Role of Courts in Economic Development: A Case of Prewar Japan*

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Abstract

In this paper, we explore the role of courts in the Japanese economic development, using prefecture-level litigation statistics. Since the late nineteenth century, Japanese people brought many cases to courts. The dominant part of the cases were on monetary issues, which implies that the court played a substantial role in arbitrating disputes concerning economic transactions. Through regression analyses of prefecture-level panel data, it was found that frequency of law suits was positively correlated with the scale of economic activities, but that it was only in case economic development was accompanied by urbanization or decline of local communities. At the same time, it is found that increase of the capacity of the legal system enhanced financial development. In this case also, the importance of the capacity of legal system was conditional on the function of local communities.

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1. Introduction

Since the seminal work by North and Thomas (North and Thomas 1973) most economists and economic historians have agreed that property right protection is essential to development of a market economy. Whereas North and Thomas (1973) focused on property right protection by the state, in recent years, it is stressed that the ways for property right protection are diverse and not limited to that by the state (Ellickson 1991; Fafchamps 2004; Dixit 2004; Greif 2006). Nevertheless, still we cannot deny that the state, more specifically, the court has played a substantial role in property right protection in the modern period.

However, we have surprisingly few historical studies exploring the role of the courts in the modern economic development¹. One of the exceptions is Muldrew (1993). Examining the records of a borough court in early modern England, he found that the court was accessible to almost all of the people in the society, wealthy or poor, in settling disputes including those concerning economic transactions. Another exception is George and Sworden (1986), which drew on decisions of a court on contract and property law in early nineteenth century Canada, to conclude that the court played an important role as the infrastructure to enhance economic efficiency. On the other hand, in the context of Japan, based on the records of court decisions, Nakabayashi (2001) argued that the decisions of the ward court in Suwa district supported the grade wage system, in which a wage of each worker was determined based on her relative performance, and thereby contributed to emergence of the labor market in that district.

Yet, there is much to be done in the historical research on the role of the courts in economic development. In particular, given the state of the literature, it is important to have a bird eye view on the relationship between economic development and the role of the court. For this research, Japan provides an excellent basis. In Japan, the modern court system started in 1875, when the Supreme Court was established. Since 1878, the Ministry of Justice has published detailed litigation statistics, the Statistics of Civil Cases (*Minji Tokei Hyo*) every year (Hayashiya 2003; Hayashiya et al 2005). Using this statistics as well as other relevant economic data, we explore how economic activities affected on demand for the court service, and how the legal service supported economic, in particular financial development.

The paper is organized as follows. Section 2 overviews the history of the legal system in Japan since the ancient period. Section 3 describes the basic features of civil law suits based on the Statistics of Civil Cases. In section 4, we explore the relationship

¹ Concerning pre-modern period, Greif (2006) analyses the role of community courts in the cpntext of the community responsibility system.

between the legal system and economic development quantitatively. Section 5 concludes the paper.

2. A brief history of legal system in Japan Legal system in pre-modern period

From the late seventh century to the early eighth century, the Imperial Government of Japan tried to implant the Chinese political institutions and legal system. In that period, the Imperial Government proclaimed "Imperial Legal Codes," (*Ritsuryo*) written in Chinese, modified versions of Chinese Imperial Legal Codes. In 710, a landmark codes, the "Imperial Codes of Taiho" was proclaimed, which gave the basis of the legal system in the ancient empire of Japan.

In the ancient empire, the ruling elites were the Imperial family and nobles, led by Fujiwara family, which indeed assembled the "Imperial Codes." Property right of any piece of land in Japan officially belonged to the Emperor, and the legal system was also officially centralized. In reality, however, the Imperial Government did not sufficient resource to rule entire Japan, and the Imperial Government delegated responsibilities of governance and privileges to collect taxes to the Imperial family, nobles, and major temples, which held manors. That de facto decentralized manor system was the basic structure of the ancient empire of Japan.

