a certain proportion of the coins, which would undoubtedly flood the Bank at first, could be purchased with the new notes, and as the number on the market was reduced, the rate could gradually be lowered and the coins distributed judiciously over the country, so that in a few years the value of these coins could

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be made constant and probably decimal to the standard."

It would naturally have to be understood as part of this scheme of standardization and simplification through the issue of bank notes that the Bank of China and its branches should have an exclusive legal right to issue notes. Mr. Passeri suggests that it should be empowered to issue up to \$300,000,000 free of taxation, above which figure issues could be taxed according to a progressive scale.

The chief argument which can be advanced against such a proposal as the one just outlined is that the prerequisites to its successful inauguration are not likely to exist for some time. But it is also true that no simplification of the currency system of China can be brought about until there is reestablished order out of the existing political chaos. If that does not come in the course of time then China as a state will have ceased to exist, which would mean that the problem of industrializing the country would have to be considered from an entirely different point of view. In any treatment of the question the continued existence of China is a basic assumption, which necessitates a second as-

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sumption, namely, that in time an efficient governmental system will be established. When that time comes, with it will come the establishment of financial agencies capable of putting into effect a plan of currency reform such as the one proposed. It seems entirely reasonable to expect the Bank of China to continue as the fiscal agency of the new government, but if not then the name of the financial agency would merely have to be changed.

As to the other requisite, the bringing of the Bank of China to a condition of normal efficiency, it may be pointed out that its loss of efficiency has been due in large part to its governmental association. Its general financial policies were sound until the government came to regard it as a source of income. It was governmental pressure rather than a desire on the part of the managers of the Bank which caused it to resort to over-issues of bank notes, and it was the governmental drain on its resources which caused it to weaken in the meeting of its obligations.

As Mr. Passeri indicates, however, it does need to strengthen itself in its organization by bringing the branches under a more

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effective control, thus preventing too great a competition between them.

When the proposed plan of reform, or some other equally practical one, is put into operation one of the serious handicaps to the development of industry will have been removed. Interprovincial distribution of goods will take place with greater assurance and to a greater extent, thus widening the market for the products of industry, which in turn will stimulate production. The need for reform of the currency system will be emphasized as more adequate communications are established, and the consequences of reform will be more marked with each such advance.

CHAPTER FIVE

The Problem of Communication

No country has ever experienced an extensive industrial development until adequate means of communication have been established. Consequently the problem of communications is one which must be solved before the industrialization of China can proceed much beyond the point thus far reached. As a matter of fact, many other of China's problems depend for their satisfactory solution on the development of more effective means of communication. There is over-concentration of the population in some provinces while others are comparatively underpopulated. Famine conditions exist in some sections of the country when there is a surplus of production in others, a surplus which cannot be used to abate the famine conditions because of lack of means of quick transportation. An effective political centralization depends for its maintenance on a system of transport and communications under the supervision and control of the cen-

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tral government. The betterment of the means of communication will unquestionably facilitate the solution of the currency problem by bringing home to the people the losses suffered through the continuation of the present cumbersome and chaotic conditions. So that it is not alone because the extension of the present means of transportation and communication will broaden the market, replacing the present local market for goods with one that is national and international, which makes it imperative that this problem shall be regarded as the most important one to be solved by modern China.

Until railways began to be built in China toward the end of the nineteenth century, the principal arteries of commerce were the waterways, both natural and artificial, with which the Empire was bountifully provided. These included such rivers as the Yangtze, the chief waterway of the country, navigable by large steamers for about one thousand miles from its mouth; the Hwai river, in central China, navigable for the greater part of its length; the Han river, navigable for about three hundred miles; and the West river, also navigable for long distances.

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The Chinese had begun to supplement these river highways by canals at an early stage in their history, and had gradually constructed a perfect network of artificial waterways, largely in central and southern China. Many of these canals had been maintained in an excellent state of repair and afforded cheap and locally adequate transportation facilities for non-perishable goods and for all exchanges where the time consideration played little or no part in the transaction. Others, however, had been allowed to fall into disrepair so that they had become practically useless during the last days of the Manchu rule. This was true, for example, of the northern part of the Grand Canal, the most ambitious of these undertakings.¹ It must be recognized, then, that the country has the foundations for a most satisfactory system of waterways, given a government capable of restoring the ones which have not been kept up, and of extending the system somewhat further as it would be easily possible to do.²

¹ It traverses four provinces and is about 850 miles long. *China Year Book*, 1921-22, p. 465.

² Thus in two provinces alone, Chekiang and Kiangsu, "in an area 175 miles by 160 miles there are said to be 25,000 miles of canal." *China Year Book*, 1921-22, p. 465.

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But many of the provinces are very poorly provided with either natural or artificial waterways. This is particularly true in the northern, the western, and the southwestern provinces. And even where we find canal systems most highly developed there remains the need for some means of communication in the regions which cannot be reached by water, and also the need for establishing land connections with the waterways. In other words, whether with or without waterways, the need for land routes exists. The need is undeniably greater in the provinces falling under the first group than in the second case. But it exists in both instances.

In the old China there was a tremendous lack in the way of roads, not to say good ones, as a means of communication. Even for the existing modes of conveyance the roads were inadequate. The means of travel in the northern provinces, writes Richard, were "by cart drawn by ponies, mules or oxen. Some also travel in sedan chairs borne by carriers, or in mule litters, . . . and in barrows propelled by hand and sail. . . . For goods, conveyance takes place by ox-cart, by mules, by camels and by donkeys. Goods are also trans-

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ported to a large extent on the shoulders of carriers. . . . Beyond the main roads, carts cannot be used in Shensi and Kansu, while in Shansi the highways are even in such a bad state that it is difficult to travel on them. . . . In the central and southern regions, carts are seldom used. Passengers travel on the barrow or sedan chair. Others ride on ponies, mules or donkeys. . . . Carriers are even more numerous than in the North.”⁸

Had the roads been kept in measurably good condition the difficulties of transport of goods would have been appreciably lessened for short carriages. But the roads were allowed to become merely ruts in the north, and were only footpaths between the rice paddies in the south, so narrow sometimes that footing was insecure. And obviously for interprovincial transportation, the difficulties, whether donkeys or human carriers were used, were so great as to discourage effectively the movement of goods.

One further quotation, typical of many at hand, and typical of the observation of those who have gone into China beyond the treaty

⁸ *Comprehensive Geography of the Chinese Empire*, p. 427.

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ports and away from the railroads, will serve to illustrate the condition today still existing. A correspondent writes to the *Far Eastern Review*:⁴ "It is incredible that a province so full of commercial possibilities [as Shansi] should continue to be hampered as it is in the matter of transport. There is no traffic in June and July as the harvesting operations call for all the animals. In August and September and far into October floods render roads impassable and rivers uncrossable and only now does merchandise begin to move with some hope of constancy unless hindered by snow, until spring rains again dislocate the traffic.

"If only the roads were kept in some sort of order the Shansi cart as a vehicle is not to be despised. Long strings of carts drawn by four mules each are struggling through the gullies, each hauling 2,000 catties of goods to or from the railway and to every traveller these teams and teamsters are a constant marvel. . . .

"Goods coming along now are six months overdue! Some have been lying in inns or farmer's houses for weeks while the carter, forgetful of his contract, has been sowing, reaping, and storing his autumn crops."

