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Since we entered the 21st century, the financial situation in Japan has been more exacerbated than that during World War II. A status that is equivalent to that during the period of the Meiji Restoration has been ongoing. Moreover, the international credit rating of Japanese government bonds has been shaky, which also resembles that during the Meiji Restoration period.

In 1870, Japan's first government bonds were issued in pounds to raise funds to construct railway facilities. Despite the efforts to offer all customs revenues as security, poor conditions were applied to the issue such as a maturity period of 13 years and an interest rate of 9 percent, which ranked just better than that of Honduras. In 1873, a second set of government bonds, this time to dispose of *chitsuroku* (stipends, etc.), was issued in pounds with a maturity period of 25 years and was based on the security of rice. While the interest rate was reduced to 7 percent, it was higher than the rates applied to Argentine and Chilean bonds.

Conversion from *goyokin* funds, which were secretly raised, to government bonds that were publicly traded, played a major role in achieving the modernization of Japan. The processes that led toward the modernization of Japan include the breakup of the old regime. Specifically, these processes consisted of the elimination of former clan notes and *chitsuroku*, the consolidation of government notes, which were issued in a large quantity for the Boshin War, the establishment of private-sector banks and the promotion of industry. All of these processes progressed with an extremely close relationship with the issuance of government bonds.

In 1868, the initial year of the restoration, the government was dependent upon government notes and loans for 87 percent of its expenditures. The Meiji government first established tax collection authority and implemented a land tax reform to obtain tax revenues in cash. In terms of expenditures, the government significantly reduced *chitsuroku* payments to the former *shizoku* (samurai). Through these efforts, a surplus (primary surplus) was achieved in 1874 and 1875, with the exception of debt redemption for principal and interest.

While *chitsuroku* was paid in accordance with *koku* (rice as the tax base) before the restoration and was equivalent to 34.62 million yen, 12.83 million yen was paid as interest on government bonds in 1877. This means that a large-scale reduction of 60 percent of vested rights was implemented in only ten years.

I What We Can Learn from the Meiji Restoration Period

Since we entered the 21st century, Japanese finance has been facing a rare significant downturn in its history, with dependence on government bonds reaching 44.6 percent in fiscal 2004. Even during World War II, dependence on government bonds was only 13.5 percent in fiscal 1943, 25.6 percent in fiscal 1944 and 38.5 percent in fiscal 1945. After including the extraordinary special accounting for the military, the level of dependence was still only 29 percent in fiscal 1943, 34 percent in fiscal 1944 and 40 percent in fiscal 1945. Only during the Meiji Restoration period did Japan face such a devastating financial downturn such as the one we are now facing.

In 1870 (Meiji 3), the Meiji government issued Japan's first government bonds in London. The applicable interest rate of these bonds was higher than those of bonds issued by Egypt and Rumania, although it was lower than that applied to bonds issued by Honduras. This situation can be likened to that in which Japan's government bonds were rated lower than those of Chile and Botswana by foreign rating firms since the beginning of 2002.

Even in such a situation, by around 1877, Japan's finances achieved a primary surplus, i.e., a surplus if interest and principal repayment of debts are excluded. The current Japanese government is aiming at achieving a primary surplus in the early part of the 2010s. In the efforts to achieve this goal, the reforms implemented early in the Meiji era might provide some reference. In addition, while the expression "a major reform since the Meiji era" is now sometimes used, what was the specific content of the reforms that took place in the Meiji era? Furthermore, while the argument that the issue of government notes is necessary to reverse deflation gained strength in 2002, the Meiji government did issue such notes during the Meiji Restoration period.

From these perspectives, I will look back over the finance and government bonds of the Meiji Restoration period. First, I will review the general situation up until 1877 (Meiji 10), the period covered by this paper. The fiscal balance for this period is shown in Table 1.

The regime of the Tokugawa shogunate was toppled through the restoration of imperial rule in November 1867 and the order for the return of the imperial regime in January 1868, and the Meiji government was inaugurated. During the Meiji Restoration period, varied types of money and clan notes (*hansatsu*) were circulated. Being affected by the trends in the parity of gold and silver in foreign countries, the currency system was in great confusion. In terms of finance as well, the new government faced a variety of factors requiring huge expenditures. These included the handling of the accumulated debts of the shogunate and clan governments (*han*) and the payment of hereditary stipends (*karoku*) to samurai retainers. Conversely, taxes were paid in kind, and the authorities to collect tax covered only districts under direct control, which consisted of less than 30 percent of the nationwide tax base.

Making the situation more complicated, civil wars took place for 17 months starting with the outbreak of the Toba-Fushimi War to the surrender of Goryokaku Castle. There was no choice but to finance the expenses required for these wars by government notes. The revenue for 13 months during Meiji Term 1 (from December 1867 to December 1868) consisted of land taxes amounting to 2.01 million yen and customs fees amounting to 0.72 million yen. In contrast, revenue obtained through loans was 4.73 million yen and that through the issue of Cabinet notes (*dajokansatsu*) reached 24.04 million yen. This means that approximately 90 percent of the total revenue of Japan depended on government notes and loans. During Term 2 (January – September 1869), 73 percent of the total revenue depended principally on government notes. It is not an exaggeration to say that the

Table 1. Fiscal Balance in the Early Years of the Meiji Period

(Unit: Million yen)

	Ordinary expenses	Extraordinary expenses	Tax revenue	Issue of notes	Public bonds, loans	Total revenue (notes + loans)
Term 1	6	25	3	24	5	86.7%
Term 2	9	11	4	24	1	72.6%
Term 3	10	10	9	5	5	47.7%
Term 4	12	7	13	2	—	9.7%
Subtotal	37	54	29	55	11	59.6%
Term 5	42	15	22	18	—	35.3%
Term 6	51	12	65	—	11	13.1%
Term 7	60	22	65	—	—	—
Term 8	53	13	77	—	—	—
Subtotal	206	63	229	18	11	9.7%
Total	243	117	258	73	22	23.3%

Notes: Term 1: December 1867 – December 1868; Term 2: January – September 1869; Term 3: October 1869 – September 1870; Term 4: October 1870 – September 1871; Term 5: October 1871 – December 1872; Term 6: January – December 1873; Term 7: January – December 1874; Term 8: January – June 1875.
Source: Hyoe Ouchi and Takao Tsuchiya, *Meiji zenki zaisei keizai shiryo shusei* (Compilation of Financial and Economic Historical Records for the First Half of Meiji), Vol. 4, Kaizosha, 1932.

overthrow of the shogunate was made possible through the issuance of government notes.

The Meiji government that emerged under circumstances characterized by a currency system in turmoil and the failure of the economy had to concurrently deal with the structural reform of government finance and the establishment of a currency system. The authority of the Meiji government to collect taxes extended nationwide through the abolition of clans (*han*) and establishment of prefectures in August 1871. Taxes started to be paid in cash through the land tax reform in July 1873, which contributed to an end of fluctuations in rice prices (in the past, productivity was measured in rice as the tax base). In terms of expenses, progress was made in the reduction of the payments of *chitsuroku* (hereditary stipends, etc.).

These measures contributed to a rapid improvement in fiscal balance and, in Meiji Term 6 (January – December 1873), tax revenue started to exceed ordinary expenses. Toru Omori pointed out in his paper[10] that the average primary balance was narrowly in the black during the period from Meiji Term 5 through Term 8 (October 1871 – June 1875). Because a considerable portion of the former clan bonds, clan notes and *chitsuroku* was abolished, commodity prices began to follow a stable path in 1873 despite yen depreciation caused by a worldwide increase in the parity of gold and silver.

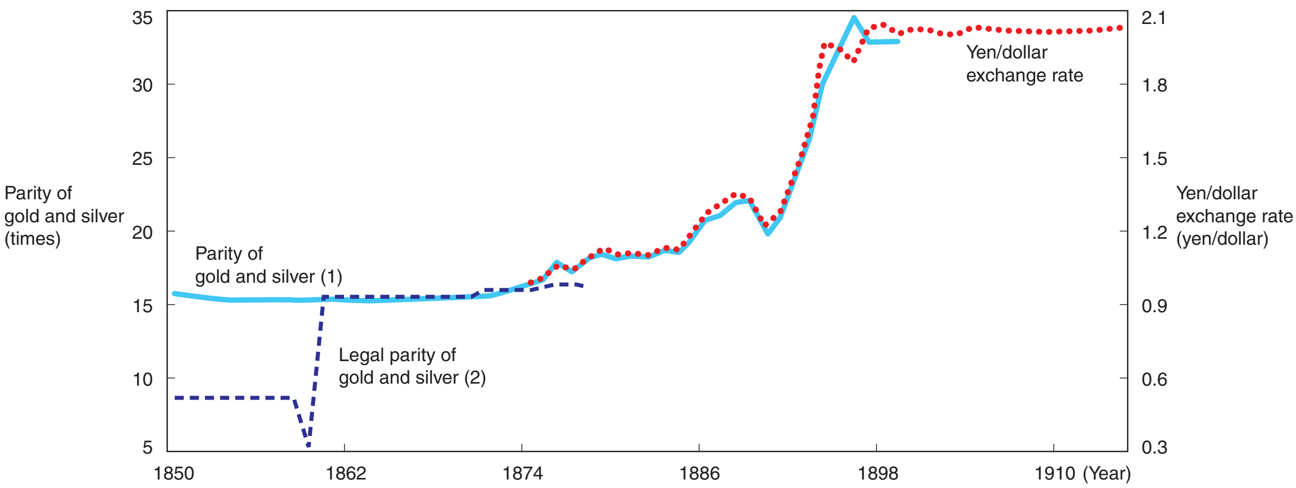
In Japan, which had no concept of government bonds, how were government bonds issued? How did Japan begin to issue adjustment bonds (*seiri kosai*) only 20 years after the Meiji Restoration in a format that was very close to the consolidated bonds of England? (Consolidated bonds are called consols because diverse formats of government bonds were consolidated into government bonds with no maturity period.) How was a huge amount of accumulated debts of the former regime disposed of? How were large amounts of government notes adjusted? How was the extremely large credit risk premium that was required for the first Japanese government bond in pounds reduced? With a focus on these issues, the following section examines the processes involved from the birth of Japanese government bonds and the issue of adjustment bonds (*seiri kosai*).

II Currency System in Inextricable Disarray: Are Cabinet Notes (*Dajokansatsu*) Currency or Debt?

