

**Institutions and economic development
of early modern Japan***
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Abstract

The Tokugawa shogunate, which ruled early modern Japan from 1603 to 1868, provided considerably effective judicial system with the commodity market and the short term local government bond market. Under the governance, the impersonal trades expanded rapidly in the commodity market and the specific financial market, and the national economy was integrated. On the other hand, the shogunate did not provided the farm land market with third party enforcement, and tried to regulate the labor mobilization. This led to an early modern economy where the commodity market and the public financial markets were well integrated while the land and the labor market were segregated and were governed by local communities in the personal manner with long-term relationship.

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1 Formation of the Feudalist System.

1.1 Establishment of samurai's government

1.1.1 Manorial system in the old empire

Since the 6th century, the imperial government of Japan, which ruled around Kansai region, had made efforts to introduce Chinese culture through a Korean kingdom, Pekuje, to establish a civilized rule over Japan. While the alliance of Japan and Pekuje was defeated by the alliance of China and another Korean kingdom, Shilra, which unified the Korean Peninsula at last, in 672, Japan kept paying tributes to the Chinese empire, kept the diplomatic relationship with Shilra, and continued efforts to import the culture from the Continent. From the late 7th century to the early 8th century, the imperial government accomplished implanting the Chinese legal and administrative system in Japanese society. The Taiho Imperial Legal Codes (Taiho Ritsuryo), written in Chinese, which became effective in 701, was a landmark of the civilization effort in the old empire. This legal and administrative system, basically copied from the Chinese empire, nominally established the centralized state governed by the emperor. In 794, the imperial government moved from Nara to Kyoto, which has been the imperial capital since then. Emishi, native Japanese in Eastern Japan, came under the rule of the imperial government in the late 8th century.

However, the central government did not have sufficient resource to directly rule all over Japan and directly collected taxes. Also, transportation technology in that period was a serious constraint to the direct rule. As a natural result, the imperial government gradually gave up the direct rule, and delegated administrative duties with the privilege to collect rent to nobles, local governors, and temples.

Also, local leaders who developed their territories wanted to avoid the direct rule by the central government, so that they “donated” their lands to nobles and imperial family, and was protected the privilege to collect some portion of rent in their territories. By the 10th century, the nominally centralized system was replaced by the bundle of delegated authorities and privileges shared by imperial family, nobles, and temples. Yes, the emperor him/herself enjoyed the privilege delegated by the government.¹

1.1.2 Rise of samurais

In the 7th century, due to conflicts among nobles, nobles themselves were armed. However, after the establishment of the old empire, duties of armed forces were also delegated to local governors, who were nobles sent from Kyoto. Especially, local governors in Eastern Japan organized armed commoners in their territories. They formed groups of soldiers led by nobles. The imperial government delegated police authorities to those groups, so they came to be called “Server”s—in Japanese “samurai”s. By the 12th century, small samurais’ groups

¹Nagahara (1973).

gathered under the big two groups, one of which was called Taira, the group that was led by a noble family, Taira, the other of which was the one under another noble family Minamoto.

Samurais took over a critical role to keep public order and to collect rent in local manors. Samurais were delegated duties to keep public order in local manors. Their duties were authorized by supreme owners of manors, who were nobles, imperial family, or temples. However, once samurais were delegated authorities in local manors, they required stable rent belonging to themselves, as a return service of their delegated duties. In the manorial system, a privilege to acquire rent accompanied by a specific delegated duty was called *shiki*, which means the title.²

1.1.3 The Kamakura shogunate

Samurais, as the only armed force, wanted their *jito shiki* to be safely and stably protected. Because it meant stable distribution of rent from a land to samurais, which originally belonged to nobles, imperial family, or temples, interests of samurais and those establishments included serious conflicts. First, Taira backed by those demanding samurais, took over a political power in Kyoto. After he defeated the group of Minamoto, as the leader of army consisting of samurais, Kiyomori Taira was appointed as the prime minister by the emperor in 1167.

However, Yoritomo Minamoto successfully got support from samurais in Kanto area, and then defeated Kiyomori Taira in 1185. Moreover, in the year, Yoritomo Minamoto had the imperial government guarantee samurais a specific privilege to collect rent from manors that was accompanied by the duty to keep local public order. A samurai who was appointed for the duty was called *Jito*, which means the local director, and the privilege with the duty called *jito shiki*. The guarantee of *jito shiki* was the one samurais in Eastern Japan were eager to have, thus the dignity of Yoritomo Minamoto was perfectly respected by them. Yoritomo Minamoto also began to develop administrative organizations and the legal system to govern samurais in Kamakura, a city in Kanto region.

The imperial government recognized that the political power of Yoritomo Minamoto could not be blocked, and then appointed him as the shogun in 1192. This was the establishment of the Kamakura shogunate. While the imperial government had enforced the Imperial Legal Codes, the court of the Kamakura shogunate did not accept the Ritsuryo, and recognized only Japanese common law. The Japanese common law became formalized as a written law in 1232. This was written in Japanese, while the Ritsuryo of the imperial government was written in classical Chinese.

Once the Smaurai's government was recognized by the imperial government, a noble family, Minamoto, became less useful to samurais in Kanto. Thus samurais of the Kamakura shogunate excluded Minamotos.

When the Kamakura shogunate was established, the sovereignty of the shogunate was effective almost only in Eastern part of Japan. However, it expanded by a few political momentum.

²Nagahara (1973).

In 1221, the retired emperor Gotoba, stood against the Kamakura shogunate, because he did not like the expanding presence of the samurai's government, and demands for bigger rents from Smaurais. The Kamakura shogunate defeated his troops, deposed the current emperor who supported Gotoba, and made a branch office of the shogunate in Kyoto. Thus, the political domain of the Kamakura shogunate expanded to Kyoto.

The Mongolian empire, which emerged in the early 13th century, had called for tributes to Japan since 1266. The Kamakura shogunate refused that, and the Mongolian troops invaded Japan in 1274 and in 1281, but the Kamakura shogunate successfully defeated them on the seashore of Kyushu. Through the process, the Kamakura shogunate took over the sovereignty on diplomacy from the imperial government, and took a good reason to deploy Eastern samurais in Western Japan, and to collect special tax there for defence. The shogunate finally grasped the rule over all Japan.

1.2 The manorialism and the shogunate

1.2.1 The system of delegated duties with rent

According to the Imperial Legal Codes, any piece of land in Japan belonged to the emperor and any kind of private property right over land was excluded. Furthermore, under the taxation mechanism the Imperial Legal Codes prescribed, any tax revenue belonged to the central government. In the 8th century, the imperial government indeed pursued to the literally centralized governance. The regime meant local leaders, some of whom worked for local governments as minor officials, was not allotted any claim over revenue from agriculture neither as private owners nor as officials.

However, technological constraints of transportation and development did not allow the imperial government directly to rule reclamation and management of paddy fields and farms, in fact.

These conditions led the empire to a serious inconsistency of incentives for development. Given the technological constraint of the imperial government to rule distant areas, reclamation needed to be decided and organized by local communities. After reclamation, again, paddy fields and farms had to be locally managed. Nonetheless local leaders, the essential decision makers of agricultural development, did not hold any residual claim over rent from any piece of land, so that they did not have appropriate incentives to develop and manage paddy fields and farms. Paddy fields and farms were naturally devastated.

Responding to this failure, an institutional change to adjust the Imperial Legal Codes to the Japanese reality occurred. The newly formed institution was the Japanese manorial system, where the supreme ownership and the sovereignty still belonged to the emperor, but considerable portion of tax and rent were received by intermediary agents.

