# Japanese Economic Growth during the Edo Period\*

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#### Abstract

During the Edo period, Japanese production of silver declined drastically. Japan could not export silver in order to import cotton, sugar, raw silk and tea from China. Japan was forced to carry out import-substitution. Because Japan adopted seclusion policy and did not produce big ships, it used small ships for coastal trade, which contributed to the growth of national economy. Japanese economic growth during the Edo period was indeed Smithian, but it formed the base of economic development in Meiji period.

Key words: Kaimin, maritime, silver economic growth, Sakoku

## 1.Introduction

Owing to the strong influence of Marxism, and Japan's defeat in World War II, Japanese historians dismissed the Edo period (1603–1867) as a stagnating period. Japan, during this period, was regarded as a country that lagged behind Europe because of its underdeveloped social and economic systems. It had been closed to the outside world for over two hundred years, as a result of its *Sakoku* (seclusion) policy, and could not, therefore, progress as rapidly as Europe and the United States.

This image of Japan during the Edo period began to change in the 1980s, and this period is now viewed as an age of economic growth, even if Japan's growth rates were not as rapid as those of Europe. Economic growth during the Edo period is now even considered to be the foundation for the economic growth that occurred after the Meiji period.

In this paper, I will develop three arguments that demonstrate the veracity of the above viewpoint. The first emphasizes Japan's connections with the outside world. As Japan is a country surrounded by seas, maritime networks were of great importance in its economic history, although their role has often been underrated. Japan exported significant quantities of silver during the course of the seventeenth century to be able to import goods—cotton, sugar, raw silk

and tea. However, with depleting silver supplies, Japan was compelled to substitute imports.

Second, with regard to the domestic economy, production and productivity of agricultural goods increased because of very low taxation on commercial activities. However, the salaries of *Samurais* remained fixed. This warrior class, therefore, became poorer compared with the agricultural and commercial classes, notably peasants, farmers, craftsmen and merchants.

Third, although Japan had developed a military regime by the beginning of the Edo period, which continued up to the end of this period in 1867, it remained at peace. I will examine the economic growth of the military regime during this period without wars.

#### 2. Japanese Maritime History

Although Japan is an insular country, its maritime history has rarely been a main topic of study in Japanese history. Japanese economic history during the early modern period has been widely perceived as a history of peasants, or of agricultural history, because most Japanese people were assumed to be peasants until the end of World War II. Rice has been the country's most important agricultural commodity since ancient times. The image of peasants working in rice fields has been, and continues to be, a common one that the Japanese have about their ancestors.

This is, however, only an 'image' and not a fact that Japanese maintain about their ancestors. Yoshihiko Amin<sup>1</sup> (1928–2004) completely changed Japanese historiography in relation to the sea. It is true that by the time the *Ritsuryo* system (borrowed from China) was established at the end of the seventh century, Japanese public documents were predominantly focused on the rice-field. At the same time, however, we should not ignore the important role of seas in Japanese history.

Japanese villages (*mura*) did not always just mean rural or hillside areas. They also sometimes included seaside villages. Japanese historians have, however, tended to overestimate the significance of rural areas and rice fields. Amino emphasized the roles of the *Kaimin*, people

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<sup>&</sup>lt;sup>1</sup> See, Amino (2007–2009).

who mainly lived off sea-related activities. During the latter part of the Jomon Age (around 4000 BC), we find that there were some entrepôts located along the coastline bordering the Sea of Japan. During this period, the Japanese traded with China, Korea and Russia. The Sea of Japan was, therefore, an important Asian trading route. Moreover, Japanese commerce is thought to have been initiated by the salt merchants who lived along the Setonai-kai (a Japanese inland sea located between Chugoku and Shikoku). By the twelfth century, the Japanese coastline was well connected through the use of sea-vessels. The *Daimyo* (feudal lords) who used these vessels depended on each other. Principal products were exchanged through coastal trade. As in the case of Europe, Japanese merchants had their own commercial networks entailing overland and sea routes; the latter created primarily by the *Kaimin*.

The *Kaimin* sometimes acted simultaneously as merchants and pirates. For example, the *Wako*, who engaged in commerce as well as smuggling and invasion, haunted the coasts of China and Korea from the thirteenth to the sixteenth centuries. During the sixteenth century, most *Wako* strongholds were Chinese, and not Japanese, and the *Wako* retained independence from Japanese governments. Japanese *Kaimin* thus engaged in trade independently from the policies of Japanese governments.