Furthermore, in local communities where agrarian production was actually practiced, the owners of the manors did not directly exercise their powers. Rather, they delegated responsibilities to govern local communities with privileges to take some rents as a portion of the taxes, to local elites and low class nobles. Because of the nature of their tasks, those people were heavily armed, and came to be called "*samurai*"s². While the Imperial Legal Codes were still effective in the Imperial Capital, Kyoto in the western part of Japan, and in neighboring areas called *Kinai, samurais* followed their own common law in the other areas.

By the twelfth century, local *samurais* formed several groups, and each group was led by a samurai who had a noble origin. After the period of civil war among those groups, in 1192 the Kamakura Shogunate, the samurais' government, was finally established at Kamakura in the eastern part of Japan, while the Imperial Government at Kyoto still existed and played the role of authorizing the Shogunate³. The Kamakura Shogunate created their own court, where the Samurais' common law was applied. In 1221, retired Emperor *Gotoba* stood against to abolish the Shogunate to fail,

² The original meaning of samurai is a person who served to his principal.

³ "Shogun" was the title which meant the general, given by the Emperor.

which expanded the power of the Shogunate to Kyoto. Furthermore, in the late thirteenth century, the Monglian Empire attacked Japan. Through repulsing it, the Shogunate took over the sovereignty over the foreign affairs and defense, which gave a good reason for the Shogunate to rule entire Japan including the West, where the Imperial Government had been relatively powerful. In 1223, the Shogunate proclaimed "Legal Codes of Joei (*Joei Shikimoku*)," which was the first written text of samurais' common law, and the first law written in Japanese. By the thirteenth century, samurais' common law replaced the Imperial Legal Codes to be the official legal system in Japan. Thus, the legal basis of the feudal state was established.

The legal system in Tokugawa Japan had its origin in this samurais' common law. Common law to govern the relationship between feudal lords and samurais became highly sophisticated through fourteenth and fifteenth centuries, and this was inherited in the political and legal system of the Tokugawa Shogunate. In Tokugawa period, feudal lords were strongly controlled by the Shogunate, and samurais became just bureaucrats hired by feudal lards. In this sense, the political system of Tokugawa Japan was centralized.

With respect to the general public, however, the system was substantially different. Farmers were given high level autonomy over their economic and social activities. Even tax collection from farmers was delegated to villages, which were self-governed. At the same time, most contracts between farmers were written and enforced by themselves. "Private" agreements were signed or sealed by village officials selected from farmers, relatives, and neighbors, so that "private" agreements had formality. Here enforcement was carried out by members of the village, not by the Shogunate (Henderson 1975, p. 31.).

In other words, the Tokugawa Shogunate was not obliged to provide legal services to civil cases, while it was obliged to criminal cases to keep peace and order, which had long been the duty of samurais. With respect to civil cases, the Shogunate differentiated two kinds of claims, namely claims with security or without security. Suits on claims with security were generally accepted by the Shogunate court, but suits on claims without security might not have been, especially when the court was busy (Henderson 1975, p. 32.). Indeed, when the Shogunate court was very busy, the Shogunate proclaimed "Aitai Sumashi Rei," which literally means "order for parties to settle conflicts by themselves". In this sense, bringing law suits of civil case was not a "right" under the Tokugawa regime.

However, protection of property right is essential to the development of a market economy (North and Thomas 1973; North 1990), and indeed Tokugawa society was

characterized by the highly developed market economy (Shinbo and Hasegaw 1988). Then the question is how that condition was satisfied.

As tax collection and enforcement of agreements within a village was delegated to the village, protection of claims without collaterals, or governance of trades to prevent from cheating, was delegated to merchants' communities, called "nakama"s, which means fellows groups. Usually nakamas cover all relevant merchants in a certain area, so that a nakama could exercise monopoly power in a certain industry in a certain geographical area.