During the last days of the Tokugawa regime, diverse types of money and clan notes were being circulated in Japan, and the currency system was in extreme disarray. In dealing with the financial crisis, the Edo government implemented large-scale recoinage during the Bunsei era (1818 – 1820) and in Tenpo 8 (1837). According to a paper[6] written by Yujiro Oguchi, recoinage was also implemented in Bunkyu 3 (1863), and the profits from recoinage accounted for 68.7 percent of the total revenue of the shogunate government that year.

Because the purpose of recoinage was to acquire marginal profits, recoinage was implemented in the direction of stronger silver with respect to the exchange rate between gold coins and silver coins, resulting in the extremely unrealistic parity of gold and silver from the international perspective. As shown in Figure 1, although the parity of gold and silver exceeded 15 times

Figure 1. Parity of Gold and Silver; Transition in Yen/Dollar Exchange Rate



Notes:
1) The parity of gold and silver (1) is the parity based on the silver market in London; parity (2) is the legal parity within the country.
2) Spot selling rate for other countries in Yokohama: yen per dollar.
3) The gold standard was adopted by the New Currency Ordinance in June 1871. However, the unrestricted circulation of trade silver was permitted only at open port areas. In November 1878, the silver standard was adopted by the recast issue of trade silver of one yen. The issuance of convertible bank notes started in May 1885. The gold standard was adopted by the Coinage Act in March 1897.

Source: Investigation Bureau of the Bank of Japan ed., *Nihon kin'yushi shiryo Meiji Taisho hen* (Japan's Financial History Records: Meiji and Taisho Edition), Vol. 16, 1957; Committee for Editing the Hundred-Year History of the Bank of Japan ed., *Nihon ginko hyakunen shi* (The Hundred-Year History of the Bank of Japan), *Shiryo hen* (Records Edition), The Bank of Japan, 1986.

in London, it was changed from 10.24 times to 8.57 times in Japan by the introduction of *Tenpo koban* (gold coin) and *Tenpo chogin* (silver coin). In addition, through the introduction of *Ansei koban* and *Ansei chogin* in 1859, parity became 5.24 times, creating extremely strong silver.

While such recoinage caused inflation, it was possible as long as the domestic market was isolated from international financial markets by the country's policy of national isolation. However, when the ports of Kanagawa, Nagasaki and Hakodate were opened in June 1859, a large volume of gold coins flowed out from Japan, which was largely dissociated from the international parity of gold and silver. As the international parity of gold and silver at that time was 15 times, silver was excessively appreciated in Japan by close to 3 times over that of the international market. This meant that if silver coins were brought into Japan and exchanged for *koban* (gold coins), extremely large amounts of arbitrage profits could be secured.

In order to triple the value of *Tenpo koban* and *Ansei koban* vis-à-vis silver coins, in February 1860 (Ansei 7) the Edo government minted *Ansei nishugin* (silver coins), each of which contained 1.34 times more pure silver than that contained in *Tenpo ichibugin* (silver coins) but whose face value was only half. This changed the exchange rate from "one foreign silver dollar = three *ichibugin* silver coins" to "one foreign silver dollar = two *nishugin* silver coins." On the argument that "the principles of the same volume for the same type for silver coins were not observed" and "the buying power of dollars would be reduced to one-third," diplomats such as American Ambassador Harris Townsend and foreign merchants strongly opposed the coinage of *Ansei nishugin*.

Because of this, the Edo government had to adapt the parity of gold and silver to the international market by debasing gold coins. In April 1860, the Edo government coined *Manen koban* that contained approximately one-third of the gold contained in *Tenpo koban* per *ryo* (a monetary unit at that time). Consequently, the parity of gold and silver was increased to 15.58 times, which was close to the international standard.

While these measures stopped the outflow of gold coins overseas, inflation took place as the pure gold content of the standard coin was decreased to one-third in a single stroke. In his book,[16] Masami Sato called this phenomenon "Harris shock inflation" and treated it as a cause that contributed to the collapse of the Edo government. According to Mataro Miyamoto,[30] the nominal currency value rapidly increased from 53 million *ryo* to 130 million *ryo*, and inflation at an annual rate of 13.2 percent prevailed after the opening of the ports up until 1868 (Meiji 1).

When the new government was inaugurated, a wide variety of money was being circulated. Included were *mekata*, diverse types of gold coins, silver coins and *sen* coins that had unequal gold and silver content, which were all coined by the Edo government; Mexican dollars that flowed in during the last days of the Edo government and clan notes that were issued by each clan (*han*) within its territory with the permission of the Edo government. In addition, counterfeit gold coins and paper currency were also common. As such, the currency system was in great disarray, which considerably hindered economic activities. Accordingly, the standardization of a currency system was an urgent, vital issue for the Meiji government. However, because the Toba Fushimi War broke out immediately after the order for the return of the imperial regime, the Meiji government declared its intention in February 1868 to follow the currency system of the former Edo government.

As the Meiji government took over the finances of the Edo government by leaving the existence of former clans (*han*) as is, the financial structure of the Meiji government was extremely fragile, as people said "the Imperial Court is worth 8 million *koku* (the rice amount as the tax base)." In its efforts to deal with this matter, the Meiji government adopted a method of raising *goyokin* funds by issuing *kinsatsu* (gold notes) that had been adopted by the previous government during its last days, as there was no choice but to rely on the issuance of a large amount of gold notes (*kinsatsu* or *dajokansatsu*). During the period from June 1868 to July 1869, *dajokansatsu* notes were issued by taking over the functions of the gold notes (*kinsatsu*) of the Edo government and clan notes (*hansatsu*). In addition, *dajokansatsu* notes were also issued to finance the Boshin War. In total, 48 million *ryo* was issued.

The management of financial affairs at the beginning of the Meiji Restoration was implemented by Kimimasa Yuri, a retainer of the former Fukui clan (*han*). In order to strengthen clan finances, the Fukui clan provided funds in the form of clan notes (*hansatsu*) to merchants, consolidated all products within the clan and sold them to other clans. *Dajokansatsu* notes were lent through a commercial group organized by wealthy merchants in Kyoto and Osaka. Takeo Suzuki, et al.,[18] pointed out that this method was created by Yuri who became a councilor of the new government by expanding the method adopted by the Fukui clan in which clan notes were issued through a comprehensive product group.

During the last days, as it became difficult to secure profits from recoinage because of the opening of the ports, the Edo government also issued gold notes (*kinsatsu*) to borrow funds from wealthy merchants. The funds were required for the shogun to visit Kyoto and to finance the suppression of wars initiated by the Choshu clan. In 1865, the Edo government required 1,153 merchants in Edo to pay a total of 630,000 *ryo* to the government. In the next year, it ordered 1,108 merchants in Osaka to deliver approximately 18 *kan* of silver. Because government funds (*goyokin*) were continually required, rice paid as land taxes within the territories that was used as collateral reached a limit. According to Yujiro

Oguchi,[6] the Edo government issued gold notes (*kinsatsu*) in April 1867 to raise funds to construct a place to open a port in Hyogo by using customs duties after the port construction as security. The Edo government permitted the circulation of *kinsatsu* within the four administrative regions and neighboring areas. Moreover, according to his book, in October 1867, the Edo government granted gold notes (*kinsatsu*) according to the amount of *goyokin* funds provided to the Mitsui family (a wealthy merchant family), which could be circulated in Edo and the eight provinces of Kanto.

In the same way as with the clan notes (*hansatsu*) and the gold notes (*kinsatsu*) of the Edo government, *dajokansatsu* notes were lent by using the receipts of loans from wealthy merchant families in Kyoto, Edo (Tokyo) and Osaka as security. These families included the Mitsui, Ono, Shimada and Konoike families. In addition, *dajokansatsu* notes were lent to each clan (*han*) at the rate of 10,000 *ryo* per 10,000 *koku* (the rice amount as the tax base). Each clan (*han*) was required to repay the principal plus 30 percent in 13 years. Taking the example of the Fukuyama clan (*han*) in Hiroshima, which issued clan notes (*hansatsu*) by using borrowed *dajokansatsu* notes as a reserve, Yuzo Yamamoto pointed out in his book[33] that *dajokansatsu* notes led to the dissemination of clan notes (*hansatsu*) substitutable for gold coins in western areas where silver coins were used.

In any case, as indicated by the Meiji government that "one of the objectives of the issuance of *dajokansatsu* notes was to supplement shortages in the Treasury," it is obvious that the majority of the issue volume of *dajokansatsu* notes was to finance fiscal deficit.

Because a large volume of *dajokansatsu* notes was issued under the fragile foundation of the Meiji government, their value vis-à-vis gold and silver coins dropped significantly. *Shihei seiri shimatsu* (Details of Paper Currency Management) published by the Ministry of Finance[7] indicated that "the value of *dajokansatsu* notes dropped by some 60 percent against specie even in Tokyo, Kyoto and Osaka, and they were not circulated at all in other areas." In order to deal with the difficulty in the circulation of *dajokansatsu* notes and to prevent a decline in value, gold coins and silver coins were recoined and debased, which increased the degree of disarray and significantly hindered foreign trade.

In an attempt to promote the circulation of *dajokansatsu* notes, in September 1868, the new government determined to use *dajokansatsu* notes (*kinsatsu*) for the payment of all taxes. According to *Nihon ginko hyakunenn shi* (The Hundred Year History of the Bank of Japan), in May 1869, the government declared a reduction in the circulation period of *dajokansatsu* notes from 1880 to 1872 and the collection of *dajokansatsu* notes in exchange for new money. The government subsequently decided to apply a monthly interest of 5 percent for *dajokansatsu* notes that had not yet been exchanged.[25]

Here, we must consider the meaning behind the promise to exchange *dajokansatsu* notes for new money. As also pointed out by Toshihide Tsumagari, a distinction between government bonds and money (or currency) exists in that while government bonds are redeemed by currency, there is no need for redeeming currency.[22]

While it is considered that *dajokansatsu* notes were issued to promote their circulation as currency, their exchange for money was promised from the beginning at the issuing stage as is clear from the fact that *dajokansatsu* notes were called gold notes (*kinsatsu*). In this sense, *dajokansatsu* notes cannot truly be called currency. Even if they were considered currency, they were emergency currency issued as a temporary expedient, and must have been recognized as a government debt. Although *dajokansatsu* notes were also used for loans to promote commercial activities, more than 60 percent of the total volume issued was to finance fiscal deficits.[25] Consequently, since 1881, the government must have redeemed the government notes by using fiscal surplus.