#### 3. The Role of Silver

As mentioned above, Japan was connected to other Asian countries, especially through the activities of the *Kaimin*. The history described in this paper is one that focuses attention on the roles of people. A key question that arises is: what was the most significant commodity connecting Japan with the outside world? In the early modern world,<sup>2</sup> the most important commodity traded globally was silver. Significant quantities of silver were exported from South America to Europe and from the Pacific to Asia. In particular, exports from Japan, a primary silver producer, to China were considerable. Thus, silver circulated all over the world.

There were many silver mines in Japan, and Japanese coins contained a high proportion of the precious metal. For example, the *Keicho-gin* coin (1601) was composed of 80 per cent silver. China and other Asian countries were, therefore, willing to import this Japanese coin. From the

<sup>&</sup>lt;sup>2</sup> Flynn and Giráldez.(1995), 201–221.

end of the sixteenth century up to the first half of the seventeenth century, it is estimated that about one-third of the world's silver was produced in Japan.

The volume of silver exports from Japan was impressive. According to estimates by Kobata Atsushi, Japanese silver exports amounted to nearly twenty thousand kilograms per year.<sup>3</sup> Even after the 1630s, when the *Sakoku* policy was in full force, Japanese silver exports continued. Goods imported by Japan from China included commodities such as cotton, sugar, raw silk and tea. Much of Japan's silver exports were to China to settle the trade balance.

Japan exported silver to China via Nagasaki, Tsushima and Ryukyu, with much of the silver coming directly from Nagasaki. Silver from Tsushima was exported via Korea to China. It was also exported from Satsuma via Ryukyu to China. In the seventeenth century, China was the most affluent country in Asia and, arguably, in the world. Considerable amounts of silver were exported to China from Asian as well as European countries, with silver exports from Japan being the most substantial. However, Nagasaki differed from other Japanese silver trading hubs. Whereas Nagasaki was included in the territorial orbit of the Tokugawa Shogunate, also known as Tokugawa *Bakufu* (Government), the other trading centres were part of the territories of the various *Daimyo*. Nagasaki was the most important hub in the trade route with China and was directly controlled by the Tokugawa government. Early modern Japanese history was thus closely associated with the global circulation of silver.

## 4. The Foundation of Japanese Economic Growth

From around 1470, many of the *Daimyo* became independent and actively fought with each other. This was, therefore, a period of *Sengoku Jidai*, or warfare, in Japan. The *Daimyo* required considerable sums of money to wage wars as well as to survive them. They therefore needed to support and promote commerce which they did to a considerable extent. For example, Oda Nobunaga (1534–1582) adopted a policy of *Rakuichi Rakuza* which involved establishing a free market to replace the monopoly of the guilds, thereby supporting the development of commerce. The import of guns from Portugal during the second half of the sixteenth century was an important factor that contributed to a 'Military Revolution' in Japan.

<sup>&</sup>lt;sup>3</sup> Kobata (1968).

Toyotomi Hideyoshi (1536/37–1598), who was responsible for reuniting Japan in 1590, began to trade by way of *Shuin sen* (ships used for foreign trade) with the formal permission of the Japanese authorities. The government subsequently took control of this highly profitable foreign trade.

Every time Hideyoshi conquered a new territory, he had the land surveyed. He succeeded in simplifying the previously complex relationship between land and estates and established a unified land system. This became the basis of the *kokudaka-sei* (rice-standard) during the Edo Period. Consequently, every *Daimyo's* tax contribution was calculated in terms of rice production. This system was known as *Taikou Kenchi* (*Taiko* indicated Hideyoshi's rank and *kenchi* meant land survey). It completely eradicated the old feudal manor system, signalling the end of the medieval era and the beginning of the modern period in Japan. Moreover, it contributed to the establishment of centralisation within bureaucratic systems. During the Edo Period, every *Samurai*, or member of the *Samurai* class, received his salary in rice. A rice standard was adopted during the early modern period in Japan. Hideyoshi's system suited the Japanese economy of this period and continued up to the end of the Edo Period. Hideyoshi is also credited with unifying the system of weights and measures which was a major advance for the economy.

