

1

The economic heritage

The relevance of the past

The economic policy and performance of the People's Republic has been shaped by certain characteristics growing out of China's long history, the country's stage of development, and the 1949 revolution. In a fundamental sense China's economic development since 1949 is the product of both continuity and change. As revolutionary as the changes have been in the past twenty-five years, the actual course of development can be much better understood against the background of China's heritage.

One of the most crucial questions is what elements of the Chinese experience inherited from the past may have fostered or hampered China's economic development. Clearly there are no simple answers to this question. Moreover, the answers given would depend on whether one were exploring the problem in prospect – that is, before rapid and sustained development was started – or after it was fully and visibly underway for a certain period of time. Thus the assessment of the role of China's heritage in the country's economic development would almost certainly be quite different and much more pessimistic seen from the perspective of the 1930s as compared to that of the 1970s.

Similarly, an informed observer appraising the prospects for economic development and modernization in Asia from the vantage point of 1840 might have picked China – rather than Japan – as the most likely candidate. China was a vast empire more populous than Japan, much better endowed with mineral resources and large internal markets. Even in terms of social and political institutions, China might have appeared to be in the better position. Yet it was Japan that within approximately a hundred years (1870 to 1970) climbed close to the top of the world income scale, leaving China far behind.

What this suggests is that a study of conditions fostering or retarding economic development poses a highly elusive problem. Why did the industrial revolution come first to England in the late eighteenth century rather than to

1



2 China's economic revolution

Germany or Russia? Why did Japan embark on economic modernization a century later? Why was Japan the only country in Asia to start on the path to modern economic growth in the nineteenth century rather than in the middle of the twentieth? Moreover, to what extent is economic development due to certain economic, social, cultural, and political traits and institutions of the society we are studying and to what extent to certain patterns of interaction between different national economies and societies?

Conditions conducive to development in the eighteenth century may not at all be the same as those required in the twentieth century with its entirely different international environment and much more advanced stock of technology. As Alexander Gerschenkron has suggested, a crucial variable in the development process is the timing of the industrial revolution in a country, that is, whether a particular economy is a precursor or a follower, an early industrializer or a latecomer. He also emphasizes that it is doubtful that one can specify a unique and fixed bundle of characteristics that may be expected to yield rapid economic growth. Conditions are substitutable, and what may work under one set of circumstances may not work at a different time in a different place. ¹

Given the elusive nature of this problem, one of the few ways we can approach it is to compare the economic, social, and political conditions in countries that have broken through the development barrier at a particular time with those that have not. Therefore to illuminate the Chinese case we have to cast at least a brief glance at certain key countries or regions from around 1800 to 1850, but do so from the vantage point of the 1970s.

By that time England and parts of continental Europe were well on the way to industrialization. China, Japan, and India encompassed old civilizations, highly organized and complex societies subject to considerable population pressure on their arable land and hard pressed by European expansionism and colonialism. Parts of Southeast Asia, on the other hand, were much less densely populated, less highly organized, and had methods of farm production that even by pre-modern standards were less advanced than those of China or Japan. These characteristics of "backwardness" were even more pronounced in the Middle East and the parts of Africa that were quite sparsely populated. They relied to a considerable extent on much simpler and tribal forms of organization not based on permanent agricultural settlement, and employed a much more primitive technology.

It therefore seems that China, India, and Japan shared certain characteristics with pre-industrial Europe, since all these can be considered old and rich civilizations with highly complex societies. Yet Europe forged ahead in



The economic heritage

the early nineteenth century, Japan in the late nineteenth, while India's and China's development was postponed until the middle of the twentieth. Some of the elements contributing to this apparent paradox can perhaps be better understood through a somewhat more detailed comparison of conditions in pre-industrial Europe and China.²