⁴ January 1918, p. 26.

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With conditions such that the native carts are not able to move for months at a time because of the condition of the roads, the impossibility of introducing such rapid means of transport off the railways as motor trucks afford is immediately apparent. And yet, if industry is to develop, quick and easy transportation is essential. From this it can only be concluded that one of the problems confronting modern China, once political stability has been attained, will be the construction of roads capable of sustaining motor transportation. This will be one of the easiest and most effective ways of supplementing the railway system, the extension of which will also have to be pushed. The railway problem, as will be pointed out, is one which will have to concern primarily the central government. Construction of roads, and their maintenance, will have to be undertaken by the provinces, under a measure of supervision and control from Peking. But it is fundamentally a problem for government in China as well as in other countries.

That the need for good roads is now recognized by the Chinese is indicated by the fact that a "good roads" movement was launched

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at Shanghai in 1921, and also by the fact that there has been a beginning of construction of roads more or less well suited to motor transport. Just how much has been done by way of construction it is hard to tell. A writer in the *China Weekly Review*⁵ claims that more than seven thousand miles of motor road have been built in recent years. If that is true⁶ a substantial beginning has been made, and it may be expected that a cessation of disorder will result in still more construction activity. And to the extent to which the country is linked up by motor roads, to that extent will the problem of communications be in the process of solution, and to that extent will the interests of industry be promoted.

From the standpoint of industrial development, however, the building of railways is the crux of the communications problem. And the railway question in China is complicated by so many factors unknown to the United States and other western countries that it is necessary

⁵ January 10, 1925. "More than 7000 miles of motor roads built in China," by Hu Chieh-shian.

⁶ The only reason the writer has for doubting it is the optimism of Chinese writers which sometimes causes them to set down as accomplished things which have only been projected.

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to consider it historically and in some detail.

The first proposal looking to the construction of railways was made in 1863, at a time when the Imperial government had just put down one of the most formidable rebellions in the recent history of China. The Viceroy, Li Hung-chang, in his reply to the foreign petitioners, stated concisely the early Chinese point of view toward the innovation when he said: "Railways would only be beneficial to China when undertaken by the Chinese themselves and conducted under their own management; that serious objections existed to the employment of numerous foreigners in the interior; and that the people would evince great opposition to being deprived of their land for that purpose."

The Chinese themselves did not want, at that time, nor for some time thereafter, to undertake for themselves the introduction of the steam engine, and consequently there was very little construction authorized prior to the war with Japan. Such beginnings as were made were under the direction of Li Hung-chang himself after his transfer to the Tient-

¹ Quoted by Morse, *International Relations of China*, Vol. III, p. 74.

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sin Viceroyalty, and were due to his desire to make profitable exploitation of mines under his control. After a start had been made, under British auspices, he urged the continuation of the work for reasons of state. In this way began the construction of what came to be called the Imperial Railway System of North China, with a line extending finally from Peking to Mukden.

The experiment was frowned upon by other high officials partly because they felt that it was dangerous to build railways close to the sea. It was proposed, however, that the experiment should be continued by the construction of inland lines "safely remote from the sea."⁸

The war with Japan, and its disastrous conclusion, however, gave a new turn to development; first, by demonstrating the strategic value of the railway, and the absurdity of building only inland lines, and second, by injecting the international factor into the situation as the one of primary importance.

⁸ This objection was made by Viceroy Chang Chih-tung. Many of the officials, however, were hostile to all innovations proposed without specific reason for their opposition.

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For, immediately following the war, the movement on China, known as the "Battle of the Concessions," was begun. The concessions sought were mainly for the financing and construction of railways. Russia secured the right to project her Siberian road across northern Manchuria to Vladivostok, and, a little later, the right to drop a line southwards from Harbin, on the Chinese-Eastern railway, as this section of the Trans-Siberian road was called, to Mukden and still further south to Port Arthur, thus bisecting the province of Manchuria. Germany secured the concession for a road from Tsingtao, the lease of which had just been extorted from China, to the center of Shantung province; France gained a similar concession for a road from the border of Tongking to the provincial capital of Yunnan; and Great Britain secured substantial mileage in the Yangtze Valley. In addition each power secured from the Imperial Government pledges of preferential rights for the financing and construction of future lines in the areas thus marked out by each as its sphere of particular interest. The motive back of the insistence on these concessions in one mad rush was political, and the Russian,

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French, and German lines were built and later operated under governmental auspices through financing and construction companies formed for the purpose.

Each power was extremely jealous of the privileges secured by the others and demanded equal or greater ones for itself on the basis of compensation. An era of intense national rivalry was thus inaugurated which resulted in keen international competition for further railway concessions. This competitive era lasted approximately until 1908. During the years from 1898 to 1908 the Peking-Mukden road was finally completed; the Manchurian railways were built by Russia, and administered under the direction of the Russian government through the Chinese Eastern Railway Company until 1905, when, as one of the prizes of the war between Russia and Japan, the section from Changchun to Mukden to Port Arthur was turned over to Japan by the terms of the treaty of Portsmouth, being then administered by the South Manchurian Railway Company, a quasi-governmental corporation; the German Shantung Railway was constructed; and the Pakhoi-Yunnanfu road was built by France.

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These, with some additions in Manchuria, comprise the group of concessioned roads. In addition, Belgian capitalists, supported diplomatically by Russia and France, after a sharp struggle, secured the right to finance a road from Peking to the Yangtze at Hankow; Americans, partly as compensation for their failure to secure the Peking-Hankow contract, gained the right to construct a road from Hankow to Canton, a right which was resumed by China in 1903 because of the failure of the American concessionaires to live up to their agreement not to allow the control of the road to pass out of American hands. In all of these cases the interests of foreign finance were safeguarded by the pledging of the roads as security for the loans, by provision for supervision of the expenditure of the loan funds, and by provision for control of operations after construction through the appointment of a chief engineer, traffic managers, and accountants.⁹

Practically all of these grants were made before 1900 under the impetus afforded by

⁹ The texts of the various railway loan agreements mentioned, together with others entered into later, may be found in MacMurray's *Treaties*.

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the initial move on China following the war with Japan.

It is hardly to be wondered at if thinking Chinese found themselves pulled two ways in the years following this staking out of their country into spheres of interest, with railroad concession used as one means of marking off the sphere. There was a growing sentiment in favor of railroad construction which rapidly became a conviction that without better means of communication the Empire could not be held together. But there was a decided fear lest foreign political influence should be strengthened as a result of the construction of railways with foreign capital. That this fear was not unreasonable is evident when the use actually made of the railroads in Manchuria both by Russia and by Japan is recalled. Furthermore it was difficult to make any clear distinction between the enterprise undertaken by an agency such as the Russo-Chinese Bank, organized and controlled by the Russian government for the purpose of promoting Russian interests in China, and that undertaken by a banking house such as the Hongkong and Shanghai Bank, supported as it was by the

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British government, for it was clear that in some instances the foreign government was making use of its national financial agencies instead of being made use of by them to promote perfectly legitimate interests. In other words, in both cases it seemed to be true that the end aimed at in securing a railway concession was the advancement of a governmental interest or policy, rather than the making of a good investment. Another reason why the Chinese found it difficult to distinguish between the various enterprises lay in the fact that the control provisions seemed to be just as dangerous in the case of the commercial as in that of the political or strategic road.