The Tokugawa Shogunate picked up some important nakamas in big cities, ordered them to pay some taxes, and guaranteed those privileges of monopoly in those cities. These privileged nakamas were called kabu nakamas, which meant chartered groups. Those guilds were delegated authority to govern trades among them, and governance of trades related to claims was provided by those guilds (Okazaki 2005). While large nakamas in big cities were privileged in such a way, many small nakamas in local cities and villages also govern trades among them.

As long as trades are repeated among the same partners, i.e., trades were personal, such private governance did work well. Cheating your partner meant losing profit from infinitely repeated personal trades in the future, so that honest trading today can be an outcome of sub-game perfect equilibrium strategy, if the expected value created from personal trades was sufficiently large (Okazaki 2005; Greif 2006).

However, such a private governance mechanism does not work in impersonal trades, because a partner today might not be important tomorrow there. Remarkable economic development in a modern nation state has come from, at least partly, impersonal trades under the price mechanism. Property right protection by the modern state was critical, not only because a centralized modern state acquired a strong power of enforcement, also because it re-established proper right as the one effective to any third party, i.e., effective in impersonal interaction, by defining rights as ones universal within the state, and by declaring protection of it against anybody within the state (North 2005). The Tokugawa Shogunate supplied legal services for criminal cases and took a responsibility to keep peace and order. This obviously prompted the economic development to some extent, but it could not establish a right protected by the state. For institutional change from personal privilege to impersonal right, a modern legal system was needed.

Introduction of the Western legal system

After 260 years of isolation policy, the Tokugawa Shogunate was forced to establish a diplomatic relationship with the US in 1854, under the military threat from the US, and then with other Western powers. In 1858, the Tokugawa Shogunate was again had to conclude a treaty of friendship and commerce with the US, and then with other Western powers. Under the treaties in 1858, Japan was forced to enter the free trade regime from 1859. This sudden encapsulation into the free trade caused drastic change of relative prices in Japanese economy, which showed as chaos to peoples' eyes (Shinbo 1978; Bernhofen and Brown 2004). Also Japan had to approve consulate jurisdiction to Western countries under 1854 treaties, and to give up tariff autonomy under 1858 treaties. National security was the duty of samurais, but the Tokugawa Shogunate apparently failed to keep it. Trust in the Shogunate by the Japanese people rapidly disappeared.

In this situation, some powerful feudal lords supported by the Emperor defeated Shogunate in 1868, and right after that they declared establishment of the "New Imperial Government," and started the radical political institutional reform, called the "Meiji Restoration." One of the important goals to the New Imperial Government was to renew "partial treaties" with Western countries. However, lack of the modern legal system, thus luck of human rights including property right was a good excuse for Western countries to deny renewing the treaties. That attitude of Western powers made the New Government try to introduce Western legal system.

In Tokugawa Japan, a registered farmer exclusively held a piece of land and cultivated it. His right of holding the piece of land was guaranteed by the feudal lord of territory in which he lived, in exchange for his duty to pay tax. The tax rate was fixed such as 40% of crop, and after he paid tax in kind, the rest of crop belonged to the farmer. In the sense that the surplus after tax deduction belonged to the farmer, he "owned" his land. However, trade of land was officially prohibited, so that even if he could actually sell his farm to somebody, the Shogunate court did not enforce the contract. In 1872, the New Imperial Government officially allowed trade of land. Furthermore, in 1873, the New Imperial Government started the "Land Tax Reform," by which any holder of land was registered as the exclusive owner in the modern sense, and he had to pay tax by money. While the property right of farmers was authorized by the New Imperial Government, dominium of feudal lords was "returned" to the Emperor in 1870, and feudal independent states were turned to prefectures that did not have any independent sovereignty.

In 1873, the New Imperial Government invited Gustave Emile Boissonade de Fontarabie, a law professor at the University of Paris, and started assembling the Civil Codes and the Commercial Codes with him, and also consulted him for assembling the Criminal Law. In 1880, the Criminal Law, the first full-fletched Western law in the Japanese legal history, was proclaimed and became effective in 1882⁴. The Civil Codes and the Commercial Codes based on the French law were proclaimed in 1890 first, and then were modified so that German factors were introduced before they were enacted. The Amended Civil Codes, the first half of which was proclaimed in 1896, and the last half of which in 1898, was enacted in 1898. The Amended Civil Codes was proclaimed and was enacted in 1899.

