The Development of Commerce in the Edo Period

By Miyamoto Matao

While Tokugawa Japan was a feudal society, it was also a society premised on the development of a money economy. First of all, although during the Edo period (1603-1867) society was divided into the four classes of samurai, peasant, artisan, and merchant, this in itself also meant that there was a division of labor. The samurai and merchants who left the land and established residence in the castle towns were not producers, so it was necessary for them to purchase essential commodities from the peasants and craftsmen. Those in the manufacturing business did not produce foodstuffs or other agricultural products, so they also had to purchase such items. In addition to agricultural activities, peasants produced certain handicrafts and fundamentally they were highly self-sustaining. Yet even they had to purchase tools and items they could not produce themselves, such as salt, iron pots and hoes, and this need grew as the Edo period wore on. Interregional trade of agricultural and manufactured goods developed as a result.

Secondly, this development of commodity distribution occurred against a background of increased agricultural and industrial productivity that followed the Period of Warring States. Employing the civil engineering technology that had developed since the latter part of that period of civil war, the feudal lords (*daimyo*), who had come to possess strong, broad administrative control, developed land in the broad downstream plains. The tilled acreage of Japan which stood at 2,000,000 acres at the beginning of the 17th century, grew to almost 3,000,000 acres by the beginning of the 18th century. Because high-quality farmland in the downstream plains became available, there was an explosive growth in the production of rice, and the population increased from 12,000,000 to 31,000,000, an expansion unprecedented in Japanese history. The stabilization of the supply of agricultural products allowed samurai, merchants and artisans to leave the land and supported the development of towns and cities.

Thirdly, while there was epoch-making expansion in agricultural production in the provinces, in Kinai (the Kansai region) surrounding Kyoto and Nara, due to the fact that political control had been located there since ancient times, there were large numbers of associations of craftsmen in the employ of the Imperial court, temples and shrines and the nobility providing a considerable accumulation of craft technology. With the commencement of so-called "southern barbarian trade" (trade conducted primarily with the Portuguese) in the second half of the 16th century, Kinai-area handicrafts incorporated techniques from Europe and China causing further development. For that reason, in the production of manufactured goods such as arms, clothing, production tools, medicine and art work, the Kinai area was overwhelmingly superior. As a result, there developed trade of agricultural and manufactured goods between agricultural areas, especially those specializing in the production of rice, and the Kinai region, which had achieved superiority in the production of manufactured goods. As the prime loci of this trade, large urban centers developed, and of these the "three metropolises" of Osaka, Edo and Kyoto played the most significant roles.

Fourthly, both the policy of national seclusion (*sakoku*) and the system of alternate attendance in Edo (*sankin kotai*) effectively promoted the expansion of domestic commerce. Because the government restricted trade in the items it allowed to be brought in through the single foreign trading port at Nagasaki to chartered merchants in the central metropolises, including Osaka, Kyoto


The Dojima Rice Exchange

and Sakai, most provincial domains were dependent on merchants in these central cities for supplies of imported goods and their domestically produced substitutes. Furthermore, the alternate attendance system which required that the feudal lords, their retainers and the families of each reside in Edo in alternate years engendered enormous consumer demand both in Edo and in the post towns along the main routes to Edo. The tremendous sums of cash required by the feudal lords and their vassals for alternating residences involved them in the money economy as well as providing a major stimulus to the development of commerce and finance nationwide.

Fifthly, the development of large-scale distribution of goods was dependent to a large degree on the development of marine and river transport. The policy of national seclusion prohibited the construction of boats of more than eighty gross tons, but coastal shipping showed marked development. There was particularly prominent development on the so-called "western circuit" linking Hokkaido, Tohoku and Hokuriku via the Japan Sea and Inland Sea with Osaka; the "eastern circuit" linking Tohoku and Edo; and the Edo-Osaka shipping circuit. For each of these circuits there appeared specialized shipping agents, the most well-known of which were the Higaki and Taru ships that plied between Edo and Osaka. Originally shipping lines set up to transport sake from Kansai to Edo, they eventually began to carry general freight and engaged in fierce competition. Both lines offered scheduled operations and in the early 18th century these amounted to 1200-1400 departures per year. In the early years ships were below forty gross tons, but by the end of the Tokugawa period they exceeded one-hundred gross tons. The "western circuit" and "eastern circuit" were initially opened up to forward rice taxes from Tohoku and Hokuriku to Osaka and Edo, but eventually general cargo became the majority tonnage. Because marine transportation in the Edo period was carried out by small sailing vessels and because these boats passed along the coastlines calling at various ports, port towns naturally sprang up in each region. Most of these port towns were located at the mouth of a river, enabling traffic by river into the interior. In this way, during the Edo period the Japanese made rapid strides in boat transportation by taking advantage of the geographical features of being surrounded by seas and having large numbers of rivers across the land.