For these reasons it was argued that, while railways must be built, new construction should be undertaken only by Chinese and with Chinese capital. The gentry in the provinces therefore expressed a willingness to finance the construction of roads necessary to complete the trunk line system blocked out in the early grants to foreign interests. This would have been a way out of the dilemma if it had been possible to raise the necessarily large sums required in the domestic money market. But this has proven impossible even

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up to the present time. Where attempts at construction were made, notably in Szechuan province, the sums collected were largely dissipated without adequate results and without the interest of the investor being safeguarded. One apparent exception to this should, however, be noted. The Peking-Kalgan road was built without resort to a foreign loan, and under purely Chinese direction. But, so far as financing was concerned, this exception was apparent rather than real since the funds for the undertaking came from the earnings of the Peking-Mukden road, already in operation, rather than by a resort to the domestic money market.¹⁰

One great disadvantage connected with the building of railways out of local funds lay in the fact that it meant the control of development by the provinces instead of Peking, which meant, in turn, decentralization of the system. This would have the effect of neutralizing the importance of the railroad as a nationalizing and unifying agency politically and strategically. This was perceived by the Imperial government and, just before its

¹⁰ Willoughby, *Foreign Rights and Interests in China*, p. 531.

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overthrow, it consciously reverted to the earlier idea of establishing a unified system for the entire country. This decision carried with it also a recognition of the fact that resort to foreign loans would have to be made at least for the purpose of completing the system of trunk lines.

This new willingness to go abroad for funds was due to a re-emphasis of the necessity for railways from the political and strategic point of view growing out of the Russo-Japanese war. In fact, that struggle tremendously accelerated the whole movement of reform and reorganization in China.

The first result of the change in attitude, from the standpoint of communications, was the granting of a concession for the construction of a road from Tientsin to Pukow, and from Nanking to Shanghai. The concessionaires were Anglo-German financial groups. The terms of the contract were by far the most favorable to China of any secured from foreign finance up to that time. The usual provisions for supervision of the expenditure of the loan funds were eliminated, and the loan was secured on certain specified provincial and governmental revenues rather than

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by a mortgage of the road itself. These more favorable terms were the result of a preliminary competition between the British and the Germans for the contract, the latter being willing to grant what must be considered liberal terms in order to forestall their competitors. Eventually, however, because of earlier agreements to respect one another's priority of interest in the regions to be traversed by the proposed line, it was agreed to construct it jointly.

This paved the way for joint rather than competitive action of the Powers on a larger scale. In 1909 preliminary negotiations were begun for the construction of roads from Hankow to Canton and from Hankow into Szechuan province. These negotiations were carried on between the interested Powers to seek a basis for cooperative action, and between the Powers and China for the purpose of securing the right to finance and construct the above named roads. When agreement had been reached it was on the basis of a union of the interests of England, Germany, France and the United States, forming an international banking group to which was entrusted the financing of the lines known collectively

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as the Hu-Kuang railways. The loan was to be pro-rated among the four powers, as was also the mileage to be constructed.

The outbreak of the World War temporarily halted work on the roads under contract but not carried to completion, but it served only to retard the development of new projects. The Americans and the Japanese appeared at Peking seeking concessions for railroads and contracts were entered into for several new lines.¹¹

Summarizing development up to the present time, it may be said that China has about seven thousand miles of road completed and in operation, with about the same mileage either under construction or under contract. In addition about eight thousand miles of road are "projected" for future construction. This gives a grand total for the near future, if the projected lines are duly contracted and constructed, of approximately twenty-two thousand miles. Judging by the mileage of the United States this must be considered a mere beginning if the needs of the country are to

¹¹ The details of these concessions may be found in the *China Year Book*, 1921-22, chapter on "Communications."

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be met in an adequate manner. It is, however, a respectable beginning for a country which has been in dread of foreign domination established through the railroad, and which has been in as chaotic a condition politically as has the China of the past fifteen years. Since most of it is trunk lines it may be expected that it will be naturally added to as industry develops, and as the mineral wealth of the country comes to be more fully and freely developed.

Two serious hindrances to future development must be fully reckoned with before leaving the subject. One of these is the difficulty that will be encountered in financing a railway program of any great magnitude. The other comes from the nature of China's international commitments. It will be convenient here to consider the second of these difficulties first.

The activity of the powers following the Sino-Japanese war resulted in the division of China into spheres of interest. For railway construction purposes this meant that a certain section of the country was considered the preserve of a certain foreign power. Thus Russia established herself in Manchuria, Ger-

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many in Shantung province, England in the Yangtze valley, and France in Yunnan and Kueichow provinces. Each one claimed to have secured a general priority of right to finance railroad building in its sphere, and each sought to secure from the others a recognition of its position. Thus in 1899 England agreed not to seek concessions north of the Great Wall, in return for a Russian agreement not to penetrate south of it. This may be taken as typical of the inter-power agreements negotiated following the initial drive on China. The most important change in the situation thus created followed the Russo-Japanese war, when Japan replaced Russia in Manchuria south of Changchun.

To offset this the United States, which had secured no sphere of special interest for itself, gained from the Powers certain pledges which have come collectively to be known as embodying the principle of the Open Door. In none of these commitments, however, was the question of railway *construction* touched, although by 1902 the United States had come to construe the principle of the Open Door as prohibiting the securing of monopoly rights of construction for the nationals of any one

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Power. This cannot be considered as having been formally accepted by the others, however, as within the scope of the principle which they had bound themselves to follow. Thus the "sphere of interest" conception seriously affected China's freedom of action in determining the course of her railway development by forcing her to resort to a particular country for a loan for railway construction in a given region, and even for materials to be used in building the road. Conceivably it might be to her interest to defer the building of a particular line because of a fear of establishing additional vested interests of a foreign state whose general policy she distrusted as political. Furthermore, the existence of these rights on occasion prevented her from granting concessions to those interested in securing and making use of them, even though the holder of the original grant might not be in a position at the time to make use of it. Thus, during the war, none of the states of Europe were in a position to make loans to China for railway purposes while Americans were ready to undertake work on a rather large scale. But when the Siems-Carey Company secured a series of concessions it found

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itself blocked at every turn by the existence of alleged prior rights.

The most notorious case of restriction of China's freedom of action, however, came in Manchuria. Out of this grew the famous Knox proposals for the neutralization of the Manchurian system. The facts were, briefly, that a concession had been secured by Anglo-American capitalists to construct a road from Chinchow to Aigun. Both Japan and Russia objected to the project, the former producing a hitherto unknown protocol to the Komura treaties of 1905 giving Japan a virtual veto on all railroad projects in southern Manchuria which could be construed by Japan as setting up a competition to the South Manchurian road. Furthermore, both countries objected on political and strategic grounds to the concessions. England refused to join the United States in supporting the concession and it was finally allowed to lapse. Secretary of State Knox then proposed the internationalization of the Manchurian roads, but he was equally unsuccessful in securing the adoption of that proposal. Consequently, Manchuria was left as the exclusive preserve of the Japanese and the Russians.