Pre-industrial Europe and China

In both societies a primarily agrarian economy supported a small superstructure. In many ways this was a "natural economy," with a relatively low degree of commercialization and a limited use of money. The monetary system was inefficient. There were extensive barriers to trade in the form of tolls, dues, and taxes on the movement of goods. Roads and communication were poor, except for water transport. Capital was scarce, as illustrated by high and usurious rates of interest. All these factors placed severe constraints on internal trade

As a result, these were in many ways what Eli Heckscher has called "storage economies," in which consumption depended largely upon accumulated stocks. Such inventories of grain and other foodstuffs were needed not only to meet inter-harvest requirements, but also to serve as a protection against both natural and man-made disasters. Other similarities between pre-industrial Europe and China include the low status of the merchant and moneylender and the extensive use of guild organizations to protect and control merchant activities.

But perhaps even more notable are the dis-similarities between China and pre-industrial Europe. Possibly the most important factors contributing to the process of economic change in pre-industrial Europe were the scientific revolution and the cumulative character of scientific progress, the growth of foreign trade, and the growth of autonomous cities. Europe's development and expansion overseas after the voyages of discovery in the fifteenth century were marked by a widening in the extent of the market and the commercialization of the economy together with extensive capital accumulation, all facilitated by foreign trade. These developments also depended upon the growth of urban centers, with their legal status as chartered cities or city-states and the special privileges extended to the burghers.

None of these developments had a counterpart in China. As Joseph Needham has demonstrated, the Chinese were highly inventive people who made large numbers of discoveries in anticipation of the Europeans.⁴ However, scientific development in China was handicapped by the absence of cumulative,

3



4 China's economic revolution

mathematically based, abstract theory. Moreover, few of China's inventions were applied or translated into an ongoing stream of technological progress. The essence of traditional China's technological dilemma is perhaps best captured by R. H. Tawney's penetrating observation that China's peasants "ploughed with iron when Europe used wood, and continued to plough with it when Europe used steel." ⁵

Foreign trade in proportion to the total economy, even during the Sung period, never reached the degree of importance that it had in Europe. The reasons for this smaller role of foreign trade in China are many and varied. First, the Chinese geographical configuration placed its centers of ancient population on the broad irrigated plains of the Wei and Yellow rivers. Only later, after China's social institutions had been well established, did dense populations accumulate in delta regions like those of Canton and Shanghai. When seaports eventually developed, their growth was handicapped by China's comparative isolation from other major states. Korea remained an appendage, accessible by land as well as sea. Japan and Annam were comparatively small and peripheral. Chinese expansion was chiefly absorbed in the sub-continent that constitutes modern China - for example, into the Southwest or Central Asia. With half a dozen provinces, each larger than any accessible foreign state, China's trade remained oriented toward the domestic market and was not based upon seafaring. This preponderantly inward orientation has characterized China's economy up to the present day, as will be shown in Chapter 7.

At the same time, the Chinese city was under the domination of officials rather than of merchants. The tradition of government monopoly or regulation of all forms of large-scale association and economic activity kept commercial growth subordinate to the political, administrative, and military interests of the non-commercial ruling strata.

Lying behind the contrast between China and Western Europe were the differing institutional frameworks and cultural values within which their economies developed. The West, except in Egypt, had little counterpart to the irrigated rice economy that had such far-reaching influence on Chinese life. The Mediterranean Basin facilitated the growth of city-states and sea trade, and Western European geography with its radiating peninsulas later fostered the development of nation-states and overseas explorations. These same factors promoted the introduction and diffusion of new technologies and ideas. In contrast, from the beginning the Chinese empire was turned in upon itself by the Central Asian landmass and the expanse of the Pacific Ocean. It early developed a bureaucratic empire in which the legal system remained a tool of the official class.



