

Japanese Economic Revolution vs. the Western Experience (part 1)

By Dr. Kawakatsu Heita

A new 'Asian drama'

A quarter of a century ago, Gunnar Myrdal, a Nobel prize laureate economist, in his *Asian Drama* (subtitled 'An Inquiry into the Poverty of Nations,') argued convincingly that Asia was subject to a vicious cycle of poverty (Myrdal, G., *Asian Drama: An Inquiry into the Poverty of Nations*, 3 vols., Harmondsworth & C., 1968). There was little hope for development because the low average income caused by the sheer size of population meant that there were not enough savings to invest. The present East Asia, however, stars in the world drama of accumulating wealth, and the center of that dynamism is Japan. When Japan experienced 'take off' in the late 19th century, she was regarded as an exceptional case in Asia, where most countries became subdued to the Western powers. Now Japan is followed by the Asian NIEs (Newly Industrialized Economies: South Korea, Hong Kong, Singapore and Taiwan), and these four little dragons are, in turn, followed by ASEAN (Association of Southeast Asian Nations), e.g., nations such as Thailand, Malaysia and Indonesia. If Myrdal were to write a new Asian drama now, he would change the subtitle to 'an inquiry into the nature and causes of the wealth of nations.'

Act one of the drama is Japanese economic development. How did it all begin? It has been assumed that Japan caught up with (and is now surpassing) the West. There was, however, an unmistakable difference between Japan and the rest of the late starters of industrial Europe and the U.S. When continental Europe and the U.S. started industrialization in the 19th century, their infant industries had a high tariff protection directed mainly against British goods, while Japan emerged as a power without tariff autonomy. The tariff option to foster domestic industries was not open to Japan until 1911 as the commercial treaties concluded in the 1850s banned its use. It was Britain that remained the main exporter of industrial goods, consisting mainly of cotton manu-

factures. Still, it was the Japanese cotton industry that threatened Britain in Asian markets as early as the first decade of the 20th century. How was that possible?

In order to answer these questions, this essay aims to address two points.

Firstly, modern history has witnessed the emergence of two types of economic societies, distinct from the old empires. These two types emerged at the extremities of the Eurasian continent. One was the Western one. There was another—the Japanese economic society came into existence almost simultaneously with the former. Both moved to attain economic superiority over the old Asian empires. That is to say, the West challenged such Islamic empires as the Ottoman Turks (c.1299–1922) and Mughals (1522–1858), while Japan challenged the Chinese empire. As Europe emerged as a power seeking to dominate Islamic Asia, so Japan emerged as a power after her victory in the intra-Asian rivalry.

Secondly, these two economic systems were firmly established around 1800, without mutual contact, through their respective 'production revolutions' of the 18th century. The production revolution has been called the 'industrial revolution' in the West, a capital-intensive and labor-saving type of production revolution. Another type of 'production revolution' was carried out in Japan, characterized by labor-intensive and capital-saving techniques, which Hayami Akira calls succinctly the 'industrious revolution.' As a result, both the West and Japan were able to escape from the problem of an outflow of treasure to the old empires of Asia.

Methodological point of view

A brief explanation of my methodological point of view is desirable at this point. What matters here is economic development. J. A. Schumpeter in his pioneering work, *The Theory of Economic Development* (Schumpeter, J. A. *Theorie der wirtschaftlichen Entwicklung*, 2 Aufl.,

1926), defined economic development as 'the carrying out of new combinations;' different methods of production can only be distinguished by the manner of the combination of factors of production. The end result of the combined sum of all the factors of production is all the products used in a society. These products constitute the everyday life of the people and can be called the product complex of a society. Each society has its own product complex. When economic development occurs, that is to say, when a new combination is carried out in a society, the combined sum, i.e., the product complex, will change. Once the product complex changes, it will affect the manner of life of the people. The concept of product complex is a modification of the anthropological concept of the culture complex which refers to the whole life of a people. The anthropological view of Japanese culture—which will also be the sociological one—will certainly include not only the tea ceremony, *Kabuki* and *Noh* plays, but also the Sony video, Toyota car, Nikon camera, and Japonica rice with chopsticks.