Centralization by the New Imperial Government caused antipathy among farmers and ex-samurais. On the other hand, within the New Imperial Government, there existed a serious divide between the Emperor and nobles and the young bureaucrats led by Hirofumi Itoh. The Emperor and nobles wanted "restoration" of imperial monarchy, but well-educated bureaucrats were eager to establish a modern constitutional state. Unrest outside of the government, "Movement for Freedom and Democracy," favored the latter, and the New Imperial Government gave an ordinance that the government would "gradually move to constitutional state" in 1875. Hermann Rösler, a Prussian scholar, was invited, and Itoh and other young bureaucrats began study on constitutional law with him. Right after the Meiji Restoration, the highest class nobles were appointed as the prime minister and deputy ministers, who were to support the Emperor. However, Itoh established the modern cabinet system in 1885 to replace them. In 1889, the New Imperial Government proclaimed the Constitution of Empire of Japan, that followed the Prussian constitution in many parts. Under the Imperial Constitution effective from 1890 to 1947, protection of property right and freedom of contract were guaranteed as the fundamental civil rights. The Constitution with the Civil Codes and Commercial Codes gave a fully detailed rule book of the market economy.

Development of legal organization and accumulation of human capital

While the modern legal system was established in Japan in the 1890s, ordinances and laws that were fragmented parts of modern legal system had been given since the early 1870s. For instance, the 1872 National Bank Act, a copy of the American counter part, showed the model of joint stock company, and indeed the stock exchange market took a big role in Japanese industrial revolution since the 1880s. The 1890s was the period when all of those modern legal institutions were streamlined.

The court system was not an exception. The Court Organization Law, the Civil Lawsuit Process Law, and the Criminal Lawsuit Process Law were proclaimed and enacted in 1890. But formation of the legal organization had started in the early 1870s.

⁴ In 1907, the Criminal Law was drastically amended following the "New School of Criminal Law" in Germany. This has been effective since 1907 in Japan.

In 1872, the New Imperial Government established the Department of Justices, which was the first effort to make justice relatively independent within the administration, and the Ordinance of Legal Servants was given, by which legal bureaucrats such as judges and executors were separated from others. In 1875, when the government declared gradual movement to the constitutional state, the Supreme Court (*Daishin In*) was established as an organization fully independent against the administration. In 1886, right after the Cabinet Organization Ordnance was proclaimed, the Court Organization Ordinance was proclaimed, by which implantation of the basic structure of western court system was finished.

Once the Criminal law, Constitution, the Civil Codes, and the Commercial Codes were proclaimed, legal studies to apply them to the Japanese realty flourished. In the 1890s, the classical studies inherited up to now were produced. The department of law of the Tokyo Imperial University was the center of these studies, and it supplied new generation of judges, executors, and bureaucrats to the government. Many private law schools were also established, and they supplied lawyers to private sectors. In the late 1890s, a consistent rule book of the market economy and human resources to implement it became ready to use for impersonal exchanges in the market.

3. Economic development and role of court: A descriptive analysis

In this section, we overview the basic features of civil law suits and the relationship between law suits and economic activities, using the data from the Statistics on the Civil Cases (*Minji Tokei Hyo*). As stated in the previous section, the Japanese court system was composed of four tiers, namely the Supreme Court-high courts-district courts-ward courts. With respect to the civil cases, the ward courts took in charge of the first trial of suits with no more than 100 yen and compromises. In 1895 there were 301 ward courts under 49 district courts (Table 1). In 1913, due to the curtailment of the government expenditures, 128 ward courts were abolished, but 46 and 31 of them were revived in 1917 and 1919, respectively (The Supreme Court 1990, pp.113-114). In terms of the number of suits accepted, ward courts played a dominant role. That is, more than 80% of the cases were accepted at ward courts (Table 1).