The emperor delegated a specific duty to govern the land to a man, and gave the man a privilege to receive a portion of rent from the land as a quid pro quo of the duty delegated. This was the basic principle of the manorialism.

Plural duties, not the only one, were supposed to exist on a piece of land. The duty of

cultivation taken by a farmer, the duty of keeping the public order taken by a samurai, and the duty of arranging those subordinate duties taken by nobles and the emperor composed the strata of duties. To each specific duty, a privilege to receive a specified portion of rent from the land was guaranteed. Therefore, the ownership of a piece of land consisted of strata of specified rents, each of which was accompanied by a specific duty.

This system worked better to provide incentives with local leaders to develop paddy fields and farms. According to the Imperial Legal Codes, unless specific tax exemption was allowed by the emperor, even though they newly develop a paddy field, the local government condemned the paddy field and the developers were not allowed to hold any claim. To avoid the condemnation process, a local leader “donated” the paddy field newly developed by himself to a local noble. The local noble “donated” the paddy field to a higher-class noble at Kyoto, and he donated the paddy field to the regent or imperial family. Finally, the regent or imperial family asked the emperor as the public figure to authorize the paddy field as a manor. Authorization as a manor guaranteed specified portion of rent from the paddy field to each stakeholder from the local leader, the original developer, to “donated” nobles, and delegated specified duty to govern the paddy field to each stakeholder. When the local leader who developed the paddy field was a samurai, he received 9 litters of rice per 1,200 square meters of paddy field a year, as provisions for security enforcement. His duty delegated by the emperor as accompanied one with the piece of rent was maintenance of security in the local community on the paddy field. His claim was much smaller than exclusive property right, of course, but the manorial system gave much stronger incentives for development than the original regime of the Imperial Legal Codes, which denied any claim of local leaders, did.

As the manorial system dispersed, highly decentralized organization of government and system of property right were formed. Under the system, neither of local leaders who developed paddy fields and farms nor peasants who cultivated them were not allowed exclusive residual claim, while peasants after the land reform by the Toyotomi government were guaranteed exclusive right to cultivate his registered piece of land, and exclusive residual claim. However, it did not mean the manorial system in the medieval period was “inefficient” compared with proper right in the early modern period. Agricultural technology in the medieval period was much more primitive, hence crops heavily depended on natural weather, rather than effort of peasants or local leaders. Given that exogenous risk was relatively larger, provision of exclusive residual claim to a single risk averse agent was not necessarily efficient, because it means imposition of all risk on that single agent. Decentralized system of claims was a practical second best equilibrium.

The Kamakura shogunate established its own authority over samurais by protecting the *jito shiki*, the duty with rent given to samurais, by negotiating with the imperial government. In this sense, the Kamakura shogunate, the first politically independent government specialized in protecting *shiki* of samurais, in fact depended on the manorialism based on the Imperial Legal Codes that legally authorized *shiki*.³

At the same time, however, the Kamakura shogunate created its own legal court, and the

³Nagahara (1973).

judgements there followed the Common Law of samurais, codified in Japanese language as the “Joui Shikimoku” (the Legal Codes of Joui)⁴ in 1232. The Common Law that was from the tradition and cases in Japanese local society was totally different from the Imperial Legal Codes that was implanted from China. For instance, if a samurai occupies an area whose *jito shiki* or equivalent privilege belonged to another samurai, and ruled there over 20 years, then the *jito shiki* of the area came to belong to the samurai who have occupied. The Kamakura Court authorized this privilege based on the Common Law. Hence the establishment of the Kamakura Court strongly encouraged samurais to invade areas ruled by samurais who were not vassals of the Kamakura shogunate. Backed by supports from this new legal enforcement, vassals of the Kamakura shogunate gradually extended their territories, which meant the territories and rents ruled by nobles were slowly declining.

1.2.2 Decline of the manorialism

In the Kamakura shogunate, Hojo family, from which Masako Hojo was the wife of Yoritomo Minamoto, grasped the superior power, and the concentration of political power even reinforced over time. As the power centered in the Hojo family, the judgements of the Kamakura Court tended to be favorable for the family over disputes on *jito shiki* and other important issues. This led to the loss of trusts in the Kamakura shogunate among samurais. On the other hand, the emperor Godaigo still tried to restore the direct governance by the emperor.

In 1333, two powerful leaders of samurais, Takauji Ashikaga and Yoshisada Nitta finally decided to take sides with Godaigo, and attacked the Branch office of Kyoto and the Kamakura shogunate respectively, and the Kamakura shogunate collapsed.

Godaigo declared the New Government of Kemmu,⁵ which meant restoration of the direct rule by the emperor, and he indeed excluded Takauji Ashikaga from his government. The Imperial Court also favored nobles over samurais on territory disputes. These policies were disappointing to samurais, who actually attacked the Kamakura shogunate. In 1335, Takauji Ashikaga determined to stand against the Imperial Government, arrested the emperor Godaigo and backed up a new emperor, Komyo,⁶ and established a new shogunate in Kyoto. Takauji proclaimed the Shikimoku of Kemmu (the Legal Codes of Kemmu) in 1336, which was the extended version of the legal codes of the Kamakura shogunate. The shogunate restored the legal system based on the Common Law of samurais, following the legal codes and cases of the Kamakura Court. The shogunate in Kyoto was called the Muromachi shogunate.

Under the rule of the Muromachi shogunate, the privileges of samurais strongly protected and they took over nobles' and temples' privileges on rent over time. On the other hand, farmers improved agricultural techniques to increase productivity. The marginal increase of

⁴Joui is the name of era from 1232 to 1233.

⁵The Kemmu is the name of era from 1334 to 1338.

⁶Godaigo then escaped to Yoshino, and declared his government. Godaigo's Imperial government called the Southern Imperial Government, while the Imperial Government in Kyoto, which was supported by the shogunate and had the only nominal sovereignty, was called the Northern Imperial Government. Both the Southern Imperial Government by the Northern one in 1392 under the rule of the Shogun Yoshimitsu Ashikaga.

output by the improved techniques was new interest, which had to be decided to belong to anyone. Farmers often took collective actions against rulers such as samurais, nobles, and temples, and they acquired the right to acquire at least some portion of marginal increase.

Therefore, while the imperial family, nobles, and temples, who had been traditional rulers, had gradually lost their privilege to land, samurais and farmers enhanced their privileges as their rights under the Muromachi shogunate. The manorial system led to decline.

1.3 Establishment of the Tokugawa shogunate

1.3.1 The feudalist land reform by Hideyoshi Toyotomi

The Muromachi shogunate appointed leaders of samurais as governors of domains. As those governors enhanced their rule over their territories in local societies by their own power, however, they came less dependent on the Muromachi shogunate, and established themselves as local lords. Instead of the rule based on the manorial system and supported by the Court of shogunate, they created new orders in their own domains. Each lord proclaimed the Legal Codes of the Domain over the domain he ruled, created the taxation system and conducted development policy on their domains, to increase the productivity that led to the increase of tax revenue. The changes in the regime of rule brought the period of development of new paddy fields and farms in the fourteenth and fifteenth centuries.

Among independent local lords, Nobunaga Oda emerged in the 1560s. He almost unified the fragmented independent domains, and attacked the Enryakuji temple, which was the symbol of the ancient regime, but he was killed by one of his vassals, Mitsuhide Akechi, in 1582.