The product complex is a term which refers to the material foundation of the culture complex. The product complex of a society is the sum of all the material things supporting the material life of the people. Adam Smith referred to it when he wrote in the first sentence of *The Wealth of Nations* (Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 1776.), saying "all the necessities and conveniences of life which it [every nation] annually consumes, and which consists always either in the immediate produce of that labor, or in what is purchased with that produce from other nations." Karl Marx called it in *Das Kapital* (Marx, K., *Das Kapital*, Bd.1, 1867), "an immense accumulation of commodities" to indicate the wealth of those societies in which the capitalist mode of production prevails. The concept of "product complex" is used here to refer to the entire combination of goods which constitute the material life of a society.

Because of the strong influence of Marxism, economic historians of Japan have focused on the emergence of class, i.e., wage laborers and capitalists, paying little attention to the material things used in everyday lives. The late Fernand Braudel made detailed studies of the foods and beverages produced and consumed from the 15th through the 18th centuries, in his first volume of *Civilization and Capitalism, 15th–18th Century* (Braudel, Fernand, *Civilization and Capitalism, 15th – 18th Century*, London, 1981). Alfred Crosby in his *The Columbian Exchange: Biological and Cultural Consequences of 1492*, (Newport, Conn., 1972.) remarked that Columbian exchange delineated the global dispersal and exchange of New World products (such as pumpkin, maize, potatoes, sweet potatoes, beans, cocoa, paprika, American cotton, and manioc) and also Old World products (rice, wheat, barley, oat, onions, radishes, sugar cane, coffee, indigo, grape wine, bananas, olives, and fruit crops; we can also include the cow, pig, sheep, goat, chicken and horse). This inflow of new products transformed the material underpinnings of life. It brought about a revolution in European material life. This material revolution was accompanied by their utilization and consumption in a new form of social organization.

Special attention should be paid to a series of goods introduced from Asia, such as cotton, indigo, sugar, tea, coffee and porcelain. These became necessities and conveniences in the material life of Europeans. Much of the demand for the Asian goods had to be satisfied by imports and therefore had to be paid for with gold and silver. These precious metals, in turn, came mainly from the New World. During the first century after the discovery of the Americas, Europeans were not interested in bringing anything back except gold and silver. As much as one-quarter to one-third of the huge volumes of these metals obtained from the Americas ended up in Asian hands.

An overlooked fact is that the trading structure between Europe and Asia was similar to the one between Japan and the rest of Asia: Japan exported bullion to and imported various goods from Asia. Just as the emerging pattern caused a huge trade imbalance for the West with Asia, so Japan had a trade imbalance with

Asia. This imbalance remained unchanged until the end of the 18th century.

These inflows of new products caused not only substantial change in the product complex of both European and Japanese societies, but also created a crisis in the economies because of the corresponding outflow of precious metals. The outflow of Japan's metals was so substantial that between 1648 and 1708 gold exports were worth 2.4 million *ryo*, while those of silver were worth 374,000 *kanme*; between 1663 and 1708, exports of copper reached 114 million *kin*. The drain brought such a blow to the economy that the only answer was to produce those imports for themselves. It was through a production revolution that this import substitution was attained.

How it all began

According to Wallerstein (Wallerstein, Immanuel M., *The Modern World-System*, 3 vols, New York, 1974–89.), the crisis of the 14th century created a conjuncture in which the modern world-system emerged, so went the economic society of Japan. When we look back to the same period in Asia, we see that in the middle of the 14th century, the Mongolian empire was crumbling, replaced by the Ming in 1366. The Koryo dynasty of Korea was doomed to be taken over by the Yi dynasty (Choson kingdom) in 1392, and the Imperial Household of Japan was divided into two antagonistic groups, each claiming legitimacy. In tandem with the crisis of the 14th century, a rising swell of overseas advances occurred. As a result, Europeans and Japanese came to the same geographical region of the world, the area known as 'the East Indies.' There they engaged in intensive trading activities. The so-called 'Japanese towns' scattered around the East Indies outnumbered the Europeans' so-called 'factories.'