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These or similar complications were somewhat mitigated by the formation of the International Consortium to construct the Hu-Kuang roads, for that indicated a way out of the dilemma of conflicting national interests. The situation was still further bettered when, at Paris, the consortium was reorganized, and an agreement was reached to pool all financial business in China, including Manchuria, each party agreeing to put into the common pool its existing options for rail construction. Then the reaffirmation of the Open Door principle in a broader and yet more explicit and definite form, and its embodiment in an international treaty at the Washington Conference, coupled with a relinquishment at the same time by the European Powers of the sphere of interest conception paves the way for future activity on a purely financial rather than a political basis. It is true that the new consortium has done no business as yet, and it is equally true that there have been recent indications that the policy of some of the Powers has not so changed as to make the Washington agreement self-enforcing. But if it is lived up to by the signatories to the treaty, whether vol-

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untarily or by some sort of compulsion, the fear on the part of the Chinese of the foreign-financed railroad should become a thing of the past.

With the political factor pushed into the background there is no good reason why foreign financiers should hesitate to loan money to China for the purpose of constructing railroads. At present, of course, the internal condition serves also to militate against the injection of foreign capital into the country. But, again, it must be emphasized that this problem, as well as the others, is being discussed in terms of the ultimate realization of political stability.

Considered purely from the investment standpoint, the building and operation of railways is profitable. Practically all of the lines in operation today, even with the disturbed condition of the country, show a profit after the loan charges as well as the operating costs, are deducted. In other words, the roads maintain and can ultimately pay for themselves without resort to governmental revenues. It is a generally accepted fact that the administration of the government roads has been sound. Operating expenses have

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been kept down to the lowest point compatible with the efficient operation of the roads where the militarists have left them alone. According to Mr. J. E. Baker, the adviser to the Ministry of Communications, the rolling stock is used to as great advantage as in any other country in the world, including the United States.¹² There is a constant increase in the use of the roads now opened from which it may reasonably be inferred that there will be a continuous increase in the profits of operation for some time to come. From every standpoint it may be argued that railway loans are sound as investments.

The only objections that can be raised against the Chinese administration under the Ministry of Communications are on the ground of discriminations in tariff, weakness due to the wide variety of rolling stock in use, lack of uniformity of accounts and general administration, and, of course, the inability of the Ministry to maintain itself independent of political control and manipulation.

¹² See article "Chinese Government Railway System in 1917," *Far Eastern Review*, February 1918, pp. 41-6. Also Tyau, *China Awakened*, chap. XI, especially pp. 192-5.

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The first series of these objections can be answered by pointing out that the difficulties come from lack of complete Chinese control rather than because of it. Tariff discriminations have been common on the foreign administered roads, not those under native control. The lack of uniformity of rolling stock, accounting, etc., has been due to foreign control on a national basis of purchasing of equipment, and to the independent or semi-independent administration of many of the roads, made necessary because of the original nature of the concessions. It was stated by Mr. Koo at the Washington Conference, and not denied by the other delegates, that the criticisms levelled against the Chinese administration were in reality criticisms of the conditions under which the earlier railroads had been constructed, rather than of the honesty and efficiency of the Ministry of Communications.

Many of these administrative defects have been wholly or partly overcome in recent years. A uniform system of accounting has been introduced throughout the government-controlled part of the system, and largely accepted by the other roads, at least south of

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the Great Wall. Through-traffic arrangements have been perfected, interchange of rolling stock has been agreed upon through many parts of the system, and it is gradually being nationalized by this means of inter-road agreement on various questions.

Another reason why there can be no question of the profitableness of railway building lies in the fact that most of the roads to be built will be serving, from the start, already developed territory. Some will, of course, be what may be described as colonizing lines, principally into the north and the northwest. But even these regions should be settled and developed rapidly because of the enormous population to draw upon. There is even now a movement, partly of migratory workers and partly of permanent settlers, into Manchuria and southern Inner Mongolia, from which it may be argued that the people will show a willingness to go to new regions as the advantages of such a change are made apparent. Government aid to colonizers in the future will help to stimulate movement in a positive fashion, just as the breakup of the family tradition is helping in a negative way to make it possible.

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With roads serving the needs of thickly populated areas with an already settled agricultural life there will be no reason to fear for investment in railway construction from the standpoint of profits. The establishment of a network of roads will stimulate industry, and the development of industry will continually add to the margin of profits of the roads. These propositions need not be argued since the experience of other countries, and, in fact, of China herself up to the present time, makes them self-evident.

One important question remains to be discussed. What should be the nature of the relationships established between China and the financial interests to which the government will have to resort for the necessary funds? In the first place, foreign investments in China's railways cannot be made in the same way that they have been in those of the United States. It has become a fixed policy for the government to build and operate the roads. Neither will it be possible to expect that governmental loans can be contracted on the same basis as when, for example, they are made to Japan. This will not be possible until the reorganized Chinese government has

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been in existence long enough to create an absolute confidence abroad in its financial integrity. Consequently it must be expected, at least until that time, that foreign financial interests will continue to look for support and protection to their own governments. Because of this situation, a form of agreement will have to be devised which will give adequate protection to the lenders and yet will prevent the growth of a feeling of fear on the part of the Chinese. To accomplish this, it may be suggested that the Chinese will hesitate, in the future, to accept provisions for the supervision and control of expenditure of loan funds. Consequently, in order to prevent the dissipation of loan funds, the bankers might rest content with adequate provision for auditing of accounts, through an audit bureau properly staffed by expert accountants, both Chinese, where they are available, and foreign, the latter to be appointed by China upon the recommendation of the lenders. In this way check could be exerted upon the improper expenditure of funds, if and when it became apparent that the ends of the loan were not being realized. After this, the most deli-

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cate question arising in connection with the loan contract is that of the security for the loan. The early contracts, it will be remembered, provided for the pledging of the road itself as security. It was this, in large part, which served to develop the fear among the Chinese that the country was coming under foreign domination through foreign control of the arteries of communication. On the other hand, the Tientsin-Pukou terms were favorably regarded in part because they did not stipulate for control of expenditure of the loan funds, but largely because the loan was secured on governmental revenues and not on the road itself. A middle ground which would eliminate the fear of the Chinese and yet would provide adequate security to satisfy the foreign bond-holders, lies in the Tientsin-Pukou provision, with the added safeguard, from the foreign standpoint, that the revenues pledged should be administered under the direction of a foreigner nominated by the bond-holders and appointed by the Chinese government. Even this would not be necessary after the general financial system of the country had been put on a modern

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basis, and the credit of the country restored. Then governmental loans can be safely contracted on the terms usual in such cases.

CHAPTER SIX

The Organization of Industry in China

SUCH a study as this would be essentially incomplete if it did not attempt an analysis of the organization of existing industry and the possibility of using that organization, or of adapting it for use, in a fundamentally different system of production than that found in pre-modern China. It is, however, with great hesitancy that the task is undertaken, for the available data is meager in extent and not altogether satisfactory in kind.

In approaching the question it must be said again, for the sake of both clarity and of emphasis, that the economic life of the country has, in the past, been organized and carried on independent of government control or even supervision. There has been neither national, provincial or local regulation of industry. Since the Republic there has been a tendency to extend the sphere of governmental activity in various new directions, and

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this has led to a small amount of industrial legislation. But it has not been so extensive as to change materially the former situation. Thus the organization of economic society has had a natural growth to meet the needs of the groups affected, and this without any outside direction.