Hideyoshi Toyotomi, one of Nobunaga's vassals, took over the political and military power of Nobunaga. In 1590, he finally unified all Japan, making all local lords subordinate to his sovereignty. In 1582, he began a thoroughgoing reform of taxation system. Under his reform, only one farmer was recognized as the holder of the right to cultivate a piece of land, and the farmer was guaranteed by the right in the name of Hideyoshi Toyotomi. The holder of the right to cultivate was obliged to pay tax only to a lord designated by Toyotomi Hideyoshi. In other words, the farmer was not obliged to pay any to other ex-stake holders such as temples, nobles, or samurais who were not authorized by Hideyoshi Toyotomi. At the same time, farmers were disarmed. Therefore, only farmers authorized by Toyotomi Hideyoshi had the rights to cultivate their lands, and only the samurai's government ruled by Toyotomi Hideyoshi had the tax sovereignty. The manorial system finally disappeared. A piece of land exclusively belonged to the farmer registered by the samurai's government, the samurai's government guaranteed the farmers' rights, and the farmers paid taxes only to the samurai's government as a return service of protection of their rights over their farms.

In addition, Toyotomi's government committed to the taxation policy declared in advance. In the medieval period, farmers of a village and a samurai who ruled the village often made some contract about the tax rate, in particular in advanced regions such as western Japan. Wherever such a taxation practice had been established, Toyotomi's government authorized

the practice and ordered the samurai to commit to the established tax rate. Otherwise, Toyotomi's government imposed a fixed rate of tax, sixty percent of crops. This "tax" included both the "tax" for the government and the "rent" for the feudal lord, so that this was the all of farmers's payment.⁷

1.3.2 Property right of peasants

Property right over an asset can be decomposed to the residual control right and the residual claim. The word "residual" means the rest after all contractual obligations are implemented. In the world of perfect information, nothing will be left. Any claim and authority will be entitled to some party and be enforced. Such a complete contract is the one in the perfect competitive market economy.

In the real world, however, information is asymmetric so that parties' action after entering the contract could be hidden, and enforcement of contracts is not perfect. Under such a condition, it could be meaningless to allot some kind of claims and obligations to a party, because commitment of the obliged party is not credible. Then, some discretion and claims can be beyond the contract. Discretionary control in terms of not being stipulated by the relevant contracts is the residual control right, and a claim over the leftover after any obligation specified by the relevant contracts are implemented is the residual claim. For instance, stockholders of a firm are supposed to have the residual control right over the firm in the sense that they can legally decide everything except for what contracts with employees and other stake holders stipulate. They are also supposed to have the residual claim in the sense that they receive the rest after contractually obliged payment as dividends.

In a context where asymmetric information is a significant problem and enforcement is imperfect, it would could lead to a more efficient result to make the residual claim belong to the holder of the residual control right. Holding the residual control right makes a real sense only if asymmetric information is significant. When asymmetric information is significant, then, the residual control beyond enforcement of the relevant contract inevitably means making some risky decisions. Only if the decision maker has the residual claim, he would try to maximize the residual by utilizing the residual control right and taking accompanied risk. The right consisting of the residual claim and the residual control right is then the property right in the modern society. On the other hand, a manager of a state-owned firm in a socialist state was supposed to have the residual control right, however not to have the residual claim.

The sixty percent of inspected crops, although the real tax rate of crops was somehow lower, was not low. Still, commitment to the fixed rate of tax had a significance. A fixed rate taxation implied that fixed rate of crops after the tax belonged to the registered farmer, which meant the fixed rate of marginal increase of crops delivered by an increased effort or an improved technique. Stabilization of taxation and commitment to a fixed rate of taxation then guaranteed some residual claim to the farmer. In a peasant economy, agricultural productivity strongly depended on effort and discretion of a stem peasant family who cultivates the

⁷Araki (1986). Aoki (2001).

relevant paddy field. The residual control over their land strongly affected crops. Under the technological settings, provision of a residual claim with the peasant family would improve the social welfare through well-working incentives for peasants.⁸

By contrast, in the early medieval period—the twelfth and thirteen centuries—, peasants who really cultivated lands had almost no residual claim. While peasants in advanced regions negotiated with nobles and samurais since the fourteenth century and had their own *shiki* as the farmer, called *saku shiki*, which literally means the title of cultivator, and then came to make some contracts of taxation with the samurais, their residual claim was still unstable.

However, it did not necessarily mean that the incentive mechanism under the manorial system in the medieval period was “inefficient.” The agricultural technology was primitive in the medieval period, hence crops strongly depended on weather instead of effort of peasants. As long as output was did not effectively depend on peasants’ effort, incentives for peasants could not have increased output. Furthermore, crops determined by the weather means that it should have been to impose too much risk on peasants if the incentive mechanism where peasants’ income depended on outputs had been imposed.

Stronger incentives on the agent can be desired only if welfare loss from asymmetric information about the agent’s action after entering the contract. Under such a condition, practical incentives are to make relate the agent’s payoff to some signal that only imperfectly correlates with the agent’s action. Hence provision of incentives, whenever it is necessary and effective, means to impose some risk on the agent. However, imposition of risk on a risk-averse agent reduces utility of the agent, hence provision of incentives requires compensation of the reduced utility if possible. If risk is too much or the agent is too much risk-averse, stronger incentives would not mean enhancement of efficiency since the welfare loss because of the risk attitude could larger than welfare increase from stronger incentives. This failure typically emerges to the principal as the case where the gain of the gross benefit from the stronger incentives is smaller than the compensation of increased risk payed to the agent, hence the principal would not choose stronger incentives when it is not desired in terms of social welfare.

In this sense, imposition of incentives on peasants in the medieval period would not have improved efficiency. In the ancient and early medieval period, many of farmers were in the status of slave, who received only life expenses, that is, only fixed payoff. The institution was not inefficient in the period when the agricultural technology was not developed.

After the centuries of improvement in agricultural technologies, the feudalist land system that favored development of peasant economy was rigorously established.

1.3.3 Peasant economy in the Tokugawa Era

By the feudalist land reform by Hideyoshi Toyotomi guaranteed exclusive rights over their farms to farmers. This gave strong incentive to farmers for increasing productivity, so that it prompted agricultural development. However, Hideyoshi Toyotomi tried to invade Korea twice in 1587 and 1592, and failed before the alliance of Korea and China. This invasion

⁸Araki (1986).

turned out just waste of resource, and had negative effect on his political power. As soon as Hideyoshi Toyotomi died in 1598, Japan withdrew from Korea.

Ieyasu Tokugawa defeated his rivals in 1600, and established the shogunate at Yedo (Tokyo) in 1603. The Tokugawa shogunate established the stable political system to rule feudal lords all over Japan, and its rule continued until 1868.

The Tokugawa shogunate succeeded the feudalist land system established by Hideyoshi Toyotomi. The agricultural development in the stable peasant economy brought the stable growth in the Tokugawa era, by providing strong incentives with peasants.

Along with the incentives, the shogunate and feudal lords generally set up to control and share the risk in every village in order to stabilize the tax revenue and peasant economy. Following the tradition from the medieval period, tax payment was based on contracts between the shogunate or a feudal lord and a village, and the village took the liability of the tax stipulated by the contract. While primary tax liability belonged to each registered peasant, every five peasants were ordered to compose a “team of five” that took on the joint liability to their village and the village finally took the responsibility of their tax payment to the shogunate or a feudal lord. Under this “village contractor system,” if a farmer failed to pay tax, four fellow farmers of his team paid the tax designated to him, and if even four fellows failed to do so, the village members did. If the weather was so bad that the village as a whole failed to pay tax for the year, the village asked the temporal reduction of the tax to the governor.