Moreover, although Hideyoshi was born as the son of a peasant, he carried out the *Katanagari* which completely separated soldiers from peasants. The *Katanagari* became a foundation of Japan's social ranking system. In this system, the *Samurai* were ranked the highest, followed by peasants or farmers, then craftsmen, and lastly the merchant class which was ranked the lowest. Whereas farmers were allowed to possess swords before the introduction of Hideyoshi's *Katanagari*, they were now demilitarised. Through Hideyoshi's administrative reforms, the Japanese social hierarchy became fixed, marking a major constitutional revolution in Japanese history.

Thanks to its affluence from silver, Japan did not need to carry out financial revolutions of the kind that occurred in European countries. The Tokugawa *Bakufu* attempted to stop the export of silver and copper, especially after the 1660s when the production of silver and copper declined,<sup>4</sup> and by around 1750, Japanese silver mines were severely depleted. Nevertheless, Japanese governments at the centre did not issue paper money, probably because their governance structure was still closely connected with the rice-standard. If the government had levied taxes on commerce, the rice-standard could not have been maintained, because the importance of rice as a source of revenue would have dramatically declined. Therefore, the *Bakufu* was compelled to continue implementing the rice-standard system. Japan began to carry out import-substitution, because it could no longer export silver to enable it to import commodities from China. Key commodities such as cotton, sugar, raw silk, tea and ginseng, which had earlier been imported from China and Korea, were being cultivated in Japan by the end of the eighteenth century.

# 5. The Seclusion System

Japan did not close itself off completely to the rest of the world. Trade with China and the Netherlands continued via the island of Deshima, while trade with Korea was carried out from a trading house located on Tsushima han, an island situated in close proximity to the Korean peninsula. Even during the *Sakoku* period, Tsushima han *officially* traded with Korea. This was because of Japan's import of ginseng from Korea. Through these routes, Japanese silver and copper continued to be exported to foreign countries. Moreover, Satsuma traded with Ryukyu (Okinawa), while trade with Ainu (Hokkaido) proceeded through Matsumae han. These trade routes were known as the 'Four Mouths'. In other words, Japanese *Kaimin* could still trade with foreign countries. Thus, Japan did not completely close itself off, but it controlled its trade by restricting foreign trade to one port. This was a common policy in Asia at the time.

The *Kaimin* were more actively engaged in domestic coastal trade. Because the Tokugawa government had banned the building of big ships, smaller boats were built and used for coastal trade. The lengthy Japanese coastlines and the rest of Japan were connected using these smaller boats. In the course of the Edo period, there was an increase in the number of special agricultural products which began to be exchanged across land or coastal routes, or across both routes.

<sup>&</sup>lt;sup>4</sup> Kobata (1968).

The central rice market was located in Osaka.<sup>5</sup> Whereas the western part of Japan used a silver standard, the eastern part used a gold standard. If the price movement of other commodities differed from rice, the economy would have faced a challenging situation which it did during the Edo period.

#### 6 Tokugawa Yoshimune

By the turn of the eighteenth century, it had become increasingly difficult to export silver, because Japanese silver stocks were almost completely depleted. Yoshimune became the eighth *Shogun* in 1716. His efforts to keep rice prices stable earned him the name *Kome Shogun* (Rice *Shogun*). Moreover, his reform, known as *Kyouho no Kaikaku*, was aimed at recovering the power of the *Samurai* class. Yoshimune tried to stabilize the Tokugawa government's fiscal system and imposed higher tax on the Japanese people. The tax ratio was changed from 30 per cent to 50 per cent of peasants' incomes. One of his eminent vassals, Ooka Tadasuke (1677–1752) made valiant attempts to control rice prices but all efforts failed.<sup>6</sup> Even if Yoshimune's efforts could be considered successful, it became increasingly difficult to regulate the price of rice, because this was not under the control of Tokugawa *Bakufu*. Moreover, the number of available foodstuffs, apart from rice, increased, and the quality of Japanese meals also improved—trends to which Yoshimune contributed.