It is only recently that the corporate, or joint stock form of organization has been introduced into China. Virtually all undertakings have had an individual financing and direction, although the individual enterprise sometimes has been extended into a partnership. In this case each active partner has been liable for the obligations of the concern to the extent of his interest in it and no further. In other words, a partnership carried with it a limited liability. Dormant partners were not liable as were those active in the enterprise.¹

But the Chinese, more perhaps than any other peoples, have recognized the advantages of collective action and collective control. Socially this has been developed through the clan family. Economically it has been gained through the gild. The gild system developed

¹Jernigan, *China's Business Methods and Policy*, pp. 66-8. See also his *China in Law and Commerce*.

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and entrenched itself as the disadvantages of purely competitive activity revealed themselves. "Centuries of experience have proved to the Chinese that competition is not fitted to their system of life. In a country where a man can enter a trade only after he has served an apprenticeship of three years, labor has practically no mobility; and, where so many people live so close to starvation, it is a tragedy for a man to lose his job. Competition, with its fight for trade, means lower prices, lower wages and failure for those who have not the resources or ability to meet the new conditions. That in turn means loss for practically all of those who are connected with the trade, and suffering for many. The Chinese feel that the cost of competition is too high. They combine rather than compete. They have developed the guild organization so that they may be protected from each other, and that business conditions may be stabilized, be the same for all and be maintained in spite of outside influences."²

Two kinds of guilds have already been mentioned—the craft guild and the provincial guild or club. The second of these need not

² Gamble, *Peking: A Social Survey*, p. 164.

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be discussed here, particularly as its reason for existence is departing with the breakdown of provincial barriers through the establishment of better means of communication. In its place may be mentioned the artisans' guild which has been of a temporary rather than a permanent character.

In the past the craft guilds have comprehended in their membership, in almost every case, both proprietors and workers.⁸ An industrial establishment consisted of the proprietor, his workmen, and the apprentices. Often they all lived together in the building within which they carried on their labors. The workmen knew all phases of the business, and their needs were known to their employer. Because of this intimacy of relationship there was no problem of capital and labor as we know it in the industrial countries of the West. This also made it possible for both groups to be contained in the same organization, the guild.

The various guilds were very similar in organization and purpose. All of the members were entitled to participate in the meetings,

⁸ For a more complete and detailed description of the Guilds, see Morse, *The Guilds of China*; Gamble, chap. VIII; Williams, *China, Past and Present*, chap. IX.

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and much of the important business was transacted in the whole gild. The executive committee, varying in size from place to place and from trade to trade, was invariably elected. This committee, either through its officers or directly, transacted much of the routine business of the gild, enforced its rules on the members, served as the agency for settling disputes between members, acted as intermediary between the officials and the gild, and served as the channel of communication with other similar organizations.

Some of the functions of the trade gild have been mentioned above. More important than any mentioned, except that of settling disputes between members, were those which related to the trade itself. Wages were fixed by the gild, often at the annual meeting and subject to revision during the course of the year only if the cost of living underwent a radical change. However the wage fixed was usually a minimum rather than a standard. The several members of the gild usually accepted this as the actual wage to be paid, since the gild rules also prohibited one member from seeking to attract the workmen of another by offering them special inducements

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to enter his employ. In actual practice the gild rules were largely established by the masters, but the workmen did not suffer from this owing to the desire of their employers to keep them as contented as possible. If wages were fixed too low, however, the workmen sometimes resorted to a strike, organizing themselves into the equivalent of the modern trade union, the artisans' gild, for the purpose of undertaking collective action to better their situation. Strikes were rare, and were brief, since the employer could not draw on an outside supply of labor to keep his business in operation, with the result that if the demands of his workmen were at all justified they were met or compromised, and, from the workers' side, they could not undergo a prolonged cessation of work owing to their lack of a capital reserve with which to carry themselves over a long period of unemployment. This latter condition also helps to explain the failure to resort to the strike more consistently with a view to securing higher wages. When the workmen were moved to action it was because of a reduction of the minimum wage scale.

Another important function of the gild

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was that of fixing the selling price of goods to prevent competition through the attempt to undersell one's competitors. This price fixing, again, was in terms of the minimum which could be asked since there was not the same danger to be feared from the asking of a higher price than that so determined. In many cases the quality was fixed as well as the price—this in order that the standard of work should not deteriorate, and to prevent some members from gaining an advantage over their competitors by selling inferior goods at the same price.

In some cases the gild performed the usual duties of a benevolent society, but its activities of that nature were more often limited to the furnishing of coffins to the poorer members in case of death, giving aid to enable the body to be returned to the native village for burial, or maintaining a potter's field for the burial of indigent members.

Thus it is seen that the gild helped to stabilize the industry through its wage fixing and its price regulation. It further took over that most important branch of the judicial function, the adjudication, or rather, in this case, the arbitration, of disputes between

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those engaged in the same activity. It did even more than this, as a matter of fact, for it sometimes helped to settle out of court cases involving members of two different guilds. This side of its activity was developed because of the practical impossibility of getting a speedy, impartial and honest decision from the magistrates. The decision of the court often went to the highest bidder, rather than to the one with the sounder contention. For this reason no Chinese carried a case to court if he could avoid it. He was willing to accept a compromise arrived at by arbitration rather than take his chance with the law. Of course there has always been retained the right of appeal from a decision of the guild to the magistrate, but this right has rarely been insisted upon. The guild rules have required the submission of a dispute to guild arbitration before resort was had to the law court, and provision was made for punishment of the offender against this rule. He usually was denied continued membership in the organization, and was boycotted by the members. Outsiders who had dealings with him might in turn suffer from the boycott. Thus there was ample assurance against the deci-

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sion of a business case by the magistrate before the trade had passed upon its merits. Afterwards the weight of the gild was thrown in support of its findings, which might be introduced in evidence in case one party to the dispute had accepted them. Consequently the court was more than apt to content itself with a reaffirmation of the decision of the arbitrators. All of this, coupled with the usual fairness of the arbitrators and the uncertainties incident to magisterial action, prevented much actual litigation between members outside the gild organization.

Since the primary function of the official was to maintain peace and order in his jurisdiction, he kept in close contact with the gild officers, consulting them before putting into effect a new tax levy to make sure that it would encounter the minimum of opposition, and even using the gild as the agency on which to devolve responsibility for the conduct of its members. Since the magistrate was never a native of the district over which his authority extended, and was consequently not familiar with the local customs and traditions, his resort to the gild for information and advice on matters within its field of in-

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terest was natural. But it all served to put the gild in a powerful position—a position from which it could, on occasion, dictate policy to the government instead of following the direction of political authority.

Its own power was, of course, dependent on its ability to control its membership. It would have been of no particular value to have the gild laying down the rules for the governance of the trade if it had been unable to enforce them. But the organization did have the ability to control its membership. Its principal weapon of coercion was the boycott. No single member of the trade was able to maintain himself independently if he was denied membership in the organization and if it also prohibited others from dealing with him. He could secure no trade privileges; he stood alone in case of a dispute with a gild member; the influence of the organization was sufficient to prevent his getting a fair hearing before the local magistrate; his workmen could not be held, and their places could not be filled. In short his case was hopeless. Consequently the rules of the gild were seldom deliberately disregarded. And since they were democratically established they were

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apt to be supported by opinion as well as by the coercive power of the organization.