In pursuit of the establishment of a standardized currency system, the new government temporarily decided to adopt the silver standard and to mint one-yen silver coins with almost the same percentage of silver as that of Mexican silver dollar coins. Immediately after this, the government changed its decision and adopted the gold standard by accepting the suggestion of Hirofumi Ito, a high-ranking official of the Ministry of Finance, who was dispatched to the United States to study its financial system. The government officially announced the New Currency Ordinance on June 27, 1871, and treated a one-yen gold coin, which was equivalent to an American one-dollar gold coin, as its standard coin. At this point, the yen was born.

The reasons behind the adoption of the gold standard are considered to include that the gold standard had been adopted in major European countries as well as the United States. In addition, one *ryo* was almost equivalent to one American dollar. Furthermore, by maintaining the equivalence between *ryo* and yen, it was possible to secure continuity in a shift towards new currency under the concept of "1 *ryo* = 1 yen." Consequently, during the two years of 1872 and 1873, standard gold coins worth about 43 million yen were minted.

However, the settlement currency in Asia was silver, and a huge number of Mexican silver coins existed within Japan. To handle this issue, the government granted unrestricted circulation rights to the "one-yen trade silver," which had almost the same amount of silver as that of a Mexican silver dollar coin, at ports open to trade. It also decided that the parity of the standard gold and the trade silver would be 1: 16. This essentially means that, although the gold standard was adopted by the New Currency Ordinance, the actual status was a duplex gold and silver standard. Consequently, the Japanese economy began to be largely affected by international trends in the parity of gold and silver.

III From *Goyokin* Funds to Government Bonds: No Government Bonds Available Is Evidence of a Tyrannical Government

Up until the abolition of clans *(han)* and the establishment of prefectures, the Meiji government was the so-called coalition administration consisting of influential clans. From a financial perspective, it was only an extension of finance in kind in the Edo period until the nationwide spread of the cash payments of land taxes and of *chitsuroku* (hereditary stipends, etc.). While the new government that was born in January 1868 asked merchants in Kyoto and Osaka for the expenses required for the eastern expedition, the raising of *goyokin* funds did not proceed smoothly, and the amount raised during Meiji Term 1 was only 3.84 million *ryo*. Consequently, the government had no choice but to rely on *dajokansatsu* notes to finance the Boshin War.

As in the case of the "King's Certificates" in Great Britain during medieval times, it was not clear whether *goyokin* funds were donations from wealthy merchants, taxes on the wealthy, or loans. *Goyokin* funds were treated as those that should be raised clandestinely. However, as the government repeatedly asked many merchants to pay *goyokin* funds in a state of confusion during the last days of the Edo government, this method naturally reached a limit. At the time of the Meiji Restoration, when the currency system was in disarray and the level of domestic savings was low, many people could not even begin to imagine that the new government would borrow money from people extensively and that loan certificates would be traded in the future.

Under these circumstances, growing expectations were placed on the government bond system in Europe and the United States as both *goyokin* funds and government notes have limits. Knowledgeable people called for the introduction of such a system.

For example, Eiichi Shibusawa, who participated in the Paris World Expo in 1867, had experience in trading French government bonds. In a speech,[17] he said that, "In particular in Japan, people keep loans absolutely secret and consider loans as if they are disgraceful. I could not help but be amazed at what I saw in France where people handle loans as part of ordinary business. At the same time, I thought that trading creditable securities as media as part of official business is indeed convenient and a good idea."

At *Kogisho*, which was established as a legislative organ, Seigoro Ono noted in 1869[13] that "I privately heard that in Western countries, governments issue notes for temporary finance in case of a shortage of funds, borrow money from people, and pay interest every year and sometimes repay the principal. The notes issued by the governments are traded by establishing a market, and are no different than paper currency."

In October 1870, Hirofumi Ito began an official visit to the United States to survey the financial system. In February 1871, he submitted a proposal to the Ministry of Finance reporting that, "What method is available other than issuing government bonds to raise funds that are temporarily in short supply to finance a war without losing the confidence of the people? That no government bonds are available in Japan should indeed be considered evidence of a tyrannical government."

In addition, it is believed that Japanese government officials at that time had a greater level of resistance than they had in shifting from *goyokin* funds to government bonds with respect to borrowing from other countries in consideration of the long-lasting policy of national isolation and exclusionism. In his book entitled, *Okumahaku sekijitsutan* (Talking about the Old Days),[13] Shigenobu Okuma recalled that there was a strong criticism that "people raising foreign loans by hypothecating the divine land are the same as traitors who sell the country." This perspective is considered attributable to strong beliefs that borrowing from other countries would lead to political and military intervention.

Conversely, there was also the thinking of influencing domestic politics by borrowing from other countries. According to Taichiro Mitani,[29] Yukichi Fukuzawa suggested that the Edo government solicit loans from France for another expedition to subjugate the Choshu clan (*han*). Subsequently, he took a negative approach to the issuance of foreign loans in his book titled *Bunmeiron no gairyaku* (An Outline of the Theory of Civilization) published in 1875. In the Meiji 10s (1877 – 1886), he changed back to a positive approach.

As such, borrowing from other countries constituted a major point of political debate, with a mixture of great resistance and strategic expectation.

The first loan from another country by the Meiji government was concluded to redeem the mortgage on loan amounts owed by the Edo government. When the Meiji government military forces that won the Toba Fushimi War attempted to take over a steel factory (shipyard) in Yokosuka owned by the Edo government in May 1868, this factory was collateral for a loan from Societe Generale of France. The factory was about to be confiscated for nonpayment of amounts owed by the Edo government. In March 1868, the Edo government had borrowed 500,000 dollars in silver from Societe Generale at an annual interest rate of 10 percent for the term of seven months with the steel factories in Yokohama and Yokosuka as collateral.

For that reason, immediately after its establishment, the Meiji government borrowed 500,000 silver dollars (one silver dollar = four shillings, three pence) on September 12, 1868, from General Manager Robertson of the Yokohama Branch of England's Oriental Bank as the funds to repay Societe Generale, and avoided confiscation.[27] The conditions of this loan included deferment for two years, monthly repayment of 50,000 dollars from October 1870 to July 1871, an annual interest rate of 15 percent on the balance and a mortgage on customs revenues from the port at Yokohama.

IV 9-Percent Interest-Bearing Bonds in English Currency: Japan's First Government Bonds

It was on April 23, 1870, that Japan first issued government bonds. The bonds were not issued within the country, but in London in pound denominations. *Kokusai enkaku ryaku* (A Brief History of Government Bonds)[8] indicated that "9-percent interest-bearing bonds in foreign currency were offered in London, England for the purposes of promoting product distribution through opening the convenience of domestic transportation and developing the general economy. This was the first bond offering in our history of finance."

Hirofumi Ito and Kaoru Inoue, who returned from England in June 1864, emphasized the need for railway construction after the restoration and hastened in taking specific measures with the advice of Ambassador Parks from England. However, their efforts to raise funds for construction within the country were challenged by accelerated inflation due to the issuance of a large volume of government notes. In addition, diverse types of currency other than government notes, such as old money (silver coins, etc.) and clan notes (*hansatsu*) were still in circulation, and the currency system was not yet organized. As such, the preliminary requirements to issue government bonds were not at all met. Accordingly, they were forced to turn to foreign countries to raise funds.

On December 12, 1869, the Meiji government decided to construct railways between Tokyo and Kyoto (via *Nakasendo* road), between Tokyo and Yokohama, between Kyoto and Kobe and between Lake Biwa and Tsuruga, and vested Muneshiro Date, Shigenobu Okuma and Hirofumi Ito with full power to raise 3 million pounds.[13] Immediately after this, on December 14, the government entered into a contract with Horatio Nelson Lay who had been visiting Japan since the end of July to loan one million pounds from "one or more creditors" at an annual interest rate of 12 percent with customs revenues and profits from the railway business as collateral. The reason for treating this as a private loan is assumed to be the considerations given to the strong opposition within the country against foreign loans and to the reputation of the new Meiji government overseas.

Although Lay, who went back to England in March 1870, appeared to look for persons who would provide loans to the Japanese government, it seems he was unsuccessful. Eventually, railway construction funds were accepted by Emile Erlanger and Company of Paris, and were treated as publicly offered bonds handled by J. Henry Schröder and Co. Erlanger was a merchant bank in Paris that accepted government bonds (cotton bonds) issued by the government of the Confederate States of America during the Civil War in the United States. It changed its principal office to London, and accepted government bonds issued by Tunis and Greece. In addition to accepting notes, J. Henry Schröder & Co. handled the public offering and issuance of government bonds of Cuba, Russia, Chile, Uruguay, Brazil, etc., in London.

On April 23, 1870, an offering statement of bonds for the "Imperial Government of Japan Customs Loan" was announced at the London Stock Exchange. The major purpose of this loan as indicated in the statement was to construct the railway facilities mentioned above.

The issue conditions were as follows: a total issue amount of one million pounds (4.88 million yen), bearer security, an issue price of 98 percent of face value, an annual interest rate of 9 percent, interest payments in February and August, a maturity period of 13 years and equal redemption by lottery conducted once a year for ten years after August 1, 1873, after a deferment of three years. Revenues from customs were used as collateral, and the net profit from the three railway lines that were to be completed within three to five years were used as additional collateral.

The Oriental Bank was designated as the agency of the Japanese government with respect to the handling of earnings from public bonds and as the agency of the J. Henry Schröder and Co. with respect to the receipt of principal and interest. In addition, a map of Japan indicating the railway line from Edo to Hyogo via Osaka or Kyoto, the line from Edo to Yokohama and the line from Osaka to Lake Biwa and the Tsuruga Port was attached to the offering statement.

If we attempt to calculate the yield as an equal redemption bond at the beginning of the 21st century based on the issue conditions indicated in the offering statement, the average number of years remaining are 7.763 years, the average residual yield is 9.447 percent on a simple interest basis and 8.989 percent on a compound interest basis, as this is a fully equal redemption bond with 10 redemption periods.