Figure 1 shows the number of civil cases disposed at ward courts from 1891, the next year of the legislation of the Code of Civil Procedure. In the total number, we find a trend and cycles. Namely, the total number of suits had a clear upward trend. It increased from 155,913 in 1891 to 285,707 in 1929. At the same time, the number of suits changed cyclically, which suggests that the number of suits was associated with the business cycle. To see the relationship between the cyclical changes in the number of

suits and the business cycle, Figure 2 shows the annual percentage changes in the number of law suits (Panel A) and the diffusion index of Fujino and Igarashi (1973)⁵ (Panel B). Concerning the number of law suits, the series of the newly accepted cases as well as that of the cases disposed of are shown, but the two series follow very similar pattern. The diffusion index is a composite index of time series data on economic activities to identify the business cycle. Comparing Panel A and Panel B, we find that the percentage change in the number of suits was basically counter-cyclical in the prewar period. In other words, it was negatively correlated with business. The correlation coefficient of the percentage change in newly accepted suits and the diffusion index is -0.40 in the period from 1892 to 1929.

As seen in Panel A, the growth rate of suits was positive in most years, but there were distinct three periods when the growth rate of the suit number was continuously negative, namely 1893-1896, 1904-1907 and 1916-1920. The first period includes the boom after the Sino-Japanese War boosted by the government expenditure based on the reparation money from China. The second period includes the boom after the Russo-Japanese War. Although Japan could not get any reparation money this time, due to the impact of the war, heavy and chemical industries started to grow. Finally, 1916-1920 is the period of the boom during the First World War. As the production capacity of the Western countries was occupied with munitions, the Japanese economy enjoyed a huge export-led prosperity. At the same time, heavy and chemical industries expanded substantially substituting for import from the Western countries. These three booms were followed by depressions. In those depression periods, the growth rate of law suits went up and stayed at a high level⁶. The counter-cyclical pattern of law suits arguably reflects the pattern of defaults in the business cycle. This conjecture is consistent with the composition the suits we see below.

Figure 1 also indicates the composition of civil suits disposed of at ward courts. *The Statistics on the Civil Cases* classified civil suits into eight categories, namely personnel, land, buildings and ships, monetary, rice, commodities, securities and the others. The proportion of the suits on monetary issues stayed around 40 % from the

⁵ Fujino and Igarashi (1975) has several diffusion indexes. The series in Panel B is "the diffusion index based on normalized percentage change from the same month of the previous year" (pp.128-129). In Panel B of Figure 2, the index in each December is plotted.

⁶ What seems to be exceptional is the early 1910s. In this period, the diffusion index indicates that the business was in a prosperous phase, but the growth rate of law suits stayed at high level. It may be due to the fact that this prosperous phase was weak, as reflected in relatively low level of diffusion index (Panel B). Indeed, this prosperous phase was called "interim prosperity" in those days.

1890s to the 1910s, and it went up to around 50% in the 1920s. The trend and cycles we have just found in the total number of civil suits were basically due to the contribution of suits on monetary issues.

The monetary issues were further divided into many subcategories. The classifications in the Statistics on the Civil Cases were not exactly the same across years, it is sufficient for us to see the outline. Table 1 shows the subcategories of the monetary issues whose number of cases was not less than 1,000 in 1895 and 1925. In both years, the largest subcategory was that concerning loans, and the second largest subcategory was sales credit including "bills⁷." We can safely say that a large part of the suits on monetary issues were concerning credit in a broad sense, including loans and sales credit. In other words, credit was the major issue of disputes which the Japanese people brought to courts in the prewar period. On the other hand, it has been made clear that, in general, the exchange in which QUID is separated from QUO, is essential to expansion of a market economy, and for that contracts should be enforced in some ways (North 1990, 2005; Greif 2006). Table 1 suggests that the court played a substantial role in contract enforcement in Japan, at least since the late nineteenth century.