These facts pose an irresistible question. Why did Japan close its doors in the 1630s, exactly when the European countries began to widen their windows more to the world?

During the period between 1200 and 1600, China moved from the final decades of the Sung dynasty (960–1279) through the Yuan dynasty (1271–1368) and well on into the Ming dynasty (1368–1644), achieving notable developments in each. The Sung dynasty moved its cap-

ital to the south sea coast in 1127, and that resulted in an expansion in Chinese imports from foreign lands across the South China Sea. When the Mongols gained ascendancy in the Yuan period, giving China dominion over the world's largest empire, goods flowed into the country from vast areas over the Eurasian continent. In the Ming period the capital was also located on the sea coast during the first half century until 1421. By the Ch'ing Dynasty (1644–1910), products like corn, sweet potatoes, tobacco, and chilis were brought in from the Americas. From the 13th through the 16th centuries, accordingly, China amassed a wealth of goods through imports from virtually all over the world. During the time of the Ming, the material basis for the livelihood of the Chinese, i.e., the product complex of Chinese society, was radically altered from what it had been.

In Japan, this was a time of active exchanges with the Asian continent. Japanese pirates preyed on Chinese shipping, from the mid-14th century into the second half of the 16th century, and dozens of missions organized by the shogunate were sent to Ming China. Feudal domains and religious institutions were financed with the help of merchants in cities like Hakata and Sakai; these exchanges were large in scale. This period thus saw an unprecedented influx of goods from China—sufficient to sever the continuity in Japan's social evolution so that the everyday life of the Japanese was transformed.

From currency importer to exporter

Both Japan and Europe replaced imports with home produced goods by the 19th century, and this was a way of staunching the outflow of currency metals. One point to note here is that before the drain of such metals can be a problem, a country must first be in possession of them. Tokugawa Japan happened to be the only country in the world that was self-sufficient in the three main money materials of gold, silver and copper coins and capable of controlling their distribution.

In the medieval period, Japan had been importing huge quantities of copper coins from China. This trade, which began in

the mid-12th century, led to the import of as many as 70 varieties of Sung coins. A mission to China in 1242 came back with a massive load of copper coins said to have been equivalent to the total volume of copper coins the Southern Sung could mint in a single year. Thereafter the usage of these coins continued to increase, and when the Ming replaced the Mongols, Ming coins were imported in large amounts. Copper coins provided solely by China were the international currency of Asia, in use in Korea, the Ryukyu Islands, Java, Vietnam, and other areas of East Asia. Japan too was dependent on imports from China for its currency throughout the medieval period. Japan's appetite for copper coins was so immense that Shogun Ashikaga Yoshimitsu (1358-1408) entered into a tributary arrangement with China in order to acquire more coins from China.

In the Tokugawa period, however, imported specie disappeared. The turning point came with the minting of Kan'ei copper coins in the 1630s, while China became an importer of Japanese copper. The shortage of copper in China and the need for Japanese copper became a central issue for the Ch'ing dynasty (1616-1912) toward the end of the 17th century. By then Japan was producing many of the products it had imported from Asia, and the Tokugawa shogunate, giving priority to the domestic needs for silver and copper, placed limits on their export. In the 1700-1725 period, it is said that all of the Ch'ing court's specie requirements were met with copper supplied by Japan.

Tokugawa Japan, which controlled the supply of its currency metals, gained influence over China and other Asian countries. By exporting its surpluses, it displaced China as the region's major supplier of copper currency. The appearance of Japanese copper on the Asian market was an epochal event in Asian economic history. As a money supplier Japan began to replace China as a shaper of the Asian economy.