Effective tax rate in the shogunate domain was about forty percent of crops. In the early eighteenth century, the shogunate went even more. The shogunate under the shogun Yoshimune Tokugawa conducted another tax reform such that taxation was changed from fixed rate to fixed amount. It implies that all the residual belonged to the registered farmers, which meant even stronger incentives for farmers as well as larger risk from the weather.

Also, development of varied cottage industries was an important phenomenon in the Tokugawa Era. The Tokugawa shogunate was not only the central government, but also had its own domain directly ruled by the shogunate. The largest three cities, Osaka, Yedo and Kyoto belonged to the shogunate. Under the rule of the shogunate, those cities expanded rapidly. Each domain also built concentrated capital, which attracted population. Growing demand to consumer goods in large cities stimulated development cottage industries in neighboring villages. In the Kansai region first, and also in the Knato region in the 18th century, many clusters of cottage industries were formed, supplying consumption goods to cities such as Osaka, Yedo, and Kyoto. In villages neighboring large cities, peasants responded to this opportunity. They increased rapeseed, cocoon, and other commercial crop growing. They also made wife and daughters engage in tenement work such as weaving organized by city merchants in slack season.

2 Peasant economy and market economy.

2.1 Freedom of domestic trade

2.1.1 International and domestic trade in the medieval period

Agricultural growth in the medieval period was associated with the expansion of domestic trade. Manorial lords also protected merchants in their territories to liquidize taxes in kind collected from their territories. A remarkable case was Fujiwara Family of Ohshu (Northeastern Japan),⁹ who built a big port to encourage long distant domestic trade and international trade mainly with China.

The stable rule of of the Kamakura shogunate prompted the growth of domestic trade. At the same time, the shogunate directly supported long distant trade, by building ports.

While the Imperial Government ceased tributary trade with the Chinese Empire in the 11th century,¹⁰ private trade between Japan and China and other Asian countries had continued. One of the most important “imports” from China was coins minted by Chinese dynasties. Chinese coins circulated in medieval Japan as “the currency”.¹¹

2.1.2 Governance of trade by collective action

If fraud could easily be practiced, trade is very difficult. The problem is in particular serious in impersonal transactions where the parties are not engaged in long term relationships. You can cheat your partner today, run away, and cheat another partner tomorrow. Thus your incentives for cheating are very strong. However, your potential partners can correctly predict that your optimal response should be cheating them, so that they don't trade with you. Hence, under an impersonal transaction without any governance mechanism, “no trade” is a Nash equilibrium.¹²

To avoid this bad equilibrium where no trade is outcome, there should be some instruments. The modern judicial system is the instrument in modern nation states to realize a good equilibrium where players choose honest trade so that trades expand. The modern market economy based on the impersonal trades has grown under this governance mechanism.

The protection of property right and the freedom of contract are the bases of the modern legal system, hence the principles of the modern market economy. To be protected and free from whom? From the state. The independent judicial system is critical for the establishment

⁹Fujiwara Family in Ohshu had its origin in Abe Family, a native family in Northeastern Japan. The welcomed a man from Fujiwara Family of Kanto as a noble blood, and then they called themselves Fujiwara Family.

¹⁰Tribute was a style of diplomatic relationship with the Chinese Empire, where peripheral kingdoms showed their respects to the Chinese emperor, combined with tributary trade between China and peripheral kingdoms, where raw materials from peripheral kingdoms were exchanged with more civilized good from China.

¹¹The Japanese Imperial Government, mimicking the Chinese Imperial Government, minted coins, but the supply of Japanese coins fall in further short.

¹²A Nash equilibrium is a relation between players where anyone of them does not have any incentive deviate from the relationship.

of the modern market economy where impersonal trades do not face serious difficulty. Then, to be protected and be kept free by whom? Again, by the state. The judicial system equipped with sufficient enforcement ability is essential to restrain moral hazard, that is, exploitation of asymmetric information after entering the contract. The freedom of contract without the strong enough state supplying the third-party enforcement does not mean anything effective to expand trades. At the same time, the strong state that could protect property right against fraud implies a state equipped with sufficient ability to intervene private economy if it intends. Hence, the establishment of a modern state with sufficient ability of enforcement has always been accompanied with the modern constitution that stipulates the protection of property right and the freedom of contract from the state.

However, while the Kamakura and Muromachi shogunate had their courts, that court was basically for criminal cases and territory disputes between samurais, not for civil cases. Thus the medieval society needed another instrument to govern trades.

The governance by state, typically by the state court, is an institution under which both parties have incentives honestly trade given expected enforcement by the armed state, and expected punishment by the armed state in case of cheating. Such a regime is called governance by the third-party enforcement. An instrument except for the third-party enforcement such as the modern judicial system is built of long term relationships among players. If the benefit from trading honestly is sufficiently large in repeated transactions, if players are sufficiently patient, and/or if the probability of trading with the same partner in the next term is sufficiently high, then trading honestly in this term can be an equilibrium. A typical case is the long term relationship between two individuals or two firms. In that situation you don't have incentives to cheat your partner.

This relationship can be extended by a collective action. If you create a trading body with your friends, the body can commit to honest trade against other trading bodies, by keeping long term relationship with them. This extends the horizon of honest trade. This way was taken in the medieval society. Merchants and craftsmen formed trading bodies, each of which was specialized in a specific good. Trading collectively, they committed to honest trades, and expanded trades.

If those trading bodies could enjoy regional monopoly, the incentives for honest trade could be enhanced, because disincentives for deviation should become larger. Thus, giving privilege of monopoly to a merchants or craftsmen body could even prompt trade expansion. Also, at the exchange of the privilege, the authority could collect some portion of the monopoly rent as tax from the body. Therefore, the Kamakura and Muromachi shogunate and many manorial rulers protected merchants and craftsmen bodies, gave them territorial monopoly privileges, and collected taxes from them. Those privileged bodies were called "za," which means the "place." This was the structure of governing trade in the medieval period.

In order to fully realize benefit from exchanges, impersonal trade, which means that you can trade with anybody, is the first best equilibrium. Personal form of trade governed by a long-term relationship was, however, the second best path when there did not exist the third-party enforcement mechanism that was virtually the only instrument to support impersonal trades.

Market economy in medieval Japan experienced stable but slow expansion under the personal form of governance.

2.1.3 Commercial reform in the late medieval period

Nobunaga Oda (1534-1582) removed legacy of the manorial system not only in terms of rule on the land, also in the governance of commerce. He forced nobles and temples to abolish domestic customs, and denied monopoly privilege authorized by any political power in his territory. Instead of delegating governance of trade to private bodies, his government provided judicial services for the third-party enforcement.

Provision of the third-party enforcement of civil cases by the state court supported the growth of market economy through expansion of impersonal trades. At the same time, the public judicial service was still not sufficient for making impersonal trades dominant. Thus the abolition of monopoly privilege did not necessarily mean disappearance of intermediate bodies of merchants and craftsmen, and merchants and craftsmen bodies still existed to govern trades. Those bodies were called “nakama” (fellows).

The Tokugawa shogunate, the samurai’s central government, was established in 1603. Japan was re-integrated under the shogunate after a few centuries of warfare. While the shogunate ruled independent feudal domains as the central government in the feudalist system, it directly ruled its own domain including Osaka, Kyoto, Yedo (Tokyo after the Meiji Restoration in 1868), namely the largest cities. The shogunate extended provision of judicial services for governance of trades in its own domain, and it accelerated further growth of impersonal market economy.