In order to soften the effects of a bad harvest and famine, Yoshimune introduced *satsumaimo* (sweet potato). Given Japan's unfavourable trade balance with Korea, he also introduced the plantation of ginseng as a substitute for importing this item from Korea. Yoshimune's attempt to carry out import substitution succeeded. By the end of the eighteenth century, Japan had further succeeded in substituting the import of key commodities, notably, cotton, sugar, raw silk and tea, which began to be exported at the beginning of the Meiji Period (1868–1912). Yoshimune is, therefore, viewed as the *Shogun* who recovered Tokugawa's economy.

Farmers and peasants began to cultivate more vegetables and other foodstuffs for markets

<sup>&</sup>lt;sup>5</sup> Miyamoto (1988).

<sup>&</sup>lt;sup>6</sup> Oishi (1974), 96–130.

and fairs. Marine products, which were produced by the *Kaimin*, were also exchanged at these markets and fairs. Consequently, the central importance of the price of rice declined. This, in turn, raised significant challenges for the fiscal system of the Tokugawa regime, contributing to its eventual collapse as the fiscal system of the *Bakufu* was based on the rice standard and rice production.

## 7. A Military Regime without Wars

From the 1630s to the 1850s, Japan was at peace. Paradoxically, however, the Japanese constitution was a military one. Thus, in the absence of wars, Japan was still a fiscal-military state.<sup>7</sup> During this peaceful age, the warrior class had no role to play, and became useless. They forgot how to fight. The image of the Japanese '*Samurai*' is, therefore, an illusory one. In reality, members of this class became bureaucrats. The Tokugawa government did not need to equip itself with a navy or army, but it did need to maintain the *Samurai*, who were transformed into bureaucrats and provided with bureaucratic jobs to save them from becoming jobless. In the age of war, the governments needed many vassals as troops. In the age of peace, these same troops were useless and became superfluous. During the Edo period, almost all official posts were shared by more than two persons. This system thus provided a kind of working share and was applied to the *Samurai*.

The Tokugawa *Bakufu* exerted significant control over the *Daimyo*, compelling them to undergo *Sankinkoutai*. According to this system, every *Daimyo* had to stay in Edo for a full year every two years. This proved too costly for the *Daimyo*. They needed to stay in good accommodation and spent large amounts of money for their travel. As a result of *Sankinkoutai*, Japan's main roads were considerably improved. Thus, the policy of *Sankinkoutai* lent positive effects to Japanese economic development at the cost of the *Daimyo*. Though we cannot exactly estimate all of the costs that the *Daimyo* had to bear, the sum total of these costs might have exceeded those of the wars.

In contrast with Europe, Tokugawa Japan lacked excise tax. The tax burdens on commerce and commercial commodities were, therefore, very light. During the course of the Tokugawa period, whereas living standards among farmers, peasants, craftsmen, merchants and traders increased, the disposable incomes of the *Samurai* did not show much change because their incomes were fixed. The Japanese 'contractor state' thus promoted economic growth while retarding the economic prosperity of the *Samurai*.

# 8. Industrious Revolution?<sup>8</sup>

Regarding Tokugawa Japan's economic development, Hayami Akira has suggested that an 'Industrious Revolution' took place in Japan.<sup>9</sup> He argues that whereas the domestication of cattle decreased, the number of peasants cultivating the fields conversely increased, resulting in longer working hours for peasants. Japanese economic development was made possible by inputting more labour (without the use of labour saving technology). In other words, the peasants took the place of the cattle and worked longer. Thus, according to Hayami, Japan experienced an 'Industrious Revolution', leading to economic growth, in contrast with Europe where economic growth was achieved through an Industrial Revolution. The term 'Industrious Revolution' is now used by many historians in different contexts.

However, Hayami did not present concrete data of longer working hours by peasants. It is possible that peasants worked more efficiently than cattle. Considering the small size of Japanese rice fields, the use of cattle may not have been an efficient method for increasing productivity. We can see improvements in farming implements as well as in irrigation systems. However, Hayami's conclusion was based on too little evidence. We should, therefore, use the term 'Industrious Revolution' more cautiously. I will consider this aspect from a different perspective.

Japanese villages had the right to decide on their own holidays. During the Edo period, the number of village holidays increased. Therefore, I do not agree with Hayami's thesis that Japan experienced an 'Industrious Revolution'. Rather, I suggest that the productivity of lands increased and peasants could, therefore, enjoy the longer holidays.

The living standards of peasants, farmers and craftsmen were enhanced during the Edo period. If this had not been the case, they could not have sent their children to private schools in

<sup>&</sup>lt;sup>7</sup> Tamaki (2011),155–179.