The economic heritage

5

Feudalism in China was wiped out at the time of the Ch'in unification. From the Han period on, the bureaucratic network and the ideal of imperial unity militated against the rise of detached and particularistic politicaleconomic areas. In spite of the barbarian inroads after the Han dynasties, the geographical environment and cultural and institutional inheritance of the Chinese people were so strong that they led to a revival of unified empire. This meant that the pluralistic and multi-focal institutional structure of Western Europe, with its struggles and rivalries among the crown, nobles, lesser gentry, cities, and burghers; between church and state; and between nation and nation within Christendom, had no counterpart in Chinese experience. While European development out of the chaos of feudalism stimulated dynamic and individualistic innovation and adventure, the Chinese empire remained a bureaucratic colossus bestriding all social life. This was reflected in the legal system, which did not protect the individual within the family nor the individual property holder nor, least of all, the merchant; and also in the Confucian ethic, which did not give the individual the same incentive as the Protestant ethic.

It is not surprising therefore that under the impact of all these developments, the "initial conditions" for industrialization and modern economic growth were more favorable in late eighteenth- or early nineteenth-century Europe than in early twentieth-century China. This is illustrated by the fact that average per capita product in pre-industrial England is estimated as possibly a fourfold multiple of that prevailing in China in the 1930s. Demographic conditions were also more favorable in Europe, with lower birth rates and much less acute population pressure on arable land resources.

A comparative view of China and Japan

While there were marked differences – economic, political, social, cultural, and institutional – between pre-industrial England and China this was much less true for pre-industrial Japan and China. In both China and Japan irrigated rice cultures played a major role, small units of cultivation characterized modes of agricultural production, and the density of population on cultivated land was high.

Similarly, as of 1850 or 1870, the average product or income per capita in China and Japan was probably at more or less the same level. Both countries were virtually cut off from the outside world for two centuries or more between 1600 and 1800 or 1850. In the Japanese case this came about through the "closing of the country" (sakoku) by the Shogun, with just one port – Nagasaki – open to foreign trade. In China, the vast territorial expanse and



6 China's economic revolution

geographic configuration of the country in and of itself dictated a preponderantly inward orientation; this was reinforced by prohibiting foreigners to reside in the country, except in Canton. Last but not least, the cultural distance between China and Japan was much shorter than between China and pre-industrial Europe. After all, the Japanese borrowed their writing, architectural styles, forms of clothing, and art from T'ang dynasty (618–907) China.

Yet following the Meiji restoration (1868), Japan embarked on rapid modernization and industrialization while China was left behind. While the reasons for this are quite complex and far from fully understood, one can point to certain significant differences between the two economies that must have played a major role in accounting for the markedly different courses of development in the two countries.

Perhaps the most crucial differences are geographic configuration and governmental structure. China is a vast sub-continent that mainly relies on inland and overland transport. Therefore, communication lanes are long and pre-modern modes of transport are high-cost. In contrast, Japan is an island country, long and narrow. It is easily accessible through coastal and inter-port transport, which is much cheaper, with only relatively short overland hauls from any point. This factor alone tends to facilitate greater inter-regional specialization and trade in pre-modern Japan as compared to China.

Geographic configuration and lower-cost transport greatly facilitated all forms of communication. Once an innovation was brought to Japan at one point of entry, it could be much more easily diffused throughout the country than in the vast continental expanse of China.

Governmental structure reinforced geographic configuration in fostering greater commercialization in Japan as compared to China in the eighteenth or nineteenth century. Tokugawa government can be described as centralized feudalism, while China was ruled by a centralized bureaucratic empire. This meant that although the Tokugawa Shogun controlled both the largest fieddom and the central government, the country itself was divided into 200 "baronies," each headed by a lord exercising authority within his fief and enjoying a certain and at times even a considerable degree of local autonomy.8

The seats of these local fiefdoms (known as han) were in castle towns. The seat of the Tokugawa shogunate was in Edo (present-day Tokyo). Kyoto was the imperial capital and Osaka the commercial capital. By 1730, Edo had a population of more than half a million and was perhaps the world's largest city. Osaka and Kyoto had populations of 400,000 or more by 1800 and, with two neighboring cities, comprised an urban center of nearly a million people.