Furthermore, as the central government, the shogunate established Japan’s first fiat currency that really circulated. The first standardized currency system reduced the cost of exchange of various kinds of coins and accelerated integration of the economy. Largest cities directly ruled by the shogunate, led by Osaka, went on to function as the centers of nation wide trades by the improved third-party enforcement provided by the shogunate court and the integrated currency system.

The commerce in Osaka, Yedo and Kyoto rapidly grew under the governance of trades by the city courts, the shogunate court. Among them, Osaka was the center of the national economy. A symbolic market of Osaka under the effective third party enforcement by the city court was the Dojima rice market. At the “rice” market, rice in kind was not really traded. Short term bonds issued by feudal lords were traded there. When they needed to finance their budget, feudal lords issued short term bonds backed by rice cropped from their domains to large financiers through auctions in Osaka, and the financiers traded those bonds at the Dojima market. The claim of bond holders were protected under the governance by the city court. The city court committed to protection of the shogunate citizens’ claim on the one hand, the shogunate also took care the stability of the bond market to finance the feudal lords’ budget. On this rigorous base of the judicial system, the Dojima market flourished in particular since the late 18th century. It is worthwhile to emphasize the fact that futures market

of Dojima was the world oldest futures market of commodity indexed assets.¹³

While trades within Osaka and Yedo were governed by the court, long-distance intercity trades between Osaka and Yedo were governed by the long-term relationship between merchants' bodies in the both sides mainly because of technological constraint on governance of long-distant trades by the city courts. Also, intercity trades from capitals of advanced domains were governed by merchants's bodies. In the case of trades between cities in backward regions and big cities such as Osaka and Yedo, feudal lords in those domains arranged institutional devices. When a feudal lord wanted to sell specialty products of his domain, he typically declared that his government monopolized the trades of the products, then provided monopoly privilege of the relevant trades with merchants his government chose, and had them govern the trades and pay taxes. The trading structure then was monopsony against producers of the relevant speciality such as peasants in the domain, and monopoly against consumers in the market such as Osaka and Yedo. The structure provided the privileged merchant with an opportunity to earn rent, and this rent covered the cost of governance and the tax for the privilege. This "domain government's monopoly" was a common way to expand trades and increase tax revenue in backward domains. For example, saffron produced in the domain of Yonezawa, in northeastern Japan, was traded in such a way.

Development of market economy, which was itself the evidence of successful policy, led to a rapid increase of lawsuits, and in the early 18th century, the capacity of the shogunate City Court (*Machi Bugho sho*) faced its limit. Yoshimune Tokugawa, then the shogun, decided to partially delegate the governance authority again to merchants' bodies called "nakama"s, rather than extended the ability of the court. The shogunate allowed selected merchant bodies in primary business charters to monopoly their business, and those chartered bodies were obliged to govern trade in their business. Moreover, the shogunate introduced indirect taxes imposed on charters, and permitted more charters in broader spheres. The charter that permitted special monopoly was called "kabu," so that a privileged body like a guild was called "kabu nakama," a chartered body.¹⁴ Exactly because of the successful commercial policy of the shogunate, in the 18th century, Japanese society was at a junction whether expanding supply of judicial services and moving to the modern market economy where impersonal trade was dominant, or, backing to personal trade governed by intermediary bodies. The shogunate took the latter.

¹³Takatsuki(2008, 2009).

¹⁴Formation of either cartel or coalition by merchants was generally not illegal and indeed merchants usually formed cartel or coalition for various objects. These coalitions were called "nakama." Among nakamas, chartered ones were called "kabu nakama." About the function of chartered coalitions, see Miyamoto (1938) and Okazaki (2005).

2.2 Fiscal state and the national market

2.2.1 Fiscal and financial regime under Tokugawa shogunte

Tokugawa Japan was a feudalist society, and each lord of domain held sovereignty over his domain (Han). While his sovereignty had to be authorized by the shogunate, he was the lord in his domain once he was appointed as the lord of his domain (Daimyo) by the shogunate. He collected taxes from his domain, and he could issue notes of domain as the currency that was circulated in his domain.

However, in the Tokugawa period, handicrafts and cottage industries that produced commodities and weapons concentrated in Kansai area that included Osaka and Kyoto, and in the late half of the Tokugawa period, also in Kanto area that included Yedo (Tokyo), both of which belonged to the shogunate territory. Other regions of Japan were generally specialized in agriculture. Feudal lords had to import commodities and weapons from those developed regions, hence they needed hard currency that circulated outside of their domains. At the same time, big cities such as Osaka, Kyoto, and Yedo demanded agricultural products such as rice.

The Tokugawa shogunate exclusively held the sovereignty to issue the fiat currency that was effective all over Japan, and prohibited usage of other kinds of money beyond the domain. The currency consisted of gold coins, silver coins and copper coins. While gold and silver coins were mainly minted in Yedo, minting copper coins was entrusted to merchants in cities dispersed through the country.

Therefore, feudal lords sold their agricultural products in Osaka and Yedo, acquired the hard money at the exchange of them and then bought commodities by the money. The center of this distribution was Osaka, while Yedo became increased its importance through the Tokugawa Period. There were about 300 feudal lords in the Tokugawa period, and they transported agricultural products, mainly rice, which were cropped in their domains, to Osaka and Yedo and sold them there. Based on this distribution of agricultural products and circulation of the hard currency, local markets were integrated. Based on the market nation-widely integrated under the shogunate rule and the national currency, the early modern national economy emerged in the Tokugawa period.

2.2.2 Control of international trade

On the other hand, the shogunate prohibited feudal lords from trading foreign merchants. Also the shogunate allowed only the Netherlands, China, and Korea to trade with Japan only at the port of Nagasaki. Even trades with those countries were strictly controlled by the magistrate of Nagasaki. Only a few privileged merchants dealt with exports and imports, and foreign people were strictly prohibited from entering Japan's land beyond the barrier of Nagasaki. Under this policy, foreign trades became negligible in Japanese economy.

This strict control of trade and immigration was succeeded from Toyotomi's government, and strengthened under the Tokugawa shogunate. The main cause of this policy was fear against the Spanish empire. While he himself had ambition to invade Korea and China, Hideyoshi Toyotomi was sensitive to Europeans's ambition for colonialism and he recognized

that the Christianity was an instrument of colonization. Thus he began to deport missionaries and banned Christianity in Japan.

The Tokugawa shogunate strengthened the policy. It prohibited Japanese people from going abroad, and banned Japanese people who lived outside of Japan from coming back to Japan. It broke off diplomatic and economic relations with a Catholic partner, Portugal, because it believed Catholic countries were more dangerous. It also executed a Spanish missionary who did not follow the order to leave, and executed Japanese Christian people. Since then, at least officially, Japan had no Christian people.

Tokugawa Japan isolated itself from the world in terms of both economic and diplomatic relations. Japanese economy was almost autarchy, and progress of production and military technologies became slower accordingly.

2.2.3 The national economy under the Tokugawa shogunate

While the shogunate monopolized the privilege to issue hard currency, it encouraged domestic free trades by building transportation infrastructure such as trunk roads and channels, and by banning feudal lords from settling customs.