New combinations: East and West

The story of cotton's importation and subsequent manufacture will illuminate the point made above, because it consti-

tuted an integral part of the Industrial Revolution. Before imports of Indian cotton appeared in Britain, the masses dressed mainly in wool. But because woolen goods are not suited for repeated washing, they are not hygienic in that respect. And linen was too expensive for the masses. Influenced in part by the Christian teaching that the body is originally filthy, personal cleanliness was not people's main concern until late in the 18th century. Unlike wool, cotton can be washed easily; furthermore, Indian calico came dyed in various colors and patterns. It was thus quick to catch on among the British. Britain imported the Indian textiles and reexported them to other countries in Europe and to Africa and the Americas, where they rose rapidly in popularity. But because the imports had to be paid for, huge amounts of bullion flowed out of Britain. The payment imbalance became so serious that the government banned the import of calico in 1700, and when this failed to produce the desired effect, it banned the use of calico two decades later. The story of how this crisis was solved by the famous inventions of Sir Richard Arkwright, James Hargreaves, and Samuel Crompton who tried to perfect spinning machines, enabling Britain to produce its own cotton fabrics, needs no explanation.

It took about a century for the British to respond fully to the trade problem. To replace textiles imported from Asia, cotton plants in the Americas provided an alternative source of raw materials, and eventually the British devised spinning machines which duplicated the Indian products. The process of the industrial revolution was the process of developing domestic textiles as a substitute for imports from India. The technological revolution was directed against one of the old Asian civilizations. It was a production revolution that undercut the need for Indian imports and thereby strengthened Britain's economic ascendancy in the Atlantic economy.

The ties that bound Europe to the trading world of the Indian Ocean were also weakened in other ways. Instead of buying such products as coffee and sugar from Asia, Europeans transplanted coffee bushes and sugar cane in the Americas. The realization that the New World could serve as a source of raw materials trig-

gered a drive to create a self-sufficient Atlantic economy, reducing Europe's trade deficit with Asia. Statistics show that after 1810, Europe enjoyed a surplus in its cotton trade with Asia.

In *The Theory of Economic Development*, Schumpeter argues that economic development results from a new combination of materials, production methods, goods and markets. The transition from the Middle Ages to modern times in Europe was marked by numerous new combinations of precisely this sort, including the organizational as well as institutional innovations as advocated by Professor D.C. North, which provided the necessary framework for them (North, D.C. et al., *The Rise of the Western World*, Cambridge, 1973.).

Did Japan experience a revolution similar to that which occurred in Europe? Was there a vast change in society's product complex through new combinations?

There was indeed one such case, and it occurred at the same time that Europe was undergoing its own revolution, just when Japan was shifting to seclusionism. In the Age of Exploration, Japanese pirates and legitimate traders were traveling far and wide, introducing to Japan the products of the lands from the South China Sea to the Indian Ocean. Through exchange within this region, the Japanese acquired new goods from the Asian civilizations as well as tobacco and sweet potatoes from the New World. Just when cotton, sugar and porcelain were becoming daily necessities in Europe, Japan was also importing these products, and through changes in the product complex of the society, they touched off a lifestyle revolution similar to that in Europe.

The product complex was thoroughly altered, altering the culture complex. Historian Naito Konan once remarked that the events in Japan prior to the 16th century should be considered as belonging to the history of a foreign country! Japan from the 16th century had great quantities of gold, silver, and copper at home mines, and the export of these metals reached a volume comparable to the volume flowing out of Europe. Eventually, however, the production technology of the materials needed to make imported goods was purchased or craftsmen were brought back to Japan. Thus products with their manufacturing technologies

were shifted to Japan. By 1800 the outflow of currency metals was virtually halted. Almost all those goods such as cotton, indigo, silk, sugar, sweet potatoes, porcelain, etc., that had previously been imported were being made at home during the course of the 18th century.

The revolution under the Tokugawa regime involved new combinations. In combining the three factors of production (labor, capital and land), Japan opted for a different combination from that employed in the West. The conditions in much of the West, where labor was scarce relative to other factors of production, made it sensible to maximize productivity with capital-intensive production. But the conditions in Japan, where land was scarce compared with labor, made it more logical to increase land productivity with labor-intensive production. In farming, for example, the Japanese used more workers in smaller fields. Neither of these two ways of combining the factors of production is inherently superior to the other. Both represented the best choices given the respective endowments of economic resources. Instead of experiencing an industrial revolution, Japan in the Tokugawa period (1600–1868) went through an “industrious revolution” (Hayami Akira, ‘The industrious revolution,’ *Look Japan*, vol. 38, no.436, 1992).