The economic heritage

7

It is estimated that by the middle of the eighteenth century about 22 percent of the people lived in cities. Moreover, although the urban population was heavily concentrated in these three large cities, castle towns were so widely scattered that there were few villages more than twenty miles from a fair-sized town.

Commercialization was also fostered by another feature of government administration, the so-called *sankin kotai* (alternate residence) system. According to Tokugawa regulations, the lords had to alternate their place of residence between the national capital (Edo) and their local capital. The lord's wives and children had to remain in Edo all the time. Normally, the lord and some of his retainers spent one year in the capital and one year in the provinces. In effect, the families were hostages in Edo to encourage the lord's loyalty to the Tokugawa, and his frequent absences from the local capital prevented the creation of a rival local power base. The resulting movements of people from the local castle towns to the national capital and back played an important role in the development of roads, inns, restaurants, and everything connected with travel.

The Tokugawa political system not only fostered commercialization, but left scope for the crystallization of a fairly self-contained local government in the fiefs, with considerable autonomy. Behind the protective boundaries of local han autonomy, a lord (daimyo) could, if he wished, develop new initiatives and programs. He could innovate without fear that these innovations would be immediately attacked and undermined by the central government, unless such innovations directly threatened central rule. That is, the centralized feudalism of Japan permitted the rise of fiefs that could serve as pacesetters for economic, institutional, and technological progress. ¹⁰

Chinese experience of the seventeenth and eighteenth centuries presents a marked contrast to some of these Japanese patterns. Given the differences in geography and government administration, there were no castle towns, no sankin kotai system, and the urban population was much smaller. It has been estimated that only 4 percent of China's population lived in cities around 1900. 11 Even allowing for shortcomings and incomparabilities in the data, this presents a sharp contrast to the above-mentioned 22 percent for mideighteenth-century Japan.

All this suggests that there were some very important factors differentiating pre-modern China and Japan. Under the impact of much greater urbanization and lower-cost transport, agriculture was probably more highly commercialized in Japan than in China. ¹² Chinese governmental institutions did not encourage or permit the rise of independent power centers, except by default,



8 China's economic revolution

during periods of dynastic decline and disintegration. In Japan literacy was significantly higher and the people were historically conditioned to borrow technology, art, architecture, and other cultural practices from abroad. ¹³ In contrast, literacy was not only lower in China but it seems that there was a pronounced and built-in resistance to borrowing ideas, technology, and institutions from abroad. To this list of differences must be added at least one other factor, namely, that imperialism came to the shores of China earlier than to Japan. Moreover, China's humiliation and defeat in the Opium War of 1840 was a much more forceful opening of the country than the entry of Admiral Perry's fleet into Yokohama harbor in 1858.

This highly sketchy and shorthand analysis suggests that in a number of crucial respects Japan was better equipped to embark on a process of economic development in the 1860s and 1870s than China. In retrospect, while there were many similarities between the two economies, the lower transport costs, greater commercialization, higher literacy, greater readiness to innovate, and stronger government in Japan, which was less constrained by incursions into its sovereignty, can be cited as some of the salient factors pointing to this conclusion.

China as an underdeveloped area

Having been left behind by the industrialization process in Western and Northern Europe, in Japan, and later in the Soviet Union, China on the eve of the Communist takeover (around 1945 to 1950) was, compared to these, a low-income country. It had experienced some industrial development and modernization in the twentieth century. Nevertheless it was poor. But was it also underdeveloped? This question can be addressed more meaningfully if we first have some understanding of the typical traits of an underdeveloped economy. We can then assess the extent to which these traits prevailed in the traditional Chinese economy.

The characteristics of an underdeveloped economy

The term *underdeveloped* is a relative concept. It implies that in terms of certain criteria an economy is less developed than those of a number of other countries.