An advertisement concerning the public offering of the Japanese government bonds was inserted in each newspaper dated Monday, April 25. For investors at that time in England, market information and the advertisement of public offerings inserted in newspapers constituted extremely inexpensive and useful sources of information. After careful research of the advertisement concerning the public offering inserted in a variety of newspapers and magazines including major daily newspapers such as the Times and local newspapers in London, Ikuo Kaida pointed out in his book[13] that the issue of the 9-percent interest-bearing government bonds in English currency was favorably accepted by many newspapers as they applauded the decision of railway construction by Japan and highly evaluated the new participation of Japan in the international financial market.

However, it is said that the Economist (dated April 30) issued a warning for investors in London against investment in Japan based on concerns over the stability of the political structure of Japan.[13]

Under these circumstances, the offering of the customs bonds was closed on April 27, and the bonds continued to be traded on the London Stock Exchange at a price exceeding the face value up until the first interest payment on August 1.[13] The bond issue was a success.

It was June 1871 when telegrams were first available between Japan and other countries. For that reason, the Japanese government learned about Japan's first government bonds issued in foreign currency about two months after the offering statement was published, or around June 18, 1870.

Hirofumi Ito and others bitterly denounced Lay for his insertion of the advertisement of the public offering in newspapers despite of the intention of the Japanese government to "secretly" raise funds as private loans. In addition, American Ambassador to Japan, Charles E. De Long, exerted pressure on the Meiji government by saying that by issuing public bonds on the security of nationwide revenues from customs to raise the small amount of one million pounds was nothing more than disclosing to the world that Japan was in a state of bankruptcy.

On June 22, 1870, the Japanese government entrusted the Oriental Bank with the post-issue processing of the government bonds and, in place of Lay, gave the bank in London full power in collecting customs revenues and railway profits that were the security for the principal and interest and transferring them to London. Following this, negotiations took place between Lay and the bank concerning the right of representation. In December 1870, this issue was resolved by the dismissal of Lay.

Later, the general interpretation concerning the issue conditions as represented by an annual interest rate of 9 percent for the first foreign bond appears that "these conditions were semi-colonial conditions in that they included a high interest rate, a short maturity period and a mortgage."[14] By also taking into account that Japan could not help but use customs that were under unequal treaties as security for the foreign bond, a high issue interest rate was unavoidable. The following section compares the interest rate of government bonds issued by each country on the London market at that time.

As shown in Table 2, the issue interest rate of the Japanese government bonds (9.2%) follows the 10-percent interest-bearing government bonds issued by Honduras (12.5%) and the 6-percent interest-bearing government bonds issued by Turkey with a deep discount so that the issue price was 60.5 percent of the face value (9.9%). This issue interest rate even exceeded that of the 7-percent interest-bearing government bonds issued by Egypt and Rumania (8.9% and 8.1%, respectively). Since the average annual interest rate of consolidated bonds in England during the same year was 3.24 percent, the interest rate of 9 percent suggests that an extremely large credit risk premium was required of the Japanese government bonds.

At the same time, it is also necessary to consider this situation from the perspective that a new-face government bond is regarded as a "lemon" whose content cannot be judged from its appearance in the international financial market, and higher interest rates are necessary than those for existing issues. Because Egypt issued government bonds in London in 1862 and Rumania did so in 1864, it can be understood that they could be issued at rates lower than that of Japan. Moreover, in consideration of the facts that the Meiji government borrowed funds at an interest rate of 15 percent from the Yokohama branch of the Oriental Bank in 1868 and that, originally, this government bond issue started from an attempt to borrow funds at an interest rate of 12 percent from Lay, it cannot be said that the market interest rate of Japan's first government bond was unreasonably high.

This government bond was completely redeemed in August 1882 as scheduled in the offering statement.

Table 2. Foreign Bond Issues in London in 1870

(Unit: %, million pounds)

	Coupon	Issue price	Issue interest	Issue amount
Argentina	6	88	6.8	1
Chile	5	83	6.0	1
Egypt	7	78.5	8.9	7
France	6	85	7.1	10
Honduras	10	80	12.5	2.5
Japan	9	98	9.2	1
Peru	6	81.25	7.4	11.9
Rumania	7	86	8.1	0.4
Russia	5	80	6.3	12
Spain	5	80	6.3	2.3
Turkey	6	60.5	9.9	22

Note: Because the redemption conditions are not known, the issue interest rate was calculated as a perpetual bond (coupon/issue price). The interest rate of the 3% consolidated bond in England in 1870 was in the range of 3.19 – 3.40%.
Source: Toshio Suzuki, *Japanese Government Loan Issues on the London Capital Market 1870 – 1913*, Athlone Press, 1994.

Kokusai enkaku ryaku (A Brief History of Government Bonds)[8] noted that then Finance Minister Masayoshi Matsukata gave presents to the Oriental Bank in London and to J. Henry Schröder & Co. in appreciation of their efforts. Furthermore, *Meiji zaisei shi* (Financial History of Meiji)[31] evaluated that "it should be said that this offering of a foreign bond made no error in meeting the purposes of the bond issue by promoting domestic commerce and facilitating the development of the general economy."

The reason behind the dispute with Lay concerning the first government bond in foreign currency may be that people in the government at that time did not know that the term "loan" could be used not only for borrowing from an individual but also for public bonds. The strong resistance against the issuance of bearer bonds that can be freely traded was significantly weakened by learning the actual status of the international financial market through the issuance of the government bond in pounds.

V Resolving the Use of Former Clan Bonds by Government Compensation Bonds (*Kofu Kosai*): The First Domestic Government Bonds

The Meiji government had to deal with the disposal of accumulated debts under the old regime and the resolution of stipends paid to the samurai class. While it was impossible to fully resolve these issues in view of the financial situation at the time, the new government would lose support from wealthy farmers, wealthy merchants and the former *shizoku* (samurai) class if it misstepped in its handling of these matters. To cope with the situation, the Meiji government attempted to reduce the negative legacy and convert it into government compensation bonds (*kofu kosai*) while depreciating government notes by using government bonds and establishing a banking system. First, let's look at the disposal of the accumulated debts of the former clans.

Immediately after the Meiji government was inaugurated, most of the former *daimyo* (feudal lord) families remained as clans. The government policy at the time of promulgating the clan system in March 1870 was that clan bonds (*hansai*) and clan notes (*hansatsu*) were "depreciable after allocation" and were the responsibility of each clan. However, as most clans were suffering from dire poverty due to the confusion during the final days of the Edo government and the restoration period, clans such as the Marugame clan voluntarily applied for the abolition of the clan because it considered resolution of the clan bonds (*hansai*) an impossible task.

The Imperial Rescript for the abolition of clans and the establishment of prefectures was issued in August 1871, ending the clan structure that had lasted for some 260 years. It was eventually decided that disposal of the debts of each clan would be the responsibility of the Meiji government, and that the hereditary stipends (*karoku*) that were paid by each clan would instead be paid by the Meiji government. According to the reports on outstanding debts submitted by each clan, outstanding clan bonds (*hansai*) amounted to 74.13 million yen and outstanding clan notes (*hansatsu*) amounted to 39.09 million yen. In addition, there were loans from other countries totaling 4 million yen. However, through negations between the Meiji government and the creditors, these loans were redeemed for 3.69 million yen in cash. If goods mortgaged by the former debtors are excluded from this amount, the foreign debts paid off by the Meiji government equaled 2.8 million yen.

Clan bonds (*hansai*) were disposed of by dividing them into three groups depending on the loan period. From the among clan bonds (*hansai*), debts amounting to 12.03 million yen before 1844, for which the Edo government issued an abandonment ordinance, as well as loans provided by the Edo government to some clans, and private bonds issued by the lord of each clan and retainer groups that amounted to 39.27 million yen, were not paid off by the Meiji government but were all declared void. However, the clan bonds (*hansai*) worth 30.98 million yen after 1844 were considered as debts for purchasing weapons and equipment and for defense of the sea against invasion from other countries, and were paid off by the Meiji government. Of this amount, the sum of 7.59 million yen was paid in cash. However, clan bonds (*hansai*) from 1844 to 1869 were paid in the form of government bonds (old public bonds) worth 10.97 million yen. Clan bonds (*hansai*) from the restoration of the Imperial Rule to the abolition of the clans and the establishment of prefectures were paid in government bonds (new public bonds) worth 12.42 million yen. These old and new public bonds are considered to be Japan's first domestic government bonds.

With respect to clan notes (*hansatsu*), as a result of converting the outstanding balance at the end of September 1871 to new money by using the market price in July 1871, it was found that notes worth 39.09 million yen had been issued. Of this amount, 24.94 million yen was declared subject to exchange. In June 1879, after the Seinan War, an exchange for government notes worth 22.91 million yen was completed. Masayoshi Matsukata noted in *Shihei seiri shimatsu* (Details of Paper Money Reform)[7] that "the exchange of clan notes (*hansatsu*) was a major undertaking in managing paper money, and facilitated the exchange of nationwide commodity prices and greatly promoted economic development. The use of government notes became increasingly more extensive, widening its areas of circulation and building a certain confidence among the people."

As stated above, the accumulated debts of the former clans totaled 110 million yen by including clan bonds (*hansai*), clan notes (*hansatsu*) and foreign debts. Of this amount, the new government paid off 42 percent of clan bonds (*hansai*) in the form of government compensation bonds (*kofu kosai*) and government notes, and 59 percent of clan notes in the form of government notes. While the values of clan bonds and clan notes that were declared void were borne by creditors, the new government paid off old debts amounting to 23.40 million yen in the form of government bonds and other debts amounting to 30.50 million yen in the form of government notes. At the same time, the new government took over the assets of the former central and clan governments, and appropriated such assets to redeem the foreign debts of the former clans in cash.

When new and old public bonds were issued in March 1873, the New and Old Public Bond Ordinance was promulgated, which stipulated the issue rules such as types of securities, maturity periods, interest and payment of principal and interest. This ordinance included provisions permitting the free circulation of government bonds. Specifically, it provided that people could make free use of government bonds such as transferring to others, pawning, buying and selling, and hypothecating for loans.

While conditions for the new and old public bonds were established as a means of compensation to creditors of clan bonds and the conditions were not supposed to reflect the current market interest, the conditions nevertheless reflected a strict financial situation. Specifically, the conditions for old public bonds included bearing zero interest and a maturity period of 50 years. Those for new bonds included an annual interest rate of 4 percent and a maturity period of 25 years after a three-year deferment. Under these conditions, government bonds were issued to creditors such as merchants in Osaka starting in April 1873. The account closing statement for Meiji Term 6 (1873) recorded 390,000 yen for the redemption of the new and old public bonds and 850,000 yen for interest on the new public bonds.