Inter-domain trade was governed by merchants' cartels that were officially privileged by the shogunate in Osaka, Kyoto, and Yedo in the early 18th century. They consisted of chartered bodies (kabu nakama), exploited monopoly rents, but took the responsibility of governance of trade connecting different domains.

Under this regime, domestic trade rapidly grew, and the integrated national economy emerged.

However, because of its foreign policy, the economy was isolated in the world. Under integration of the domestic market, handicrafts and agriculture developed in the Tokugawa shogunate, but it did not mean Japanese economy as a whole specialized in its relative advantage in the international market. Introduction of modern technologies was also deterred. While the integrated domestic market became the base of Japan's modern economic development, Japan had to overcome the backwardness inherited from the Tokugawa period when it faced challenges from western powers in the late 19th century.

2.3 Peasant economy and Market

2.3.1 Market-oriented peasants

While the distribution of the national market was protected but regulated by the shogunate, local communities were further less regulated. Farmers in suburban areas found business opportunities in production of commercial crops and cottage industries. In suburban areas of Osaka and Yedo, commercial crops prevailed and the cotton textile industry developed. Food industries such as brewing sake and producing soy sauce also developed, in a response to growing demand in big cities.

While the shogunate encouraged the expansion of commodity markets, it continued to be reluctant to develop free, thus impersonal, trades in the labor market. Given the constraint of available temporary workers, a peasant family usually kept the family members such that they were sufficient in the busy farming season of main crop that was often rice. Then, a typical peasant family had short-term slack labor in house in the off-season. Again, given the less-developed market of temporary workers, opportunity cost of the short-term slack labor in a peasant family was low. Manufacturers utilized those seasonal cheap labor. The cotton weaving, for instance, developed on putting-out system, which were organized by merchants or manufacturers in cities.

Not only it was reluctant to develop free labor market, the shogunate also suppressed expansion of farm land market. Under the shogunate rule, residential and commercial land legally belonged to a city, and farm land to a village. The shogunate officially prohibited trades of farm land in its own domain, while it legalized trades of residential and commercial land. The shogunate did not have sufficient personnel to really prohibit farm land trades, hence it did not have ability to literally prohibit trades. The key difference between treatment of the residential and commercial land and that of the farm land existed in governance of trades. While the court of the city enforced trades of residential and commercial land under its jurisdiction, local governor in charge of ruling villages did not. At the same time, a village kept administrative autonomy against the local governor's office, and a village office could authorize a trade of farm land and tenancy within its jurisdiction. Trades of farm land and tenancy depended on the governance by the village office, and thus were restricted within personal trades among neighbors through the Tokugawa era.

2.3.2 Development of local markets

The development of cottage industries and commercial agriculture was mainly a response to the growth of demands in cities. Then increased income in suburban areas led to the increased demand for commodities in local societies. Stimulated by urbanization in Osaka and Yedo, local markets emerged in suburban areas neighboring those big cities. Trades in a suburban area were governed by long-term relationship among parties or by the relevant village office that kept strong autonomy under the feudalist regime. In particular, financial trades were often governed by the village office. However, jurisdiction of each village office was restricted within the village. This restriction restrained the development of local financial market in impersonal manner. Gradual expansion of local markets were, thus, sustained by personal governance of trades.

Absence of the judicial service by the state court and taxation in kind thus veiled peasant economy from direct impact of national market economy dominated by impersonal trades. Incentives by price mechanism was accordingly weakened. However, it does not necessarily mean that property right and governance of trades in peasant economy during the Tokugawa period was inefficient. The Tax Reform Act in 1873 set up the fully fetched modern property right of farm land, and also forced holders of the property right to pay the land tax by money. This reform suddenly exposed farmers directly to the market. Many farmers did not endure

exogenous risk from the price volatility, and land tenancy ratio rose from twenty to thirty percent in the 1870s to over the 50 percent in the 1900s. Backward inference from this historical outcome indicates that personal manners of the local financial and land markets and taxation in kind, along with the “village contractor system,” under which the “team of five” took the second liability to the tax payment and the village the third if a registered farmer failed to reach at enough crop to pay tax, in a sense protected stability of peasant economy against the volatile impersonal trades. Development of agricultural technique had enhanced resilience of peasant economy against the natural risk such as bad weather so that peasant economy became stable under those institutional protection. However, still bad weather was often not manageable to peasants. If the market risk had been added to this natural risk, it should have been overload. Given the technical ability and the risk attitude of average peasants in the Tokugawa period, institutional settings then were not a bad second best.

Appropriate risk management could also be observed in local financial markets. Financial markets in rural area consisted of the mutual financing of peasants, and the lending from rich farmers. For the latter part, absence of the legal enforcement of land trades by the shogunate or feudal lords naturally increased risk of lenders outside of his village, because the governance of trades depended on the village office. The lenders’ claim were very vulnerable unless he could either occupy the collateralized farm or rely on the governance of the village office within the village. Also, governance of the village office depended on the long term social as well as economic relationships among registered farmers of the village. Not only on the business sphere, also on the social sphere such as the village festival and wedding or funeral ceremonies, the registered farmers of a village kept long-term relationship. If a farmer cheated another farmer in an economic transaction, he would be recognized as a cheater also in the social game. This structure of linked repeated game is thought to have weakened incentives for deviation than otherwise.¹⁵ This mechanism, however, restricted expansion of the financial market outside of the border of the relevant village, and also expansion of inequality in wealth beyond the social standard of the relevant village community.

The “village contractor system” implied a kind of finance for tax payment, but it was still within the border of a village. Accordingly financing beyond a village was checked. For the former part, the absolute amount of credit was small because of the constraint of peasants’ wealth, and there did not exist any financial institution for leverage. As a result peasants’ exposure to the risk of leveraged finance was also limited.

2.3.3 A commercial reform in the late Tokugawa era

Trade among Osaka, Yedo, and Kyoto were successfully regulated by the Tokugawa shogunate through privileged “nakama”s, but those in local markets were not. The volume of trades in local markets gradually grew through the Tokugawa period, which meant domestic commerce became accordingly independent from the shogunate’s regulation.

Because the shogunate courts did not necessarily accept all civil cases related to domestic

¹⁵Bernheim and Whinston (1990). Aoki (2001), pp. 44-55.

trades, governance of trade had to be conducted, at least partially, by merchants's bodies. Inter-city trades among Osaka, Yedo, and Kyoto were governed by chartered merchants' bodies. In local markets, however, bodies of independent small merchants did. It led to decline of the shogunate's control over domestic commerce.

Because of inflationary policy of the shogunate, inflation rate in the mid 19th century was high. However, the cabinet of the shogunate, led by minister Tadakuni Mizuno, thought the inflation came from the monopoly power the shogunate gave to big merchants in Osaka and Yedo. Mizuno decided abolition of chartered monopoly, expecting inflation to cease. However, not only inflation did not cease, rather disrupted was distribution of commodities in the big shogunate cities such as Yedo where supply of goods from rural areas depended on the governance by privileged "nakama"s. Then the cabinet changed its policy and chartered commercial bodies in big cities again. However, merchants of the renewed chartered bodis did not have privilege to monopoly, because any merchant had to be accepted under the renewed charters.

As a result, the commercial reform led to a kind of deregulation, and autonomy of the domestic commerce became enhanced.

3 The Meiji Restoration and westernization.

3.1 The challenge from the western powers

3.1.1 Imposed free trade

In June, 1853, Commodore Matthew Calbraith Perry of the United States Navy arrived with 4 battleships at Uruga of Yedo bay, to present a letter from President Millard Fillmore and to negotiate with the Tokugawa shogunate about establishing a diplomatic relationship. Under the pressure of the battleships, the shogunate could not refuse receiving the letter, and promised to reply to the letter next year.