A remarkable characteristic of the *Statistics of the Civil Cases* is that it has the law suit data by area. The areas were divided according to the jurisdiction of district courts and ward courts. The jurisdictional area of each district court was basically each prefecture where the court was located, except for Hokkaido, and that of each ward court corresponded to a city or a county within a prefecture. Whereas we focus on the cases at ward courts in this paper, we aggregate the data at the prefecture-level. It is for convenience to collect the relevant data to be matched with the suit data. Table 3 shows the number of law suits further aggregated at the provincial level to save space. In order to control for the difference of the populations across provinces, per capita numbers of suits are also reported. The population data are taken from the Bureau of Statistics of the Cabinet (1907) and the Bureau of Statistics of the Ministry of General Affairs (2006). It is notable that there is substantial cross-sectional as well as time-series variation in the per capita number of suits. For example, in 1895, there were 2.82 times more law suits per capita in Hokkaido than in Chubu province. While law suits increased 2.45 times in Chugoku province from 1895 to 1925, they declined 0.89 times in Tohoku province in the same period. This cross-sectional and time-series

⁷ It is notable that the suits concerning sales credit became substantially larger from 1895 to 1925. It may arguably reflect the expansion of transactions with credit in this period.

variation in per capita number of law suits may allow us to explore the determinants of law suits "demand."

As we have seen, a major part of law suits were on monetary issues, in particular on credit. This finding suggests that expansion of credit would increase law suits. Figure 3 is to see this relationship in 1895 (Panel A) and in 1925 (Panel B). The vertical axis denotes the per capita number of suits in each prefecture. The horizontal axis denotes the per capita amount of bills issued and settled by private banks in each prefecture. The data on bills are taken from the 1895 issue of the Report of Bank Bureau and 1927 issue of the Statistical Year Book of the Japan Empire. The amount is evaluated in terms of 1934-36 price by the price index by Ohkawa (1967). Positive correlation between per capita law suits and per capita bank bills is fairly clear in 1895 ($\rho = 0.462$). In 1925, the positive correlation is not so clear, but it is still observed ($\rho = 0.188$). The correlation between these two variables is consistent with the above conjecture that expansion of credit increased demand for law suits.

4. Economic development and role of court: Quantitative analysis

In this section we explore the relationship between the role of court and economic development through regression analyses of prefecture-level panel data We measure the role of court by the per capita number of law suits newly accepted by ward courts (*SUIT*). By this variable, we intend to capture how frequently a person relied on the legal service provided by the court. The data points selected are 1895, 1900, 1905, 1910, 1915, 1920 and 1925. That is, we constructed 47 prefectures* 7 year=329 prefecture-year panel data.

Economic development is measured by three variables. The first one is the per capita amount of bank bills which we used in the previous section (BILL). In addition to this, we use the per capita amount of loans by private banks (LOAN). Whereas BILL is a flow variable, LOAN is the stock variable at the end of each year. The source of LOAN is the same as BILL. Both of BILL and LOAN are proxies for financial development. The third variable is per capita number of factory workers (FACTORY). The Ministry of Agriculture and Commerce collected the data of the number of workers employed by factories with no less than 10 employees since the late nineteenth century. By the ratio of the factory workers to the total population, we measure the extent of industrialization. The data for 1895, 1900, 1905, 1910 and 1915 are taken from various issues of the *Statistics on Agriculture and Commerce (Noshomu Tokeihyo*), and the data for 1920 and 1925 are taken from the *Statistics on Factories (Kojo Tokeigyo*). It should be noted that as the data of 1895 and 1920 are not available, we substitute the data of

1896 and 1919 for them, respectively⁸.