According to *Meiji Taisho zaisei shi* (Financial History of Meiji and Taisho),[9] the government defaulted on a redemption for new public bonds in 1877 when the Seinan War occurred, as indicated in the book that "the planned redemption for this fiscal year could not be implemented as many national expenses were required for other purposes." Except for this year, public bonds were redeemed every year as scheduled. After redemption by purchase was implemented in February 1896, all outstanding bonds were redeemed by October 1896. The total interest paid during this period was 10.59 million yen. While the redemption of old public bonds was completed in December 1921, the situation became extremely complicated during the initial stage when the redemption of old bonds began. Partly because some creditors did not ask for bond redemption for some time, it was from 1875 to around 1913 that an average yearly bond redemption of about 220,000 yen was implemented.

VI Establishment of a National Bank by Issuing Public Bonds in Exchange for Gold Notes (*Kinsatsu*) and Issuing Convertible Notes

After the Boshin War, the Meiji government was pressed with the handling of the debts left by former clans and the disposal of *chitsuroku* (hereditary stipends). Consequently, it became difficult to implement the July 1869 promulgation calling for the exchange of Cabinet notes (*dajokansatsu*) and ministerial notes (*minbushosatsu*) of small denominations for new money by 1872. Moreover, the minting of new money (gold coins) based on the New Currency Ordinance in May 1871 was not proceeding smoothly due to the financial situation. In addition, the new money started to flow overseas.

Accordingly, in February 1872, the government announced the exchange of Cabinet notes (*dajokansatsu*), etc., by issuing new notes. In May 1872, the government issued new notes (*Meiji tsuho*) lithographed in Germany for the purposes of collecting former clan notes (*hansatsu*) and eliminating counterfeit Cabinet notes (*dajokansatsu*). According to Yuzo Yamamoto, the shift from Cabinet notes (*dajokansatsu*) to new money (*Meiji tsuho*) was implemented quite smoothly. He assumes that the fact that people at that time were already familiar with the use of notes and the prevalence of counterfeit gold coins constituted the reasons behind such a smooth transition.[33]

In order to fulfill a public commitment made in July 1869, with the phrase, "from the beginning, payment must not fail," the government attempted to pay a monthly interest of 5 percent to bearers of gold notes (*kinsatsu*). However, as gold notes (*kinsatsu*) were widely circulated and distributed nationwide, the payment of interest was far more than could actually be implemented.[9] In addition, foreign governments were demanding fulfillment of a promise of conversion to gold on the grounds that they suffered losses due to the depreciation of Cabinet notes (*dajokansatsu*).

To overcome this situation, the government promulgated the Ordinance on the Issue of Public Bond Instruments in Exchange for Gold Notes (*kinsatsu*) in March 1873. The government issued 6-percent interest-bearing government bonds to holders of gold notes and new notes if they desired such an exchange. At the same time, the issue of this government bond also served the purpose of collecting the government notes issued in a large volume at the time of the Boshin War and of issuing convertible notes through the establishment of a private bank.

Why, then, was a bank instead of the government and a private bank called a national bank instead of the central bank set up to issue convertible notes?

First of all, as for the reason that convertible notes became bank notes instead of government notes, *Meiji zaisei shi* (Financial History of Meiji) describes that "the issue of convertible notes falls under the business field and is not part of the political affairs to be handled by a nation. Accordingly, the government called upon a private company to handle this matter and limited the role of the government to supervision of the bank. This practice is not only convenient, but also what all other countries are doing."[31] In his speech, "*Shihei seiri* (Details of Paper Money Reform)," in 1918, Masayoshi Matsukata said that "if the government issues the notes by itself, the government might be inclined to issue inconvertible notes when the financial situation becomes somewhat poor."[24] In other words, he pointed out that notes should be issued based on the trends of the private-sector economy and in accordance with the money demand, and that the issuance of notes by the government is not appropriate.

Furthermore, at this stage, convertible bank notes were to be issued by a private-sector bank, rather than the central bank. Matsukata pointed out the reason in his *Shihei seiri* (Details of Paper Money Reform) that "a wide variety of arguments occurred, which were broadly divided into views to establish a national bank system in the American style and those to adopt a central bank system as existed in England and other countries. After strenuous efforts were made in studying the method used to exchange government notes, a decision was reached to generally follow the American system. Specifically, the plans called for the issuance of public bonds to withdraw government notes and the establishment of a national bank that issues convertible notes on the security of such public bond instruments."[24]

Consequently, the National Bank Ordinance was promulgated in December 1872. This law was to establish a private-sector bank that issued bank notes convertible to gold by national law. By accepting a suggestion made by Hirofumi Ito, a high-ranking official of the Ministry of Finance, the government followed the national law banking system of the Union government during America's Civil War. In addition, it is said that the bank notes issued resembled the American National Bank notes in face, design and color.

The essentials of this ordinance were as follows. A private-sector bank (national bank) to be established by national law pays 60 percent of its capital with government notes and receives the same amount of public bond instruments (public bonds in exchange for gold notes (*kinsatsu*)). Using such public bond instruments as security, the bank receives the same amount in bank notes printed by the Ministry of Finance. With the exception of government bond interest and customs, the status of legal tender was granted to bank notes. The bank is to pay 40 percent of its capital by specie as a reserve for conversion, is to always own a specie reserve worth 2/3 of the outstanding balance in issued notes and is to own a payment reserve of 25 percent for deposits. Based on this ordinance, the Tokyo Daiichi Kokuritsu Ginko (Tokyo First National Bank) was established in July 1873.

However, gold coins continued to flow out from Japan, which had adopted gold and silver bimetallism due to the worldwide increase in gold prices and the decline in silver prices during that time. As noted by Friedman[1] in detail, during the early 1870s, a transition occurred in major European countries from the silver standard or gold and silver bimetallism to the gold standard. Under the Coinage Act of February 12, 1873, America also decided to abolish one-dollar silver coins that had been its standard coin. Because of these circumstances, the parity of gold and silver was in an increasing trend. As soon as the national bank issued notes convertible to gold, the notes were immediately converted to gold coins. This situation rendered the continued business operation of the national bank impossible. Accordingly, only four national banks were established, and the national bank note balance at the end of 1876 was limited to only 60,000 yen.

As such, government notes, rather than money and convertible bank notes, became the chief currency within the country. Such a status was described as, "there are concerns over notes within the country and degraded silver outside the country." This continued until a large volume of government notes was issued to finance the Seinan War and silver prices declined.

VII Handling of Returned *Chitsuroku* by *Chitsuroku* Public Bonds

The handling of hereditary stipends (*karoku*) paid to the samurai warrior class under the old regime was one of the most important issues in the transition to the new financial structure. Takayoshi Kido proposed that "the evil practices that continued for 700 years should be completely changed and all 300 *daimyo* feudal lords should return their land and people." Hereditary stipends (*karoku*) were expenses for samurai warriors who had military obligations to feudal lords to maintain a "family" and living expenses. The total *karoku* amount during the last days of the Edo government was about 13 million *koku*. In addition, the Meiji government granted a total of 900,000 *koku* as a special privilege (*shotenroku*) to court nobles (*kugyo*), *daimyo* feudal lords and samurai warriors who rendered distinguished services for the restoration such as the Boshin War. *Karoku* and *shotenroku* are collectively called *chitsuroku*.

Through the return of the land and people from the feudal lords to the Emperor in July 1869, a feudal lord became a governor (*chihanji*) of the former territory, and each clan began the reduction of *karoku* by "treating all samurai warriors as *shizoku*." Through the abolition of clans and the establishment of prefectures in August 1871, it was decided that the Meiji government would bear all *chitsuroku* that was formerly paid by each clan.

The Meiji government standardized *karoku* that formerly differed depending on each clan by limiting the payment of *chitsuroku* only to *karoku* of the head of a family. Based on a written opinion of Takayoshi Kido that "new soldiers should be supported by reducing former stipends for *shizoku* under today's urgent necessity in our country," the Conscription Order was issued in January 1873. This made it no longer justifiable to pay *karoku* to those who had no job. Yet, the abolition of *chitsuroku* would deprive 450,000 *shizoku* people of a livelihood. However, the Treasury did not have enough funds. Accordingly, it was decided to substantially reduce the payment amount of *chitsuroku* and to dispose of *chitsuroku* by using government compensation bonds (*kofu kosai*).

Chitsuroku disposal using government bonds was implemented in two phases. In the first stage, it was decided in December 1873 to provide *chitsuroku* public bonds and cash to those who applied for the return of *chitsuroku*. To finance the cash required for this purpose, Japan's second foreign-currency public bond was issued. In the next stage, it was decided in 1876 to provide *kinroku* public bonds to those who did not apply for the return of *chitsuroku*. The name *kinroku* came from the decision for the encashment of *horoku* (stipends) in August 1875.

As such, the disposal of *chitsuroku* was implemented by using three types of government bonds: *chitsuroku* public bonds, the second foreign-currency public bonds and *kinroku* public bonds. First, let's look at *chitsuroku* public bonds.

There was a vehement confrontation with respect to the disposal of *chitsuroku* between a group of Cabinet members who made an inspection tour to Europe and the United States, including Tomomi Iwakura, and a group who remained in Japan. In December 1873, after the *Seikanron* (Korea invasion argument) coup detat, it was decided to impose *karoku* taxes on those who did not apply for the return of *chitsuroku* while, at the same time, granting cash and *chitsuroku* public bonds to those who returned *karoku* worth less than one million *koku* and *shotenroku* (a special privilege granted to those who had distinguished services for the restoration). For hereditary perpetual stipends (*seshusei eiseiroku*), *chitsuroku* of six years was converted to a monetary amount by using the rice price, half of which was paid in cash and the other half by 8-percent interest-bearing *chitsuroku* public bonds (with a maturity date of April 1884). For one-generation lifelong stipends (*ichidai shushinroku*), *chitsuroku* of four years was used as the basis for calculation. In November 1874, the target group was expanded to include those who were receiving one million *koku* or more. It was decided to pay 500,000 *koku* in cash and grant 8-percent interest-bearing government bonds for the remaining amount to *shizoku* who returned *chitsuroku*.