But the gild system is strong and can be maintained in its greatest strength only where the industrial unit is small, and where the labor supply is immobile as it is under the cottage system of production. This system of production demanded an apprenticeship of from three to seven years, the apprentice then often remaining as a workman in the shop where he had served his apprenticeship, or, if not, at least remaining in the vicinity. The number of workmen was invariably small, and the replacement supply limited, owing to the length of time necessary to prepare a man for the status of workman. A number of these small shops comprised the membership of the gild. All of the affairs of the members were simple and could be known in detail to the others and to the gild officers.⁴ None had an unknown strength on which to rely in case of conflict with the gild. Neither could several make secret trade agreements with one

⁴ In some cases the gild officers had regular access to the accounts and the trade secrets of the members, thus releasing the gild from reliance on information furnished it by interested parties.

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another to their own advantage and the disadvantage of the gild. All of this helped to maintain the system.

On the other hand, with this simple form of industrial life, there was no minute subdivision of occupation, with several distinct processes, each essential to the completion of the product in its finished form. All of the processes of manufacture were carried on in the same shop and by the same group of workmen. This greatly simplified the problem of organization.⁵ There was a lack of complete integration in some branches of industry, owing to a partial division of labor, but this was not so frequent, nor so intricate as to interfere with the functioning of a system of organization based entirely upon the craft.

Again, industry which produced and maintained the gild system was local in character. There was production almost entirely for the local market, with the exception of certain specialized crafts, which served the entire

⁵ By this is meant that there was not the subdivision of modern industry, and that, further, where there were several inter-related processes as, for example, in rug making, there was not an occupational separation as well as division. All of the processes were carried on as part of the same enterprise.

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country, as did certain pottery centers. So far as production itself was concerned, these were also local in character, having to meet no outside competition, so their existence does not weaken the force of the generalization. Consequently the purely local craft gild could maintain wages, prices, and quality of goods without consideration of the possible competition of other producing centers. There was no need for the extension of the local organizations to comprehend even the province, and certainly a national organization was unthought of because it would have served no useful purpose.

Contrast with this the modern industrial system! In place of the small shop we have the large factory employing not tens but hundreds of workmen. These laborers do not have to undergo a prolonged apprenticeship, but often require but a few days, or at the most a few weeks, in which to familiarize themselves with the use of the machine or tool. Instead of being limited, because of the necessity for long training, to one occupation, the workman can move readily from one line of work to another. The proprietor becomes the employer, and it is not necessary for his

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success that he shall be a trained workman. His primary function is that of supplying the funds with which to purchase the necessary machinery and raw materials. In addition he may have the task of general supervision and direction, and particularly the labor of disposing of the output, not however as shopkeeper, but to those who will, as shopkeepers, sell to the consumer. Increasing specialization of production has brought industry to the point of a minute subdivision of activity, each part of the industrial machine, however, being dependent on the others and inter-related to them. Instead of a simple thing, production has become tremendously complicated. Under these conditions industry needs a more complex organization than that which served so well during the cottage stage of production. In the West the new industry displaced the guild altogether, and for a time an unrestricted era of individualism followed the industrial revolution. The state assumed the direction only so far as was necessary to settle disputes between individuals. This, however, necessitated the creation of a body of law, applied by the courts, for the regulation of industry. This body of law has become

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more and more complex and far-reaching in character, and the direction of business by government has also become the established fact. Released from the strict control provided by the guild, industry is coming gradually under the almost equally rigid control of the state. This has not been regarded as an unmitigated blessing, but has been necessary because of the failure of industry to provide an effective control for itself.

In the movement toward the development of self-control of industry in such a country as the United States, to supplement or perhaps ultimately to supplant legal control through the state, the employers' association, together with such organizations as the Chamber of Commerce, has come into being. This has been perhaps as much for the purpose of controlling and directing political action as to afford adequate industrial self-control, for it has comprehended only one side of the industrial organism. But there has been also a movement toward organization on the other side. This has resulted in the trade union movement, with its craft and industrial organizations. The effect of this double, but separate, organization has been, however, the

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growth of antagonism in industry—the feeling that there are two distinct groups with different sets of interests which cannot be harmonized except through the subjection of the one to the other. The movement toward complete industrial re-integration by means of the establishment of a mechanism of adjustment through which the interests of the wage-workers and the employing capitalists can be unified, with adequate recognition of the essential needs of each, has proceeded but slowly. The use of collective bargaining over the wage scale is a move in that direction. But so far collective action has tended merely to precipitate, not to prevent, conflict.

One of the most important questions confronting modern China, then, is the possibility of establishing such a mechanism of adjustment, perhaps by means of an adaptation of the guild system, so as to avoid some of the dangers inherent in industrialism as it is coming to the Chinese from the West.

It may be accepted as a foregone conclusion that the union of employers and workmen in the one organization will disappear as machine production displaces the handicrafts system. This is already happening in

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the places and in the trades where the factory system has been introduced. The natural tendency is for the gild to perpetuate itself as an employers' association. This grouping of employers to regulate the trade is coming simultaneously with the introduction of machine production. Consequently it should serve to prevent the growth of conditions prejudicial to the interests of the trade as a whole on account of the establishment of such an era of unrestrained and uncontrolled competition as marks the earlier industrial stage in the West. Trade disputes can still be settled within the gild at least to the extent that they concern only those engaged in the one trade, except so far as they relate to wages. From the employers' side, a common labor policy can be agreed upon and enforced, just as in the past; prices can be controlled; and standards of quality maintained. All of this, of course, so far as local production is concerned. As communication develops it would be natural to expect that the local employers' association will naturally broaden its territorial view to make possible provincial and national associations. The justification for this feeling comes from the present tendency

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to organize on a national basis which is illustrated in the formation of a national bankers' association and a national Chamber of Commerce.⁶

But if the reorganization stopped at this point it would serve only to perpetuate some of the worst features of industrialism from the human side. By combination the employers would have a power over labor which singly they could not hope to preserve. There is, however, another tendency which can be expected to operate here. Just as one group in the original guild society is developing an organization, so also is the other. Labor unions are coming into existence to represent the collective interests of the workmen.⁷ Since there is no law prohibiting the formation of workmen's combinations, one great obstacle to unionization which was encountered in the West does not have to be overcome. Secondly there is such a strong tradition of collective action in China that labor tends naturally toward organization to advance its

⁶ It is also justified by the highly developed spirit of adjustment through collective action which may reasonably be expected to carry over from the old order to the new.

⁷ Tyau, *China Awakened*, chap. XIII.

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own interests. It is possible almost over night to organize all of those working in the same trade, and to hold them together as long as the group interest demands if the end in view is important enough. This will, perhaps, tend to be less true as the need for a lengthy training becomes less. But it is true at the present time when the foundations for future organization are being laid.

In the third place, the guild tradition is still strong enough so that employers should be willing from the beginning to bargain collectively with their employees. With these tendencies and possibilities, provision should be made for machinery to bring the two groups together periodically to establish the wage scale and to consider collectively the interests and needs of the two groups. This could be done by the same means as that used to bring into being in a uniform way the existing Chambers of Commerce—through national law. This common agency might, as a tentative suggestion, be provided either through giving the workers, where organized, representation in the Chamber of Commerce, with the appropriate committee of that body used for conference purposes, or the Chamber of

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Commerce might be authorized, or compelled, to establish a conference to consider wages or conditions of labor either periodically or upon the application of either the employers' organization or the labor union.