Together with the development of commerce, by the end of the 17th century, there had developed a nationwide distribution mechanism. As the result of functional differentiation in commerce, distinctions between wholesaler, broker, retailer, forwarding agent and financial agent gradually became clear. The wholesalers (*tonya*) in the central metropolises were especially important. Osaka had 378 established wholesalers in 1670, by 1710 that number had increased to over 4,500. Each specialized in transactions of particular goods such as rice or cotton. Specialized wholesalers also appeared in Edo by the late 17th century. Because the Kanto region, including Edo, developed later, when its expanding population had to be provided with essential goods, most were supplied by Osaka wholesalers. This is how the distribution system, centering on the Osaka wholesalers and following the order, provincial forwarding agent-broker-wholesaler-retailer-consumer, became established on a national scale. Guilds (*kabu-nakama*) were formed among the wholesalers of Osaka and Edo, and order in the marketplace was maintained by the various rules these guilds agreed upon.

Development of the financial system

At the beginning of the 17th century the Tokugawa government minted coins from gold, silver and copper. Prior to the Edo period, the primary currency used in Japan was copper coinage imported from China, so the shogunate was the first administration in Japanese history to create a unified currency. Thereafter shogunate currency was produced in large amounts, fostering the evolution of a money economy. Together with the money economy, financial agencies came into existence. In the second half of the 17th century, money changers were established in Osaka, followed by Edo. These money-exchange houses originally came into being as exchangers of currency, but by entering the business of accepting deposits, offering loans, issuing and exchanging notes, they entered the realm of early banking institutions.

The business of money-exchange houses was first of all the exchange of gold, silver and copper. There was an official rate for exchanges, but in actual practice it was current market prices that prevailed. The standard by which this market rate was established was fixed at the gold market at Kitahama in Osaka. Beginning in the latter half of the 18th century, futures transactions in gold, silver and copper coinage were also carried out here. As with our current-day foreign-exchange futures,the more important it became to avoid exchange risk, the more active commodity transactions involving such products became. Especially important among the operations of the money exchanges was the drawing of promissory notes, exchange-note operations and loans. Note transactions were particularly common in Osaka, and a survey carried out in the Meiji period found that 99% of large transactions in Osaka were note settlements. Bills issued by these money exchangers included certificates of deposit, checks and bills of exchange. More payments made between merchants were made by such certificates and the ultimate settlements were eventually made between money-exchange houses.

The development of exchange transactions in the Edo period was epochal, and in the settling of accounts over the long distance between Edo and Osaka, actual cash was almost never transported, but was instead sent by transfer. The shogunate and the feudal lords also used bills of exchange for long-distance transfers. Moreover, the money changers loaned money to these feudal lords and merchants. The well-known money-exchange house of Konoike Zen'emon had loaned money to over seventy domains by the end of the Tokugawa shogunate.

The Dojima Rice Exchange: the world's first commodity futures market

The Edo period saw phenomenal progress in commercial and financial business, and the greatest symbol of that advance was the rice-futures trade that took place at Dojima in Osaka. As mentioned earlier, provincial domains in the Edo period specialized in agricultural production, especially rice production, while the Kansai region specialized in manufactured goods. For this reason, the feudal lords received annual tax in the form of rice and sent the rice to Osaka, in order to put it on the market and obtain cash. Every year some 2,000,000 *koku* (9,920,000 English bushels; one koku equaling 4.96 English bushels) of rice were shipped from around the nation to Osaka. The various domains established their own warehouses in Osaka as facilities for selling this annual tax rice, and from the middle of the Edo period there were more than one hundred of these warehouses. Rice was sold by tender to officially authorized brokers and a "rice voucher" was issued to the successful bidder. These vouchers were freely transferable, so a market for buying and selling them, i.e., a rice market, sprang up spontaneously in the second half of the 17th century. The largest of these was the Dojima Rice Exchange.

As rice is an agricultural product, there are good and bad harvests from year to year, so the price fluctuations can be severe. With the flourishing of the rice market, a large number of major wholesalers came to deal in rice, and merchants who bought and held large numbers of rice vouchers shouldered risk with the changes in prices. In our own day, the main means of avoiding such risk is to hedge spot trading with futures trading, and resourceful people at Dojima came up with just such an idea.