The payment of cash and the issuance of *chitsuroku* public bonds to those who returned *chitsuroku* were implemented in the period from 1874 to 1876. The total amount of *chitsuroku* returned was 6.1 million yen from 143,000 people. This amount represents only about one-fourth of the total expenditure (26.22 million yen) for *karoku* and *shotenroku* during Meiji Term 7 (1874). To those who returned *chitsuroku*, 8-percent interest-bearing government bonds worth 16.57 million yen in total were issued and cash worth 19.33 million yen was paid. For the funds to pay cash, revenues from the issuance of 7-percent interest-bearing public bonds in pounds (as explained in the next section) and tax revenues were appropriated. The account closing statement for Meiji Term 6 indicates with respect to the proceeds of 10.83 million yen from new foreign-currency public bonds that "public bonds were again offered in England because of the planned return of *chitsuroku*."

With respect to the principal of *chitsuroku* public bonds, it was decided to defer payment for two years after the year of the bond issuance, and to implement redemption by lottery according to government convenience for seven years following the third year.

As in the case of new public bonds and public bonds in exchange for *kinsatsu*, all bonds were similarly redeemed in April 1884 with the exception of the year during which redemption was not possible due to the Seinan War in 1877. Interest was paid yearly, including 1877, and a total of 9.75 million yen was paid.

VIII 7-Percent Interest-Bearing Public Bonds in Foreign Currency: Is Credit Gradually Flourishing?

In March 1872, the Meiji government decided to raise 30 million yen for the disposal of *chitsuroku* and to promote industrial activities by issuing foreign currency bonds. *Meiji zaisei shi* (Financial History of Meiji)[31] indicated that "*karoku* of the former *daimyo* lords was reduced and would be paid over a limited number of years, and the surplus created by such reduction was to be used as security to raise public bonds in foreign currency on a large scale." Also, in March 1872, by order of the Emperor, the Meiji government entrusted the offering of the foreign currency bonds to Kiyonari Yoshida, a high-ranking official of the Ministry of Finance, and dispatched him to America. Unlike the first issue of public bonds in a foreign currency, the government did not confer full power upon a foreigner but set out to issue the bond on its own. The government adopted a method of inserting advertisements for the offering in newspapers.

The reasons behind the visit of Yoshida to America, which was a capital import country at that time and where the foreign bond market was underdeveloped, rather than London, which was the center of international finance, are given in detail in articles written by Eiichi Sekiguchi[19] and Minoru Senda.[20] Was the attempt to issue bonds in America part of a diplomatic consideration? Was it derived from a political confrontation within the country? Might it have resulted from wariness over excessive dependence on the Oriental Bank? In any event, with respect to the issuance of these foreign currency bonds, there are still many points to clarify including the decision-making process.

By order of the Emperor that foreign currency bonds worth 15 to 30 million yen shall be issued in America and England under the condition of "not exceeding an annual interest rate of 7 percent," Yoshida attempted to issue the bonds in America. However, as indicated in detail in *Meiji zenki zaisei keizai shiryo shusei* (Compilation of Financial and Economic Historical Records in the First Half of Meiji),[4] the issuance of bonds in America was unsuccessful. The Bank of California noted that it would be possible to raise one million dollars (one million yen) at an interest rate of 7 percent, but that an annual interest rate of 12 percent was necessary to raise all the funds required. Therefore, the conditions for issuance were not agreed upon. In addition, Arinori Mori, the first Japanese ambassador to America strongly opposed Yoshida's issuance of foreign currency bonds.

With an introduction from the American ambassador to Japan, Yoshida met Jacob Shiff in New York, a merchant banker who came from Frankfurt. Following this, Yoshida went to London in June 1872, and negotiated with Kuhn, Loeb & Co., etc. While he also negotiated the issuance of bonds in Frankfurt and Paris, the strength of these financial centers was on the wane after the Franco-Prussian War. Because, after all, Yoshida had to rely on London, he negotiated with the Oriental Bank. The bank president noted that "foreign bonds issued in 1870 are being traded on the market at 110 percent of face value and the yield exceeds 8 percent. As this represents the current level of credit of the Japanese government, bonds cannot be issued below this yield."[4]

While Yoshida also negotiated with other underwriting companies, these negotiations encountered rough going. Finally, a contract was concluded with the Oriental Bank in January 1873, and the following offering statement was announced on January 13.

The name of the bond was the "7-percent interest-bearing public bond in English currency," which was translated into Japanese, "*Nihon Tenno seifu nanashu kosai* (Japanese Emperor Government 7-Percent Public Bond)" according to *Meiji zaisei shi* (Financial History of Meiji).[31] The offering details included an issue amount of 2.4 million pounds (11.71 million yen), an annual interest rate of 7 percent and interest payments on January 1 and July 1 each year. With respect to the redemption of the principal, after a deferment period of two and half years, the principal was to be paid on July 1 of each year after July 1875 through a lottery held on April 1 of each year. All bonds were to be redeemed by July 1897. The issue price was 92.5 percent of face value. The Japanese government was to pay 216,000 pounds each year by combining the principal and interest. The interest payment expenses that were reduced by redemption of the principal in the previous year were appropriated to redemption of the principal for the next year, and redemption was to be completed within 25 years.[8]

The purpose of the bond issue was to repay debts to those who possessed *karoku* and *shotenroku* that were to be paid in kind. While the principal and interest were to be guaranteed by "Japan's general revenues," the government was to hypothecate a maximum of 400,000 *koku* of rice per year especially for this purpose. As the average price of one *koku* of rice was 4 dollars, or 6 shillings and 8 pence, the revenue to be hypothecated each year was equivalent to 333,000 pounds, which exceeded the yearly principal and interest redemption amount of 216,000 pounds.

The public bond issued by the Japanese government before January 13, 1873, was only the customs public bond of one million pounds that was issued in 1870 for the purpose of railway construction. Partially completed railway lines were bringing about major benefits to Japanese commerce and finance. The Oriental Bank handled the bond offerings and the principal and interest payments. Subscription applications were accepted from January 13 to 16. A footnote indicating that about 95 percent of the total revenues of Imperial Japan were collected by rice was included at the end of the offering statement.[9] While the offering statement for the first public bond in English currency included a map of the planned railway lines, it is interesting to note that there was an explanation about the rice, which was to be used as security this time.

Subscriptions to this second Japanese government bond in pounds reached close to four times the planned issue amount, or 9.66 million pounds. On the market in the afternoon of the closing day of the subscription, bonds were traded at 94.5 percent – 94.75 percent of face value. Yoshida reported the results of the bond issue that took one year to complete to Shigenobu Okuma, a Councilor of State and Kaoru Inoue, a high-ranking official of the Ministry of Finance. The specific wording was that "this event of the bond issue also indicates that the glory of the 'credit' of our country is gradually flourishing."[31]

As compared to the first foreign currency bond, the second offering proved that Japanese government bonds could be issued at a lower nominal interest rate and for a longer maturity period. However, while the redemption method for the first foreign currency bond was equal redemption for the principal amount, the method of equal redemption for the principal amount and interest was adopted for the second offering. Accordingly, outstanding issues decreased only gradually. In addition, that the issue price carried a deep discount (92.5% of face value) must be taken into account.

If the interest rate is compared by using the calculation method employed at the beginning of the 21st century, the average remaining period would be 15.272 years and the average remaining yield (simple interest) would be 80.98 percent, which are lower than those of the first offering. However, it is not appropriate to use the average remaining yield for the second offering with varying redemption amounts. Accordingly, the internal rate of return (IRR) on a compound interest basis was calculated. This was 10.836 percent, which is higher than the 8.989 percent of the first offering.

Comparisons with other foreign currency bonds that were issued in London in 1873 by dividing the nominal interest rate by the issue price revealed considerably more favorable conditions than those of Turkey and Egypt, as shown in Table 3. However, in the same way as with the first offering three years previously, a higher interest rate than that applied to Argentine and Chilean government bonds was still required. Incidentally, according to Toshio Suzuki,[3] the Oriental Bank suffered a great loss that same year by accepting Chilean government bonds at good conditions, as shown in Table 3. In 1876, Egypt and Turkey defaulted on their bonds.

While purportedly the revenues from the issuance of this foreign currency bond were to be used for cash payments to those returning *chitsuroku*, as noted previously, it was only after Meiji Term 7 (1874) that cash was actually paid to those who returned *chitsuroku*. The account closing for Meiji Term 6 resulted in a substantial surplus of 22.83 million yen. For that reason, it should be considered that the revenues from the issue of the 7-percent interest-bearing public bond in English currency were used to purchase Mexican silver and gold. This purchase was ordered by Kaoru Inoue, a high-ranking official of the Ministry of Finance as a countermeasure against the outflow of gold overseas and against the decline of the prices of government notes.

IX Final Disposal of *Chitsuroku*: Reduced by 60 Percent in Ten Years after the Restoration

After the Edo government, the Meiji government continued to collect tax payments in kind based on rice in terms of revenues and to make payments of *karoku* that were fixed by *koku* in terms of expenditures. A shift of this system to monetary finance was a matter of urgency. First, payments in various types of goods were consolidated to payments in rice. In May 1871, payments in cash were permitted for remote areas of the prefectures under direct control by indicating the amount of *koku* in cash. In August of the same year, immediately after the abolition of clans and establishment of prefectures, this method was expanded nationwide, and progress was made in collecting payments of land taxes in cash.

In February 1872, the issuance of *mizunoe saru* land certificates began (*mizunoe saru* is the zodiac sign of Meiji 5). This was the beginning of the guarantee of land ownership by regarding that “a land certificate is evidence of a landowner.” In accordance with the Land Tax Reform Ordinance in July 1873, it was decided to issue a land certificate to a landowner in order to establish ownership after determining the land value, and to collect a fixed rate of 3 percent of the land value in cash. As pointed out by Kanji Sasaki, the rights and obligations of the people were established with a land certificate serving as a medium through the reform of the land tax.[15]

Through the reform of the land tax, tax revenues no longer became subject to fluctuations in the price of rice. However, if stipends continued to be paid in kind in terms of expenditures, the government would continue to face the risks inherent in the fluctuations in the price of rice. Even if efforts were made to reduce stipends, the effect of reducing expenses would come to

Table 3. Foreign Bond Issues in London in 1873

(Unit: %, million pounds)

	Coupon	Issue price	Issue interest	Issue amount
Argentina	6	89.5	6.7	2
Chile	5	94	5.3	2
Egypt	7	84.25	8.3	32
Hungary	5	80	6.3	5
Japan	7	92.5	7.6	2.4
Russia	5	93	5.4	15
Turkey	6	58.5	10.3	8
America	5	102.375	4.9	60

Note: As the conditions for redemption are unknown, the issue interest rate was calculated as for a perpetual bond (coupon/issue price). In 1873, the interest rate of the 3% consolidated bond in England was in the range of 3.20 – 3.27%.
Source: Toshio Suzuki, *Japanese Government Loan Issues on the London Capital Market 1870 – 1913*, Athlone Press, 1994.

naught if the market price of rice increased. For example, in 1874, the disbursement amount of *karoku* and *shotenroku* was 26.22 million yen, up 47 percent from the previous year. According to Toru Fujimura,[27] the government also abolished the *koku* indication for stipend payments through declaration of the *kinroku* amendment in September 1875, and changed to a monetary indication by fixing it at the average price of rice for the three years from 1872 to 1874. Through a survey of *kinroku* in November 1875, the government calculated the revised payment amount to be 17.68 million yen annually.