To summarize, both Europe and Japan experienced a production revolution at about the same time. The driving force in each case was the need to attain economic self-sufficiency. Both the Japanese and the Europeans became acquainted with new goods like cotton, sugar and porcelain, but found that the imports caused a depletion of their precious metals. To staunch this outflow, both worked out new combinations of the factors of production. The Japanese choice of the closed-door policy in the Tokugawa period was motivated by the same kinds of factors that brought about the modern world-system in Europe. The development of Japanese economic society was moving side by side with the evolution of the modern world-system.

According to Wallerstein, the formative stage of the modern world-system was the years from c.1450 to 1640. This coincided with the time from the beginning of an era of civil war (1467–1568) to the adaptations of the closed door policy

Kan’ei era (1624–44) imposed by the Tokugawa shogunate. The edicts issued between 1633 and 1639 banned Portuguese ships from entering Japan, forbade Japanese citizens to travel abroad, and kept those Japanese already overseas from returning home. By 1640 the Tokugawa system was firmly in place. In this light, the modern world-system and the Tokugawa system were in parallel not just by the creation of a new system of achieving economic self-sufficiency but also by the timing of their formation.

When Japan was forcibly opened and brought into contact with the modern world-system, most historians lay emphasis on how the Japanese embarked on a drive to catch up with the West. But a careful examination as regards the reasons for Japan’s successful industrialization in the late 19th century will show that the catch-up thesis is not that persuasive. The point to note is that in forcing Japan to sign commercial treaties, the U.S. and the other Western powers opened Japan not just to themselves but also to the rest of Asia, setting the stage for free trade in the region. The end result of this Western initiative was to be stepped-up trade and intensified competition within Asia.

With Britain as the leading power, the governments of the West forced open the doors of various East Asian countries during the 19th century. A major goal of the commercial treaties they imposed on these countries was the acquisition of export markets for Western products. In the case of the British, this meant markets for cotton exports. In 1834–35 the Governor General of India reported that “the misery hardly finds a parallel in the history of commerce. The bones of the cotton weavers are bleaching the plains of India.” Indeed, Japan and the rest of East Asia could have been colonized and suffered a fate similar to India’s. But actual events followed a very different course.

The Japanese were not interested in Britain’s cotton products, nor were the British interested in Japan’s. Britain specialized in cotton garments like underwear and summer clothes, which were made from a thin cotton cloth woven from long-stapled American cotton. But the Japanese, who did not possess woolen goods, used cotton to keep warm in the winter. Their cotton clothing was made

from thick cotton cloth woven from short-stapled cotton. The Japanese used British thin cotton cloth as an inferior substitute for silks, and could rebuff Britain’s export drive even without taking defensive action.

Once Japan’s ports were opened, large volumes of short-stapled cotton flowed in from China and later from India. Since this raw cotton was similar to the domestic variety, Japanese cotton farming, which had flourished in the Tokugawa period, was wiped out by 1900. However, Japan used the imports to spin coarse yarn and weave it into a thick cloth, which was exported to China and Korea. Three centuries before, Japan had imported cotton cloth from China and Korea, but the “industrious revolution” of the 18th century led to the contrivance of more economical production methods and the cessation of imports. After Japan was integrated into the free trade system by the West, exports began. Japan managed to take a lead through the production revolution of the 18th century which was the basis for this reversal of import flows into export flows. China and Korea fell from their former high status to markets for Japanese manufacturing. The catch-up thesis, with its implication of a struggle between Japan and advanced Western countries, is not really on target. Japan’s successful industrialization was the product of a much older rivalry with other Asian nations, one whose roots go back to the years leading into the Tokugawa period (Latham, A.J.H. and Kawakatsu H., eds. *Japanese Industrialization and the Asian Economy*, London, 1994). The Japanese ‘take off’ was the new combination of Western industrial technology on top of the traditional industrious technique. DJI

[This essay will be followed up in the March/April 1997 issue.]

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