The Chambers of Commerce, as at present organized and functioning, are an interesting part of the business system of the new China. They seem to have originated as an imitation of the foreign Chamber of Commerce as it is organized in the larger treaty ports such as Shanghai. These, in turn, have their models in the various cities of the United States, England and other occidental countries.

But the Chinese Chambers of Commerce serve a much broader purpose than do their foreign prototypes. They are now set up somewhat uniformly under the regulations of the central government promulgated September 12, 1914.⁸ The purposes are much the same over the country. The Regulations of the Chamber of Commerce of Peking declare the purpose of the organization to be: 1) To bring about friendly relations between the merchants and workmen; 2) to conduct research studies on industrial and commercial

⁸ Translation given in Gamble, pp. 451-8.

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questions; 3) to develop industrial and commercial enterprises; 4) to strengthen all commercial enterprises; 5) to settle disputes between workmen and merchants; 6) to look after the conditions of the market.⁹

Thus the Chamber of Commerce is already beginning to shape up as the go-between in the case of industrial disputes. Unfortunately, as the guilds become fixed as employers' associations, which will come when enterprises are established on the factory basis, the Chamber will come to represent only one party to the industrial conflict unless provision is made for representation in it of the workmen as such. At present the organization is founded upon the guild and the independent enterprise where it has no guild organization. With such a foundation it will hardly serve in the long run as the mediator between the employing and the working groups. Up to the present time it has served as a useful mediatory body, intervening on a few occasions to bring a strike to an end on the basis of compromise. This intervention it has justified on the ground of safeguarding the public inter-

⁹ For translation of the Regulations, see Gamble, pp. 458-61.

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est. But, as its membership develops the group point of view, it may find in the future that its intervention is looked upon as a distinctly unfriendly act. It is thus imperative that it broaden its organization as the gild membership itself separates into two distinct groups with apparently conflicting interests.

At present the Chambers serve a very useful purpose of a different kind: they serve to integrate the entire business community. They do this because they are essentially inter-gild organizations. They have not yet supplanted the gild, but merely carry the idea back of it a step farther.

This is revealed most fully by the nature of one of the important functions of the Chamber of Commerce. As a subdivisional part of its organization it is authorized to maintain a court, or, more accurately, committee of arbitration, empowered to hear and adjust disputes between merchants or commercial houses. These terms include within their scope the industrial establishment. These courts are authorized only to hear cases brought before them by the several parties to the dispute. In case no satisfactory agreement can be reached, the litigants, or one of them,

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may take the case into a Court of Justice. There seems to be a feeling, however, that the Court of Justice would tend to follow the recommendations of the Chamber of Commerce court, just as the magistrate accepted the decisions of the gild. If a case is first brought into a Court of Justice that body may refer the controversy to the Chamber of Commerce court for investigation and a finding. This has happened quite frequently in the past few years.¹⁰ These commerce courts do not transgress, except by request, on the field of action of the gild in cases involving only the gild members. Their primary field of action is found in the event of a dispute where the gild does not have jurisdiction over both litigants. This field will become ever larger as the diversification of industry goes on and the authority of the craft gild becomes increasingly narrower.

In this way the Chinese have provided for the adjudication of business disputes by the business community itself, with a resort to the legal system only where the business community fails to find a *modus vivendi*.

¹⁰ See *Regulations for the Courts of Chambers of Commerce*, translation given in Gamble, pp. 463-71.

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In a country where there is no business law built up as yet, it seems a very happy solution of the problem, and one that is in complete harmony with past practice. Entirely aside from that it has the great merit of relieving the state from a tremendous amount of legal business, putting the responsibility where it properly belongs for the preservation of peace and harmony in the economic world. Those familiar with the exigencies of business and with customary modes of business procedure should be best fitted to settle disputes among themselves, always supposing, of course, that wider interests are not affected. In that case the adjustment would have to take place through the medium of the political authority.

The Chamber of Commerce, however, because of the very nature of its membership, cannot be expected to displace the craft organization. The guild, as an employers' association, needs to be maintained and strengthened for the purpose of regulating the interests of the trade. But in the modern industrial world the craft itself is too narrow a conception. The craft organization has its place. But eventually it will have to reckon

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with the industry both from the standpoint of the employer and the workman. Too many trades are closely inter-related in the modern industrial fabric for it to be desirable for them to stand apart from one another. Thus ultimately the craft organizations will probably all be amalgamated into an organization of the industry. It is this organization rather than the guild which will probably be national in scope, although built upon the solid foundation of local trade or craft organizations. The beginnings of this development may already be perceived in the attempt to establish such an organization as the Lu-Pan Industrial Union,¹¹ with the intention of comprising in one unit all of those connected with the building trades. This is not an organization of workmen but of masters, and its primary purpose is the uniting of the strength of all in the attempt to secure contracts for government buildings in Peking.

The organization of individual enterprises using modern machinery and modern production methods differs but little from their foreign prototypes, except that as yet the joint stock company has found but little successful

¹¹ Gamble, pp. 202-4, 444-51.

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use. Most undertakings which are purely Chinese in character are financed out of individual or family fortunes, or perhaps by forming a partnership of two or three individuals of large means. The reason why the financing of enterprises has been thus limited up to the present time is to be found in the fact that while, in individual business relations the Chinese is proverbially honest, he has not yet fully developed a sense of corporate honesty. Funds accumulated by public subscription often have been used for private purposes by the officers of the corporation without any apparent realization of the essential dishonesty of such a diversion of funds. As time goes on, of course, this condition will change, particularly with the introduction of modern accounting methods. At present, however, in one sense it may be considered fortunate that the people hesitate to concentrate their capital for industrial undertakings for it would seem to be desirable for the time that the industrial unit should be small, and that there should be more of them rather than that the huge undertaking should be immediately developed. By keeping the unit small there is less prospect of losing the

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intimacy of relation between the employer and the workman which it is so desirable to maintain. New methods and new labor policies can be tried out more freely where there is less at stake and where the enterprise has not become wholly impersonal in its administration. These advantages China should strive to maintain by every possible means in order to conserve to the full her man-power. In the long run this will benefit industry as well as those engaging in it.

Many of the new type industrial plants are at present under foreign direction and control. Thus there are Japanese flour mills, oil mills and bean-cake factories in Manchuria; Japanese and American albumen factories; and Japanese, British and American cotton mills. Outside of Manchuria these foreign undertakings are established mostly in the coastal treaty ports, although foreign capital has begun to penetrate the interior.

This movement of western and Japanese capital to China with the consequent establishment of foreign-managed factories is almost certain to continue unless carefully guarded against. The advantages of cheap labor will promote it, for one thing, and the

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establishment of a national tariff will have the same effect, since the foreign-owned and managed factory will be able to compete in the Chinese market under conditions which might prevent the introduction of goods manufactured outside of China and subject to the new tariff charges. It must be pointed out here that such a movement will not be entirely to the advantage of China for it will tend to introduce national and racial feeling into industrial conflicts and make more difficult the solution of the labor problems on the basis of cooperation, since the laborers would be Chinese and the employers non-Chinese. The foreign employers, unfortunately, have not the Chinese tradition of adjustment and they have to overcome a century-old tradition of superiority. What may be expected under these circumstances is illustrated in the serious trouble growing out of the strike in the Japanese mills in Shanghai in May 1925. The only way such trouble can be averted in the future would seem to be in either prohibiting the establishment of foreign-financed and *managed* enterprises, an impossible solution under existing conditions, or in bringing the foreign enterprise under the more effective

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control of Chinese law and of the Chinese industrial organization, de-foreignizing it from the standpoint of industrial disputes.