With the land tax reform and the encashment of stipends as background factors, Shigenobu Okuma, the Minister of Finance, addressed a memorial to the Emperor on March 29, 1876, which was the day following the declaration of the decree abolishing the wearing of swords. He stated that the stipend system should finally be eliminated for the following reasons: (1) While government revenues should be used to promote production, one-third of government revenues were spent for *karoku* and *shotenroku*; (2) As *shizoku* (samurai) had lost their jobs by the abolition of clans and the establishment of prefectures and the Conscription Ordinance of 1872, *karoku* had lost its significance and (3) *Karoku* is not vested interest. As a means of achieving this purpose, Okuma ordered the issuance of *kinroku* public bond instruments and the amendment of the National Bank Ordinance to increase production and promote industry. The National Bank Ordinance was amended on August 1, 1876; the *Kinroku* Public Bond Instrument Issue Ordinance was promulgated on August 5, 1876.

Even if *kinroku* public bonds were issued, the anti-government campaign by the former *shizoku* (samurai) with smoldering discontent as a result of the *chitsuroku* reduction might have been accelerated if the price of the bonds declined. Accordingly, as a measure to maintain the price of the *kinroku* public bonds, the requirements for establishing national banks were considerably relaxed. Mortgages for bank notes were expanded from 6-percent interest-bearing public bonds in exchange for gold notes (*kinsatsu*) to include government bonds with an interest rate of at least 4 percent, and the ratio of government bonds in paid-in capital was increased from 60 percent to 80 percent. In addition, the conversion of bank notes to government notes was permitted. Further, the reserve in relation to the amount outstanding was changed from the past rate of two-thirds of specie reserve to 25 percent of government note reserve.

As a temporary measure, the establishment of a modern currency system as represented by the issuance of convertible bank notes was abandoned in order to resolutely dispose of *chitsuroku*. As encouraged by these measures, national banks were established one after the other throughout the country. By the end of 1879, 153 banks had been established. At the time of the establishment of these banks, the total capital amount was 33.73 million yen, of which 80 percent was paid by government bonds at the market price. Moreover, the total amount of public mortgage bonds for the issuance of national bank notes by the end of June 1879 was 51.34 million yen, of which *chitsuroku* and *kinroku* public bonds constituted 90 percent. Accordingly, *Nihon ginko hyakunen shi* (The Hundred-Year History of the Bank of Japan) pointed out that "27 percent of all *kinroku* public bonds issued was used to establish national banks."[25]

While the initial National Bank Ordinance was aimed at converting government notes into government bonds, through an amendment of the ordinance the government bonds issued by the disposal of *chitsuroku* were conversely converted into government notes. Although this measure might have temporarily prevented the decline of the price of *kinroku* public bonds, it eventually contributed to the acceleration of inflation after the Seinan War.

The issuance of *kinroku* public bonds started in 1878. Depending on the amount of *kinroku*, government bonds with higher interest rates and longer periods were issued to those with a small amount of *kinroku*. For example, for *eiseiroku* (perpetual stipends), government bonds providing an annual interest rate of 5 percent for a period of 5 years were issued to those having a *kinroku* amount of 70,000 yen or more. To those having a *kinroku* amount of 25 yen or less, government bonds providing an annual interest rate of 7 percent for a period of 14 years were issued. To those with *shushinroku* (life-long stipends), government bonds with half the face value that was received by those with *eiseiroku* were issued under the same conditions as those for *eiseiroku* with respect to interest rate and term.

Only for *karoku* whose selling and purchasing was permitted since before the abolition of clans and the establishment of prefectures, government bonds providing an annual interest rate of 10 percent for a period of ten years were issued uniformly. According to Hiroki Ochiai,[12] this 10-percent government bond was considered preferential treatment to former retainers of the Kagoshima clan who were greatly dissatisfied with the disposal of *chitsuroku*.

Thus, *kinroku* public bonds worth 173.90 million yen were issued to a total of 310,000 people under a wide variety of conditions that included interest rates of 5 percent, 6 percent, 7 percent or 10 percent and an interest receipt period of 5 – 14 years. The maturity period of the principal amounts of these *kinroku* public bonds was scheduled to be 30 years after a 5-year deferment. However, redemption began earlier than scheduled, starting with *kinroku* public bonds for which the interest payment period had already ended. With respect to the 5-percent interest-bearing bonds offering the lowest interest rate, redemption was fully completed in April 1906 as scheduled.

Through the issuance of *kinroku* public bonds, the amount of *kinroku* payments by the government was recorded as interest paid for *kinroku* public bonds. The financial statements for fiscal 1877 and 1878 indicate that the total amount of *kinroku* public bond interest payments was 11.53 million yen. The amount obtained by adding the *chitsuroku* public bond interest of 1.3 million yen to this amount is the total amount paid for stipends after the disposal of *chitsuroku*.

Meiji zenki zaisei keizai shiryo shusei (Compilation of Financial and Economic Historical Records in the First Half of Meiji)[4] estimates that the *chitsuroku* payment amount of 34.62 million yen before the restoration was reduced to 22.66 million yen after abolition of the clans and establishment of the prefectures. Following this, after the exchange for government compensation bonds, 12.83 million yen was paid as interest on government bonds. This means that an extremely large-scale reform of vested interest was implemented in which stipends were reduced by slightly more than 60 percent within merely ten years after the restoration. Since then, with interest payments for *chitsuroku* public bonds and *kinroku* public bonds gradually coming to an end, the amount paid for stipends was further reduced.

As stated above, the Meiji government reformed the financial structure as featured by the issuance of *kinroku* public bonds and the abolition of *chitsuroku* payments in some ten years by amending land taxes and introducing new land taxes. The transition in the financial balance is shown in Table 1. In the period from Meiji Term 1 to Term 4 in which only areas under direct control of the government are targeted, as much as 87 percent of government revenue was dependent upon government notes and borrowing during Term 1, while it became possible to cover ordinary expenses by tax revenue during Term 4.

Although the government relied on government notes during Meiji Term 5 when a temporary disarray occurred due to abolition of the clans and establishment of the prefectures, the reform of land taxes was implemented on a full-scale basis and it became possible to cover ordinary expenses by tax revenues during Term 6. Borrowing during Term 6 was based on the pound-denominated 7-percent interest-bearing government bonds worth 2.4 million pounds that were offered in London in 1873. While war expenses increased to send troops to Taiwan in May 1874 during Meiji Term 7, ordinary expenses were covered by tax revenues. During Term 8, the ordinary account generated a substantial surplus coupled by an increase in land taxes and a reduction in expenses. It can be assumed that the Meiji government achieved a balance between ordinary expenses and revenues before the Seinan War.

X The Seinan War and Inflation

The reform of land taxes had given birth to antagonism within the farmer class, and the abolition of the *roku* (stipend) system had given rise to rebellions by discontented *shizoku*. The Seinan War arose from an attack on the Meiji government's Kusamuta munitions warehouse in January 1877 by private school radicals. This group was led by Takamori Saigo who resigned his government post after being defeated in an argument over the *Seikanron* (Korea invasion). During this war, the government mobilized military forces of 45,000 soldiers to fight prolonged battles. The war was brought to an end with an all-out attack in Shiroyama in September of the same year. The expenses required in waging this war reached 41.57 million yen, which is equivalent to 70 percent of the total expenses spent during the previous fiscal year. The war was financed by borrowing 15 million yen from the 15th National Bank and the issuance of government notes worth 27 million yen.

The 15th National Bank had been established in April 1877 by using the 5-percent interest-bearing *kinroku* public bonds worth 17.82 million yen that were issued to about 480 former *kazoku* (nobility) as capital. The Meiji government borrowed 15 million yen from bank notes issued by this bank at an interest rate of 5 percent. The assessment rate of the mortgage for the 5-percent interest-bearing *kinroku* public bonds invested by the former *kazoku* was 59 percent, which was the same as that for other national banks. Because this bank was given a preferential measure of having to pay only 5 percent of capital with government notes (20 percent for other national banks), it appears that the dividend to *kazoku* who had invested exceeded 7 percent.

In contrast with the Bank of England, which solicited capital investment by shares and owned government bonds, national banks including the 15th National Bank required the payment of capital investment with government bonds. As far as this situation is concerned, the national banks resembled the South Sea Company in England in the 18th century, which is well known for the South Sea Bubble panic.

While the government financed war expenses by bank notes issued by the 15th National Bank, their circulation was not easy, as these notes were still rather new in the Kyushu area. Furthermore, as the Saigo army forces used looted bank notes issued by the Fifth National Bank, trust in bank notes had declined significantly at the battlefront. In addition, because war expenses to finance the prolonged battles had increased, the government issued 27.00 million yen from their government notes in exchange for damaged notes. Regarding this issue of government notes, *Meiji zaisei shi* (Financial History of Meiji)[31] pointed out that "it is obvious that this issue had a major impact on government finance and on industries in the private sector, making it impossible for Japanese economic circles to make legitimate progress for several years."

Since the expenses for the Seinan War were financed by bank notes and government notes, the balance of these notes in circulation amounted to 118.96 million yen by the end of 1877, up as much as 11.4 percent over the previous year. In addition, the reduction of land taxes in January 1877 and the expansion of public investment by the issuance of government bonds after the Seinan War accelerated an increase in commodity prices. The reduction of land taxes was implemented as a compromise to deal with riots that frequently occurred in 1875 and 1876 by farmers who were concerned over the *mizunoe saru* land certificates issued prior to the proclamation of the Ordinance on the Reform of Land Taxes in July 1873. These concerns were exacerbated by a subsequent decline in the price of rice. Through the reduction of land taxes, land tax revenues in fiscal 1877 (July 1877 to June 1878) declined by 10.90 million yen (22 percent) as compared to fiscal 1875.