At the beginning of the 18th century, the mechanism for futures transactions had been devised at Dojima, but the government had prohibited such transactions as a form of speculation and gambling. However, with the sudden plunge of rice prices, there were no buyers on the rice market and business slumped. To the samurai class which lived on the money received from the sale of annual tax rice, this was a serious blow. The eighth shogun, Tokugawa Yoshimune, known as "the rice shogun," in 1730 officially authorized the futures market, which had until that time had operated underground, and an organized produce exchange called the Dojima Rice Exchange was established.

The trade practices of the rice exchange were as follows. There were two kinds of rice markets: one was referred to as *shomai* (literally, "true rice") which we shall refer to as simply "rice" and the second as *choaimai* (literally, "rice on the books"). "True rice trading" was spot market trading in rice vouchers, in which vouchers were to be delivered in exchange for cash within four days of the transaction. In contrast to this, "rice on the books" was a form of futures trading in which a designated brand of rice was contracted in each of the trimesters (spring, summer and autumn), with no actual exchange of money, rice vouchers or rice. The names of the buyer and seller and the facts of the trade were recorded in an account book. Sellers and buyers were required to conclude their transactions by buying back or selling back futures contracts by the closing of the market period. Because one could participate in such transactions by payment of a small deposit and charge, it was suitable for large-scale transactions, speculative transactions and hedges. Specialists attended to settlements, with over 1,000 people employed in tending to the complex transactions involving rice brokers and buyers.

The important function of the "rice on the books" transactions was that of price insurance. For example, assume that a rice wholesaler purchases a voucher for 100 koku of rice at 60 *monme* of silver per koku, and that he later resells that voucher to a retailer, the wholesaler taking the current Dojima market commission of 20%. If the price of rice on the Dojima spot market remains at 60 monme per koku, then this wholesaler gains a profit of 1,200 monme. However, if the price of rice on the market falls to 40 monme, this wholesaler suffers a loss of 1,200 monme. In short, the buying and holding of rice vouchers means taking on risk resulting from the rise and fall of rice prices. Let us now assume that this rice wholesaler purchases the one hundred koku of rice vouchers and sells short 100 koku of rice at 60 monme per koku. Later, when the price of rice has falled to 40 monme per koku, if it repurchases one hundred koku of "rice on the books" at forty monme per koku, this wholesaler's settlement of accounts would be as follows. While the wholesaler would suffer a loss of 1,200 monme in rice, he would make a profit of 2,000 monme in "rice on the books," therefore gaining a profit of 800 monme from the difference between these two figures.

During the Edo period, rice was an extremely important commodity for the peasants and samurai who provided it and for the merchants who used it. It is safe to say that had this market not operated smoothly the Edo economy would not have functioned. For this rice market to function, a distribution system of specialized brokers, wholesalers and retailers was essential, and for that to happen it was necessary that they be freed from the price risks inherent in agricultural products. The Dojima market filled this function for merchants dealing in rice on a nationwide scale.

Furthermore, the domain warehouses would normally put rice vouchers up for sale every autumn, handing over rice to the holder of the vouchers, but the holders would come not in autumn, but in the spring and summer of the following year. As a consequence, when it became necessary to obtain funds, the domain warehouses would sell rice vouchers exceeding the actual amount of rice they had on hand, for the moment obtaining the proceeds from the sale, and later use rice vouchers to buy back rice on the Dojima spot market. In this event, there would be no problem if the price of rice had not fluctuated greatly in the interim, but if the price of rice had indeed risen, the warehouse would bear a huge loss. So, when the warehouses sold rice vouchers exceeding what they actually had in storage, if they simultaneously purchased "rice on the books" on the Dojima futures market — i.e., if they hedged on the futures market — even if the price of rice did rise subsequently they would not incur a loss. In other words, they might incur a loss from a price jump in rice, but they would profit from the same rise in terms of the "rice on the books" purchase, and the loss and profit would cancel each other out.

In this way, the Dojima Rice Exchange was advantageous not only to rice merchants but also to the domain warehouses, meaning the feudal lords themselves. It is held that the Chicago Board of Trade, which was founded in 1865, was the first modern futures trading market. However, the *Commodity Trading Manual* published by that exchange comments on the Edo-period Dojima Rice Exchange; it is surprising to discover that in the 1730s in Osaka, Japan, there was a commodities exchange that included futures trading. And this was a full century prior to the establishment of the Chicago market! This indicates the high level of the commodities economy of the Edo period, even from the perspective of world history. JJTI

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