The Japanese have penetrated the coal and iron industry, again particularly in Manchuria, but also in Shantung province. They have also established, through loans, an interest in the Hany'ehp'ing Corporation, the largest iron-working company in the country. This penetration has retarded the development of mineral enterprises in China because of a fear of foreign financial control. A larger capital is necessary for the exploitation of the mineral resources of the country than the Chinese have been able to gather without a resort to financing through the corporate form of organization. The difficulties inherent in this have already been alluded to. Consequently the purely Chinese concern has frequently found itself in financial difficulties, and the outcome has been a resort to a foreign loan, as a result of which control of the enterprise has frequently been lost. This has led to hesitancy in the granting of mining rights even to the purely Chinese company, and thus development has been held back. Undoubtedly it is much better for the

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mineral wealth of the country to be exploited gradually than for it to pass under foreign control. As the Chinese become more accustomed to the joint stock form of enterprise, and as they develop the higher standards of honesty demanded for its successful use, the development of the mineral wealth of the country will be greatly accelerated.

At present Chinese capital is going into the textile industry, single large fortunes being used for the establishment and equipment of individual factories of a small or medium size. One of the most successful of these enterprises is that founded by Mr. H. Y. Moh at Chengchow, in Honan province.

In another line, the Commercial Press, of Shanghai gives an example of an eminently successful Chinese enterprise. It is the largest printing house in the Orient, and one that bears favorable comparison with any in the West.

These two undertakings, together with the Hany'ehp'ing Company, afford an indication of the general policies of the better type of Chinese concern. In all three cases the attempt is made to advance the welfare of the workers, as a matter of good business. Hous-

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ing facilities are provided in the vicinity of the factory where that is possible; places of rest and recreation are established; and questions of sanitation are not overlooked. The Commercial Press has inaugurated a system of profit sharing in addition to the other benefits afforded the workers. But all of this is done from the top down, according to the most approved western methods. It is all excellent as far as it goes, but it fails to associate the worker in any real way with the enterprise, and so loses that intimacy of relationship which is being demanded by labor in so many places in the West—an intimacy which in time the workers of China will demand. If it can be given from the beginning one of the most serious sources of conflict in modern industry will be prevented from developing.¹³

Keeping pace with the industrial advance, and even a little outrunning it, has been the establishment of agencies to aid in financing trade and the new industry. China has had banking facilities for a long time, far antedating the development of banking in the

¹³ For a description of these and other Chinese enterprises, see Tyau, *China Awakened*, chap. XII.

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West. But institutions comparable to those of the United States today or to those of other occidental countries are of recent origin.

At present there are four distinct types of banking establishment, in addition to the Shansi banks of the past. First in order of importance are the governmental banks. The Bank of China was established by presidential mandate in 1913, and is the lineal descendant of the old Ta Ching Bank. It has an authorized capital of \$60,000,000; a paid-up capital of \$12,279,800; and reserve funds of \$4,943,580.¹⁸ It is organized on the branch bank basis, with the central bank in Peking and ninety-nine branches scattered over the entire country. It is controlled and its policies formulated by a Governor and Vice-Governor, Directors and Supervisors. Each branch, of course, has its own managers, and the chief criticism that can fairly be directed against it is that there is not a close enough central supervision. The operations of the branches should be more effectively integrated and centralized under the direction of the Peking bank. With this exception its organization and general policies are usually conceded

¹⁸ *China Year Book*, 1921-22, p. 281.

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to be as sound as its governmental connection permits. It serves as the fiscal agent of the central government and does a small amount of general banking.¹⁴

The other government bank of importance is the Bank of Communications, which, as the name indicates, serves primarily the Ministry of Communications, although it does some general banking. It was organized before the revolution with an authorized capital of \$15,000,000, half of which is paid-up. It also maintains branch banks, and has much the same organization as the Bank of China. Its position has always been strong, due in large part to careful management.

Another class of government banks are those organized to serve the provincial governments. "They operate not only in their own provinces, but also outside. . . . Their methods have been entirely unsound for a long while, and they were the main offenders with respect to the issue of paper money. . . . These banks exist mainly on the prestige of the government. They are not, however, altogether state institutions. They have their own shareholders, and they correspond

¹⁴ *China Year Book*, 1921-22, pp. 280-2.

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more or less to the Presidency banks in India."¹⁵

The second class of banks are those organized by merchants with large business in several places. Their primary purpose, although they receive deposits, is to finance the business of the proprietor. Thus they do mainly an exchange business.

The third class comprises the regular native banks, usually owned by a single individual, but sometimes by a family jointly or by a number of partners. They do a regular banking business, "receiving deposits, making loans, allowing over-drafts and giving out native orders. They do not need a large capital, as the main asset of a Chinese merchant or a bank is the individual reputation of the proprietor or the manager. They rarely have had more than Tls. 100,000 of capital."¹⁶

The fourth class consists of the more nearly modern type banks. Among the more important of these are; the Bank of Canton, the Chekiang Industrial Bank, the Bank of the Salt Industry, the Shanghai Commercial and

¹⁵ Wagel, *Finance in China*, p. 225.

¹⁶ *ibid.*

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Savings Bank, and the Ningpo Commercial Bank.¹⁷ These banks have organizations similar to the foreign banks in the treaty ports, and do a business comparable to that of commercial, industrial and savings banks in other countries.

Where Chambers of Commerce exist the banks are well represented in their membership, in addition to which the native banks of the older sort have their own guild organizations. Recently there has been organized a National Banking Association¹⁸ which has made at least one loan to the central government on its own terms, and which will undoubtedly serve a useful purpose as a means of uniting the interests of the banking community.¹⁹

While growth is apparent and changes of method are inevitable, the reorganization and adaptation of the banking system does not present the same difficult problems as industrial change for it does not necessitate such a fundamental reconstruction. It is, conse-

¹⁷ For a more extensive list, see *China Year Book*, 1921-22, pp. 274-9.

¹⁸ Arnold, Vol. II, p. 196.

¹⁹ The Railway Car Loan Agreement. For text, see *China Year Book*, 1921-22, pp. 271-3.

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quently, in the reorganization of the industrial rather than the financial system that danger lies.

If it reaches its fullest fruition, Chinese industry will not slavishly imitate the West, but will develop its own methods and organization in the light of the past experience of China. It has already been indicated how this can be and is being done from the standpoint of organization. The Chinese have a tradition of cooperation and of adjustment which has been lost in the western countries in the past hundred years. From the standpoint of industrial development it is their most precious heritage. It should be the foundation principle on which they erect their new industrial order. Western machinery should be freely introduced but western industrial antagonisms should be avoided. Only by weaving the old and the new together in an harmonious and carefully blended pattern, worked out by reason and not by imitation, can the pitfalls of industrialism be avoided. This pattern may well be the great Chinese contribution to a common world-civilization.

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