<sup>&</sup>lt;sup>8</sup> This section is based on Tamaki (2011),76–177.

<sup>&</sup>lt;sup>9</sup> Hayami(2003).

Terakoya to learn how to read, write and calculate. Japan's high literacy rate, even among women at this time, is a well-known fact among economic historians in Japan as well as in other countries.<sup>10</sup> This high rate can be attributed to the education facilities at Terakoya and to the increasing wealth of families able to avail of them.

#### 9. The Importance of Information

The Tokugawa *Bakufu* authorities were able to obtain information about foreign countries using various information-gathering techniques. Because of its insularity, the government was able to control the inflow of foreign information by controlling activities of the 'Four Mouths' trading ports, especially Nagasaki. This enabled the Tokugawa *Bakufu* to centralise the information-gathering system regarding foreign activities.

In 1616, all ships, with the exception of those from Ming China, were permitted to sail to Hirado in Nagasaki. However, in 1624, the Japanese government forbade Spanish ships from entering Japan's maritime waters, and in 1638, Portuguese ships were denied entrance altogether into Japanese ports. In 1641, the *Sakoku* policy was brought into full effect with the shifting of the Dutch mercantile house (Nagasaki Shokan) to Deshima.

In addition to highlighting the significance of the above-mentioned 'Four Mouths' routes in information-gathering, it is also important to note the roles of the *Chosen-Tsushinshi* (Korean Missions to *Shogun*) and the *Oranda-Fusetsugaki* (Dutch merchants).<sup>11</sup> Whenever ships arrived in Deshima, the Tokugawa *Bakufu* demanded information and reports on foreign countries from the *Oranda-Fusetsugaki*. In this way, the *Bakufu* was able to gather critical information on foreign countries, and, more importantly, to monopolise that information.

However, this monopoly of information by the *Bakufu* became increasingly unfeasible. During the first half of the nineteenth century, *Rangaku*, which means to learn about Dutch culture and the Netherlands, began to flourish, with the number of Japanese able to read Dutch significantly increasing. The Japanese people were thus able to learn about foreign affairs, and began to contemplate doing away with the *Sakoku* policy. The Japanese intelligentsia began to notice the growing inability of the Tokugawa *Bakufu* to control information derived from

<sup>&</sup>lt;sup>10</sup> Furukawa (2003).

foreign sources. They considered this to be problematic for Japan, especially after the First Opium War (1840–42).

The Tokugawa *Bakufu*'s loss of monopoly over the control of information from foreign sources was closely connected with the rise of Japanese journalism. The intelligentsia now began to learn about foreign affairs. During the course of the Edo period, as incomes increased, literacy rates also increased, enabling people to become more connected to the outside world through their ability to read. From the nineteenth century, foreign merchants began to carry out smuggling activities with the Japanese *Kaimin*, though the actual numbers of those involved are not known. Japanese coasts could not provide protection against the penetration of foreign influences. Before the arrival of four ships at Yokohama from the USA in 1853, Japanese information networks had expanded so much that a transformation of Japanese society had already occurred before Japan entered into the Meiji period.

## **10.Brief Conclusion**

Japanese economic growth during the Edo period was Smithian and not Schumpeterian. In other words, Japanese society was not based on technology innovations. The Japanese succeeded in increasing productivity and the volume of production, and consequently living standards improved. But this may not have overcome the Malthusian trap. Therefore, Japanese economic growth during the Edo period faced a limitation. Nevertheless, Japan likely experienced moderate economic growth, and this growth became the base for the economic development that occurred after the Meiji period.

Japan carried out import substitution of cotton, sugar, raw silk and tea. These were domestically produced and exported to foreign countries during the Meiji period, thus contributing to Japan's improved balance of trade. Moreover, the development of coastal trade, which was stimulated by the *Kaimin*, enabled the birth of a Japanese national economy.

The improved living standards of the non-*Samurai* class enhanced the literacy rate in Japan. Moreover, the spread of *Rangaku* among the Japanese intelligentsia became the basis for the acquisition of Western languages by the Japanese. All of these factors contributed to Japan's rapid industrialisation during the Meiji period

<sup>&</sup>lt;sup>11</sup> Matsutaka (2007).

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