Undoubtedly the most commonly used measure for ranking countries on the world development scale is per capita income, or per capita product. Theoretically, all countries in the world could be ranged along a development



The economic heritage

9

scale, with countries such as the United States, West Germany, Sweden, and Switzerland being at the top with a per capita product of around \$6,600 to \$8,300 in 1974 and countries such as China and India closer to the bottom with per capita products of less than \$100 or \$200 a year. Figures such as these must of course be handled with a great deal of caution. First of all, statistics for underdeveloped countries tend to be more or less unreliable. Secondly, per capita income figures based on conversion into dollars of national income figures derived in terms of domestic prices and domestic currency are not really comparable. The purchasing power of \$100 will be vastly different in China than in the United States. This sum will purchase a much larger quantity of necessities in the former as compared to the latter. The same may not hold for luxuries; on the contrary in some cases, such as refrigerators, automobiles, and other consumer durables, the opposite may be the case.

Nevertheless, as a shorthand measure and as an approximation of reality, per capita income does reasonably well. This is borne out by the fact that it is quite highly correlated with a number of other measures that are conceptually less ambiguous but also less comprehensive. Such measures include estimates of calories per capita, or the protein and fat contents of diets in different countries. They also include such indicators as housing space per capita, infant mortality, and the number of telephones, physicians, and hospital beds per thousand. The precise ranking of countries may vary depending on which measure is used. However, countries that rank high or low by one standard tend to be similarly ranked by other standards.

The kind of technology used might serve as another way of characterizing an underdeveloped country. Such an economy may be expected to rely principally on pre-modern and pre-industrial methods of production. It is likely to apply traditional methods in agriculture, relying on biological (e.g., organic manure) rather than chemical (e.g., chemical fertilizer, insecticides, and pesticides) or mechanical (e.g., tractors or other kinds of farm machinery) inputs. Similarly, it implies the use of handicraft rather than mechanical methods of production in manufacturing.

Pre-industrial and non-mechanical methods of operation also typically prevail in transportation. As a result, transportation costs tend to be high, particularly over long distances. This presented especially serious problems in areas that were primarily dependent on overland transport before the introduction of the railroad. Typically, highways and roads tend to be very poor in pre-modern economies and may frequently be virtually impassable during certain periods of the year, while transportation by humans or by animals over foot or mountain paths restricts the quantity of goods that can be shipped and



10 China's economic revolution

the distance over which these shipments can travel. These limitations are not only physical but also economic. The quantity of goods that can be shipped over long distances is also constrained because this form of transportation tends to be very high-cost per ton-mile.

Given pre-industrial methods of production and transportation, the productivity of labor will be low and the cost of transport high. This means that labor requirements in agriculture will be high. This large labor force will consume most of what it produces, leaving only a small surplus for sale. At the same time the high cost of transport will limit the possibilities for regional specialization. Thus small surplus and limited specialization mutually reinforce each other in limiting the extent of the market.

Low labor productivity based on pre-modern technology and limited specialization yields low per capita income. Correspondingly, with pre-modern patterns of living, consumption needs and standards also tend to be low. Therefore, the purchasing power to buy manufactured consumer goods will also be low. This, combined with limited farm surpluses for sale, places serious constraints on the growth of cities. In turn, with limited surpluses for sale, the cash income of the rural population and thus its power to purchase urban manufactures will also be limited.

Essentially it is in this sense that one can speak of underdeveloped countries being poor because they are poor and being technically backward because they are backward. We witness here a pattern of circularity which, if modern economic growth is to take place, must be broken into at one point or another.

China's economic backwardness

To what extent does this model of an underdeveloped country fit the Chinese case prior to 1900? By that time Western and Northern Europe and North America had experienced their respective industrial revolutions and had traveled some distance on the industrialization path. In relation to these areas China was quite underdeveloped in terms of the criteria suggested in the preceding discussion. By that time Japan had launched its industrialization drive and was clearly pulling ahead of China, although the gap between these two economies was not yet as wide as it was to become in later decades.

However, in relation to other underdeveloped countries in Asia and Africa, the Chinese economy of the nineteenth century can be considered advanced by pre-modern standards. This applies to both the prevailing level of technology and to the degree of commercialization in agriculture.