In 1854, Commodore Perry indeed came back, with 7 battleships this time. With the US, the shogunate finally concluded a treaty of peace and amity under which Japan was required to open of Shimoda Port in Shizuoka and Hakodate Port in Hokkaido, to provide the US with a most-favored-nation treatment, to accept a consul at Shimoda port, and to permit consular jurisdiction in those treaty ports, but the US was not required to give Japan a most-favored-nation treatment nor consular jurisdiction. Japan also concluded similar unilateral treaties with the UK, Russia, and the Netherlands.

The goal of the US was not just establishing a diplomatic relationship. It was to force Japan to join the free trade regime. In 1858, the US Consul Townsend Harris, who had negotiated with the shogunate, succeeded in having Japan conclude a treaty of friendship and commerce with the US, which required Japan to open Yokohama, Nagasaki, Niigata, and Hyogo as treaty ports for free trades, to accept the free trade mechanism, to approve a consular jurisdiction to the US, and to give up tariff autonomy. As easily seen, the US could take a protectionist policy and indeed did in the period, but Japan could not, because any tariff imposed by the

Japanese government should be agreed by the US. Japan concluded similar unilateral treaties with the Netherlands, Russia, the UK, and France. Japan was unilaterally imposed the free trade regime.

3.1.2 Lost control of politics and economy

The duty of samurais, thus, that of the shogunate was the national defence, and to keep order and peace. The duty of farmers was to cultivate and to pay taxes to support the samurais' duty. This was the ideology that ruled Tokugawa Society. The fact that the shogunate had to concede to barbarian battleships had such a big impact on the society that the people became sceptical over the legitimacy of the shogunate's sovereignty.

Not only the impact on the politics, that on the economy was also big. Commerce and distribution in Tokugawa Japan were controlled mainly by large privileged merchants in Osaka, Yedo, and Kyoto. However, the beginning of free trade in 1859 completely changed the context. Especially raw silk was demanded by European countries, so that the distribution of raw silk to Yedo and Kyoto diminished and it was shipped to the biggest treaty port, Yokohama.

This phenomenon looked "disordered" to the shogunate bureaucrats and privileged merchants. But effects on local economies were various. In western Japan, which was a cotton growing area, was damaged by the import of cotton yarns and cotton cloths from the UK and India. On the other hand, in eastern Japan that had silk reeling, rapidly increased export of raw silk benefited peasant economy a lot. While the cost of free trade was burdened by some area and the benefit of that was capitalized on by other area, the net benefit of whole Japanese economy from free trade was plus, and, in the long term, huge. In particular, the US, which imposed free trade on Japan, later became the most important trade partner that allowed Japan huge trade surplus.

3.1.3 The Boshin civil war and the restoration of the imperial rule

Approval of forced treaties by the shogunate antagonized feudal lords, the emperor and the nobles around him, and made people slight the dignity of the shogunate. The national security was the most important duty of the shogun, the leader of samurais, and forced treaties seemed to be an evidence that the Tokugawa shogunate could not carry on the duty any more. That atmosphere accordingly heightened the emperor's dignity.

Furthermore, the emperor Komei, who was personally pro-shogun and pragmatic on domestic politics, was extremely xenophobic so exclusionist, unfortunately to the shogunate. He ordered "Exclusion of barbarians" to the shogunate, and following the order, the shogunate noticed that Japan would close the treaty ports and withdraw from the free trade regime in 1863. This was an explicit breach of the treaties, and Japan did not have a powerful naval force at that time, thus the shogunate failed to obey the order.

However, some domains tried to "exclude" foreigners to show their respect to the emperor. The domain of Choshu bombed foreign ships passing the Kanmon Straits. But this was actually a good opportunity to western countries, because they had wanted to attack anti-foreign

domains, to expand trades with Japan. The allied forces of the UK, France, the US, and the Netherland made a counterattack against Choshu, and occupied the batteries.

On the other hand, a samurai of the domain of Satsuma had killed a British merchant in 1862. Officially retaliating against Satsuma, the British Navy attacked Kagoshima, the capital of Satsuma, and occupied it in 1863.

These losses taught Satsuma and Choshu needs of westernization of military. They completely changed their policy, and closed to the UK and the US, to import modern weapons. The shogunate had also learned modernization of military be critical. In 1855, the shogunate had established the Navy and sent the Navy to the US to exchange instruments of ratification of the treaty in 1860,¹⁶ and progressed modernization of army, mainly under support from France. Japan was forced to wake up.

Once it defeated Choshu and Satsuma, the UK came to hope they overthrew the shogunate and established a centralized government. In 1864, a battle broke out between the shogunate and the domain of Choshu, and it triggered a civil war that continued by 1869. After the pro-shogun emperor Komei died and the young emperor Meiji succeeded, anti-shogun domains gathered under the emperor. In December 1867, the emperor declared the “Recovery of the imperial Government,” and in January of 1868, the shogun Yoshinobu Tokugawa surrendered to the emperor. The shogunate Navy and Northeastern domains, however, continued to fight the imperial army. While they were equipped with modern firearms, but still feudalist samurais who were required to essentially be independent warriors, not modern officers and men who are prohibited from being politically independent, and they ignored the decision by the shogun that they thought wrong in the final stage of their history. The last battle between the shogunate Navy and the imperial Army ended in May, 1869, in Hokkaido.

3.2 Creating a nation state

3.2.1 Demise of the feudalism

Right after the collapse of the shogunate, the emperor and the nobles around him tried to really establish an absolute monarch led by the emperor. They believed the Second Empire of Japan should be a real imperial monarch.

Anti-shogunate domains had a totally different idea. They found the necessity of creating a modern nation state, through their experience. However, at the very beginning of the new Meiji Era, they shared the same goal; decomposition of the feudalist system.

In 1871, the imperial government suddenly denied the autonomy of all 260 domains in Japan. While ex-feudalist lords were guaranteed their income by interest of Japanese Government Bonds given at the exchange of their sovereignty over their domains, domains lost any independent aspects against the central government of the emperor.

¹⁶The flag of the shogunate Navy took was the flag of “Rising Sun.”

3.2.2 Implanting the modern legal system

To Satsuma, Choshu, and other anti-shogunate domains, the goal was not resumption of the imperial rule, the modernization of Japan. They made their efforts in earnest in the 1870s and the imperial government came to be led by them. In 1872, the Educational System Act, which provided the obligation of elementary education, was promulgated. Also in 1872, the imperial Government began its effort to establish the modern judicial system, and started to build courts. In 1873, the Land Tax Reform Act was promulgated. An object of the act was tax reform under which farmers had to pay tax by money while they had generally payed in kind in the Tokugawa era. The other big change by the act was establishment of the modern property right over land.

While registered farmers held their right to cultivate as the holders of farm land had been protected under the feudalist regime, their trades of farm land had not been authorized by the court. This restriction had restrained the expansion of land market. Under the land tax act and the modern judicial system that began to be formed by the new government, contracts of trading farm land were now enforced by the state court. This reform triggered the rapid expansion tenancy, because trades of collateralized lands could be governed by the state court.

In 1874, the imperial government promulgated the Draft Law. In 1880, a modern criminal law was promulgated. Those efforts were partly from Japanese ambition of renewing unilateral treaties, that required Japan to introduce the modern legal system, but also from their understanding of efficient modern legal system.