In addition, on March 6, 1878, after the Seinan War, Toshimichi Okubo, the Minister of Internal Affairs, called for land development and the improvements of ports, rivers and roads as measures to increase production and provide *kazoku* and *shizoku* with work. In response, Shigenobu Okuma, the Minister of Finance, proposed the offering of domestic government bonds to finance such projects.

Okuma recommended the issuance of industrial public bonds by saying that "because extremely large payments are required, they cannot be covered by ordinary expenses" and that "if raised funds are utilized as capital to recover industrial activities, some yields will be generated after several years." While government compensation bonds that were issued for implementing structural reform accompanying the restoration did not bring about revenues to the government, industrial public bonds were issued for raising funds. These government bonds have a nature similar to that of a large volume of government construction bonds that were issued in Japan at the end of the 20th century.

Another feature of these industrial bonds was that they were Japan's first publicly offered government bonds. The issue conditions included an issue amount of 12.50 million yen, an annual interest rate of 6 percent, principal redemption by lottery in 23 years after a two-year deferment, an issue price of 80 percent of face value, bearer bonds and being freely negotiable. On May 1, 1878, the First National Bank and the Mitsui Bank advertised and offered the bonds.

While the subscription deadline was the end of August, the number of subscriptions reached twice the planned issue amount under post-war prosperity and a boom in the establishment of national banks. The offering amount was distributed proportionally among subscribers. While "people vied in subscribing for bonds," the subscription was solicited by prefectural ordinances and the chief abbot of the Nishi Honganji temple. Regarding this solicitation, Ikuo Kaida introduced the tone of the press that was apprehensive of "the ill effect of participating in the offering method by a government authority."[13] The revenue from this public bond of 10 million yen was handled as an industrial public bond fund held separately from the general account.

As such, in addition to the issuance of a large volume of bank notes and government notes during the Seinan War, the reduction of land taxes and public investment by the issuance of government bonds were implemented. Additionally, the lending by banks sharply increased the boom in the establishment of national banks with *kinroku* public bonds serving as the capital investment. The outstanding loan balance increased sharply from 18.15 million yen at the end of 1877 to 51.35 million yen at the end of 1879. Consequently, the balance of government notes and bank notes in circulation increased by 59 percent from 106.83 million yen at the end of 1876 to a peak of 169.98 million yen at the end of January 1879.

Because of this, the economy was overheated and imports rapidly increased after the war. According to *Shihei seiri gaiyo* (Outline of Paper Money Reform) written by Masayoshi Matsukata, the trade balance that generated a surplus of 3.75 million yen in 1876 began to result in a deficit in 1877. Regarding the gold and silver that were used as a means of payment for foreign trade, 32.64 million yen flowed out from Japan during the period from 1877 to 1880.[24] Accelerated increases occurred in the prices of commodities. Compared to those in 1876, the wholesale prices of farm products doubled and the prices of industrial products increased 1.8 times by 1881.

In October 1878, about one year after the Seinan War, Paul Mayet in Germany made a speech regarding Japanese government bonds. In his speech,[26] he touched on the trading prices of the government bonds at the stock exchange on October 7, 1878, i.e., the market prices of notes by treating the face value as 100. They were worth 22.1 for the old public bonds with no interest, 62.5 for the new 4-percent interest-bearing public bonds, and 96.56 for the 8-percent interest-bearing *chitsuroku* public bonds. With respect to *kinroku* public bonds, for which the ban on trading had been lifted in September 1878, 10-percent interest bonds were traded at 104.7 and 7-percent interest bonds were traded at 84.6. While prices had not been established for 6-percent interest-bearing *kinroku* public bonds, 6-percent interest-bearing public bonds exchangeable for gold notes, and 6-percent interest-bearing industrial public bonds because trading in these bonds had failed, Mayet assumed their value as 74 percent of face value.

Under the trend of the increasing prices of commodities as seen in October 1878, government bond prices had already started to fall. While the 7-percent interest *kinroku* public bond was traded at a price higher than the government purchase price of 82, the price of the 6-percent interest industrial public bond, for which the offering was completed in August 1878, fell from a selling price of 80 to 74. However, the decline in the prices of government bonds at the Tokyo Stock Exchange was not confined to only this case.

Table 4. Government Bond Issues during the First Half of the Meiji Period

Name	Date of issue	Method of issue	Interest rate (%)	Amount (1,000 yen)	Issue price (%)	Maturity period (year)	Deferment period included in maturity period (year)	Date redemption completed
9% interest public bonds in English currency	April 1870	Publicly offered	9	4,880	98.0	13	3	August 1882
Old public bonds	April 1872	Grant	No interest	10,973	—	50	—	December 1921
New public bonds	April 1872	Grant	4	12,423	—	25	3	October 1896
7% interest public bonds in English currency	January 1873	Publicly offered	7	11,712	92.5	25	2.5	July 1897
Kinsatsu exchange public bonds				Total of 6,669				
	March 1873 – 1875	Exchanged for *dajokansatsu* cabinet notes	6	2,238	—	15	3	August 1892
	1880 – 1883	Exchanged for new notes	6	4,431	—	15	3	August 1892
Chitsuroku public bonds	March 1874 – 1876	Grant	8	16,566	—	10	2	April 1884
Kinroku public bonds	August 1876	Grant		Total of 173,903				
			10	9,244	—	30	5	June 1886
			7	108,243	—	30	5	September 1891
			6	25,004	—	30	5	April 1893
			5	31,412	—	30	5	April 1906
Industrial public bonds	August 1878	Publicly offered	6	12,500	80.0	25	2	October 1892
Nakasendo railway public bonds	February 1884 – July 1885	Publicly offered	7	20,000	90.0	25	5	August 1892
Kinsatsu exchange bearer public bonds	May 1884 – January 1886	Exchanged for notes	6	7,763	—	35	5	April 1893
Navy public bonds	July 1886 – April 1889	Publicly offered	5	17,000	100.0	35	5	April 1910
Seiri public bonds	1886 – 1897			Total of 175,000				
	November 1886 – July 1892	Publicly offered	5	3,020	98.0	55	5	May 1910
	1887 – 1897	Exchanged for securities	5	125,706	—	55	5	May 1910
	September 1888 – 1897	Special issue	5	19,089	98.0	55	5	May 1910

Note: In addition, 334,000 yen of former *shinkan* (Shinto priest) *haitoroku* public bonds were issued in 1878.
Source: *Ouchi Hyoe chosaku shu* (Collection of Books Written by Hyoe Ouchi), Vol. 2, Iwanami Shoten Publishers, 1974; *Meiji Taisho zaisei shi* (Financial History of Meiji and Taisho) edited by the Ministry of Finance, Vol. 11, Keizai Orai Sha, 1956; Financial Bureau of the Ministry of Finance ed., *Kokusai enkaku ryaku* (A Brief History of Government Bonds) Vol. 1, the Financial Bureau of the Ministry of Finance, 1917.

The annual trading volume of government bonds at the Tokyo Stock Exchange located in Kakigara-cho, Tokyo reached some 200 million yen in 1879 and 1880. Among the diverse *kinroku* public bonds, the 7-percent interest government bond with an issue amount exceeding 100 million yen was actively traded with the number of recipients reaching approximately 260,000 people. While the government purchased this bond at 82 yen up until December 1879, the price fell sharply when government purchase was abolished when the policy of not permitting the establishment of national banks was adopted. Subsequently, in December 1880, the price fell to 60.7 percent of face value.

The trend of declining prices was not limited to government bonds. The prices (the price in exchange for silver coins) of government notes also declined significantly. While the prices of government notes were almost equivalent to silver coins at the beginning of 1877, the prices declined to 55.7 percent of the price of silver coins by April 1881.

An event that took place during this period of declining prices was the amending of the Ordinance on *Kinsatsu* Exchange Public Bonds in October 1880. These bonds had been issued in exchange for notes from 1873 to 1875. Article 1 of the amended ordinance stipulated that both the principal and interest of *kinsatsu* exchange public bond instruments should be paid in gold and silver coins. Article 5 specified an interest rate of 6 percent and redemption by lottery in 12 years after a three-year deferment. According to *Meiji Taisho* *zaisei shi* (Financial History of Meiji and Taisho), the number of applicants increased rapidly because the prices of government notes were falling at a remarkable pace at that time, and bonds worth some 3 million yen were issued in 1880. While this government bond was issued until 1883, the total issue amount was limited to 4.43 million yen.

While I will wait for the next opportunity to describe the details of Japanese government bonds in Meiji following this period, I will review the progress up to the issue of *seiri* (consolidation) public bonds in the following section.

After going through the political changes of 1881, the government promoted the establishment of sound finance and the accumulation of specie in order to dispose of inconvertible notes. Through these efforts, the prices of government notes and government bonds were directed towards recovery. In 1885, the Bank of Japan issued convertible bank notes, and conversions of government notes to silver coins started at the beginning of 1886. A variety of high-interest government bonds that were issued after the restoration began to be consolidated into 5-percent interest-bearing *seiri* public bonds starting in November 1886.

These processes towards the modernization of the Japanese economy that include the breakup of the old regime such as the disposal of former clan bonds and *chitsuroku*, the consolidation of government notes, the establishment of banks and the promotion of industries, moved forward with an extremely close relationship with government bonds. As shown in Table 4, a wide variety of government bonds was issued one after the other.

Japan's first government bonds were foreign-currency bonds denominated in pounds to raise funds for railway construction. Former clan bonds were replaced by government compensation bonds (*kofu kokusai*) after careful examination. *Chitsuroku* of the old government and clans was reduced and issued as government bonds to the former *shizoku*. The *kinsatsu* exchange public bonds were issued to collect government notes. Additionally, to develop social capital, industrial public bonds and railway public bonds were offered and issued.

As such, the mechanisms of issuing and circulating government bonds in Japan were rapidly developed in a short period. It can be regarded that the approximately 200-year history of government bonds after the Glorious Revolution in England and the experience of the Civil War in America immediately before the restoration were condensed into the first half of the Meiji period in Japan.

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