Furthermore, in 1885, Hirofumi Itoh from Choshu, established a modern cabinet system. While the position of Prime Minister had been assigned to a noble of the highest rank before, he abolished the traditional cabinet and created the modern cabinet, and had the emperor appoint himself as the first Prime Minister. He and other well- educated bureaucrats accelerated their effort for creating a modern nation state. Finally, the imperial government promulgated the Constitution of Japanese Empire, which strictly restricted the range of the emperor's sovereignty, and guaranteed the human rights to the people. Under the Constitution, any law had to be authorized by the Diet, and without receiving discretionary authority by a relevant law approved by the Diet, the government could not restrict the civil rights.

3.2.3 Institution for market mechanism

Although the freedom of speech were virtually restricted by manipulated regulations and orders, the modern property right was completely guaranteed under the constitution, which made the legal basis of market economy was established. In 1896, the Civil Codes and the Commercial Codes were promulgated,¹⁷ under which large part of business transactions were standardized.

As we have learned in former chapters, even in a society without a modern third-party enforcement mechanism, that is, a modern judicial system, trades could be expanded on the

¹⁷Part of the Civil Codes were promulgated in 1898. The Civil Codes became effective in 1898, and the Commercial Codes in 1899.

basis of long term relationship among merchants. But still such trades had to be restricted within personal exchanges, because cheating each other would be the equilibrium otherwise. Enforcement of contracts by the state court got rid of that restriction of commerce. Now impersonal nationwide exchanges could expand.

3.3 Agricultural society in the transition period

3.3.1 The “dual structure” with risk

As an agricultural society develops, local communities come to realize some surplus to feed less productive people, as a result of the growth of agricultural productivity. Given the conditions, less productive agents may be provided more than their marginal productivity. There could be several reasons for this. The classical thoughts lead to the story that authoritarian local leaders and household heads might prefer feeding their less productive subordinates to forcing them to go out to the market, to receive competitive wage determined by their poor productivity, and to have hard time. Such local leaders and household heads could buy respect from their subordinates by “protecting” them from the market.¹⁸

Another, and more realistically critical factor would be, however, the issue of risk management. Less productive agents generally have smaller wealth, hence they are generally more risk-averse. If somebody or some organization could take on their risk, they could choose obeying to their rule. In the case of Tokugawa Japan, rural communities separated from the city market dominated by impersonal risky trades had indeed protected peasants from the exogenous shocks from natural and commercial environments.

If less productive people could receive more than their productivity as authoritarian premium, in classical economics, and/or they could pass on their risk to authoritarian rulers, they would not come to the outside labor market that provides lower expected utility composed of lower expected wages and/or higher risk. However, once the outside market offers a wage and risk combination that provides higher expected utility, even just a little tiny amount, their labor supply suddenly jumps as if the supply of labor is unlimited at the wage level. This is an updated version of the “dual structure” story.¹⁹

3.3.2 Tenancy in the dual structure

After the 1873 land tax reform, peasants were directly exposed to the market, because they had to sell their agricultural products by themselves in order to pay land tax, which had been paid in kind in the Tokugawa period. Finance for tax payment during the Tokugawa period was managed within a village under the “village contractor system,” and it worked as an instrument to share the natural risk such as bad weather. This “village contractor system” was abolished by the 1873 reform. Hence peasants faced up with the risk both from the market volatility and bad weather. In order to manage larger risk, enhanced financial system was necessary.

¹⁸Yamada (1934). Lewis (1954). Yasuba(1975, 1980).

¹⁹Nakabayashi (2006).

The needs were met. Along with formation of the modern judicial system, the 1872 National Bank Act created a boom of establishing banks. The modern banking came to cover the whole nation in the 1870s. Also, the national banks were permitted to issue bank notes before the establishment of the Bank of Japan in 1882. It caused an inflationary growth in every local economy, with inflationary fiscal policy of the central government that still fought revolts of samurais.

In addition, full property right guaranteed under the 1873 act, including trading right of their farmland, provided farmers with much wider range of opportunities to expand their businesses by collateralizing their land, and they could finance their businesses. The local economy experienced a rapid growth in the late 1870s under the conditions, and clashed in the early 1880s, affected by the international recession and the draconian austerity of the central government. The collapse of peasant economy led to rapid increase of the tenancy ratio.

After transfer of land ownership, ex-owners generally kept cultivating the same land rather than left. Also the transfer changed nothing in terms of agricultural technology. Tenants worked as peasants exactly as they did before the ownership of their land moved from them to their land lord. Agricultural technology in modern Japan still fit the peasant economy. Hence the expansion of tenancy system did not affect efficiency of resource allocation in terms of technology. The function of tenancy system is thought to have been rather risk sharing.

An interesting aspect of the Japanese tenancy was in that rent was often paid to land lords in kind, and that a common style of tenancy contract was fixed rent with special clause of rent reduction in the case of natural disaster, similar to the structure of risk sharing within a village in the Tokugawa era. In the Tokugawa era, the payment of land tax in kind and less developed local financial market muffled risk from volatility of the national market, and farmers also shared risk from bad weather through the “team of five” system and the “village contractor system,” under which they had jointly liability of tax payment. The 1873 reform removed the joint liability of tax payment and also forced farmers to directly contact the rice market. The suddenly increased burden of natural and commercial risks was too much to many peasants. They sold their ownership of their land, became tenants, and continued to cultivate their lands as tenants of someone who took the responsibility of land tax payment to the government. Now the landlord took on the natural and commercial risks. Hence the tenancy system that expanded since the 1880s inherited the role of risk sharing from the institutional settings in the Tokugawa era.²⁰

Within a peasant family, the head of household took on risk of family members. Beyond his family, his landlord took on his risk. This newly assembled patronage regime enabled less wealthy and more risk-averse people to pass on their risk to their superior. Under this regime, patronizing superiors did not necessarily need to provide more with their subordinates than their marginal productivity. If a superior was risk-neutral and his subordinate was sufficiently risk-averse, just the former’s taking on risk could increase expected utility of the latter and the latter could accept the former’s authoritarian rule. This was the dual structure in the rural

²⁰Yamada (1934). Nakabayashi (2006).

society.²¹

3.3.3 Effect on the manufacturing sector

Heads of peasant household in rural areas fed risk-averse and often less productive family members. The opportunity cost of their labor in the slack season on the farm was especially low. Utilizing their slack labor, hand-weaving organized by putting-out system grew without major technological progress to increase labor productivity until the 1910s. The combination of the modern cotton spinning in large cities and the hand-weaving in rural areas, which depended on the “unlimited supply” of slack labor in rural areas, was the production organization that supplied textiles from the 1880s to the 1910s.

Meanwhile, the labor market before the 1920s were geographically and socially fragmented. Geographical integration by the improved transportation was on going. Traditional sectors required trade-specific skill so that movement of a worker beyond his trade was not common. Even if surplus population sufficiently existed in rural areas, nation wide mobilization of the population was slow, if anything. Furthermore, modern sectors such as the modern cotton spinning and the modern silk-reeling, especially the silk-reeling, required well organized actions, taking attention, and understanding of the production system, which were new kinds of skill. Supply of the worker with those skill fell in short as early as in the late 1880s, and the real wage of the modern sector began to increase then.

The fragmented labor market with “unlimited supply of labor” therefore led to the “dual structure” of the manufacturing. While the real wage increased rapidly since the late 1880s with labor productivity growth in the modern sector, expansion without significant increase of productivity continued in the traditional sector until the 1910s.

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