We regress SUIT on each of these variables of economic development as well as year dummies. The results are reported in Table 4. It is confirmed that the coefficients of the economic development variable are positive and statistically significant, which implies that the people in developed areas tended to rely on law suits more frequently. To put it differently, the court played the role in arbitrating disputes more frequently in developed areas. In addition, it is notable that the year dummies of 1915 and 1925 are significantly positive, whereas the year dummy of 1920 is significantly negative. 1915 is the year just after the bottom of the business cycle and 1925 is in the midst of a prolonged depression after the First World War. On the other hand, 1920 is just after the boom during the War (Figure 2, Panel B). These coefficients of the year dummies suggest that the number of law suits negatively correlated with the business cycle with one year lag, which is consistent with the observation in Figure 2.

We can interpret the positive coefficients of BILL, LOAN and FACTORY indicate that the scale of economic activities captured by these variables gave a positive impact on frequency of disputes, and thereby on frequency of law suits. But it is possible that while economic activities increased potential disputes, they did not realize as law suits, because they could be resolved or suppressed by other means, for example, by the role of a certain community (Greif 2006). Concerning prewar Japan, it is known that conventional local communities were active and played various roles in particular in rural areas. If this is the case, the impact of the scale of economic activities on frequency of law suits are conditional on the function of local communities. In order to examine this hypothesis, we add the interaction term between the economic development variables and a variable indicating the weakness of local communities, as well as the latter variable itself. The variable is the ratio of the urban population in the total population of each prefecture (URBAN). The urban population is defined as the population of a city, a town or a village whose population was not less than 50,000. The data of urban population are taken from various issues of the Statistical Handbook of the Japan Empire. The expected sign of the interaction term is positive, because as urbanization progressed to weaken the function of local communities, which in turn would make potential disputes realize as law suits.

The estimation results are reported in Table 5. The coefficients of the interaction terms are positive in all of the equations, and statistically significant for BILL*URBAN and FACTORY*URBAN. Furthermore, it is notable that in all cases, the coefficients of

⁸ In this case, the population as the denominator is also the data of 1896 and 1919, respectively.

economic development variables are not statistically significant unlike in Table 3. This implies that economic development gave positive impact on the number of law suits, only in case it was accompanied by urbanization, which supports our conjecture that economic development increased potential disputes and that they realized as local communities declined.

As economic development and urbanization progressed, law suits increased as we saw in the previous section (Figure 1). Increase of law suits, in turn, lead to increasing supply of service supporting law suits. Figure 4 indicates the overtime change in the number of lawyers. It went up steadily from the late nineteenth century to the 1910s, and sharply in the early 1920s. In 1929, there were 6,409 lawyers in Japan, which was 5.15 times more than in 1890. Increase of lawyers is supposed to indicate expansion of capacity of the legal system to arbitrate disputes, and thereby supported financial development.

In order to test this hypothesis, we regress the financial development variables (BILL, LOAN) on the lagged per capita number of lawyers and other control variables using the prefecture-level panel data from 1905 to 1925. We control for industrialization (FACTORY) and year dummies. Equation (1) and (3) in Panel A of Table 6 report the results of the baseline OLS regressions. As we expected, the coefficients of LAWYER_{t-1} are positive and statistically significant after controlling for the extent of industrialization and macro shocks. In equation (5) and (7) in Panel B of Table 6, we estimate the same equations using fixed-effect model to control for unobservable prefecture specific variables. In this case, the results are qualitatively the same.

In analyzing frequency of law suits above, we considered that the importance of the court depended upon the function of local communities. This relationship should be taken into account. That is, the effect of the number of lawyers on financial development would be conditional on urbanization. In order to incorporate this effect, we added LAWYER_{t-1}*URBAN t-1 as well as URBAN t-1. In the case of pooled OLS, the coefficients of LAWYER_{t-1}*URBAN t-1 are not statistically significant and the coefficients of LAWYER_{t-1}*URBAN t-1 are not statistically significant and the coefficients of LAWYER_{t-1} does not change qualitatively (equation (2) and (4) in Panel A of Table 5). On the other hand, in case we use fixed effect model, the coefficients of LAWYER_{t-1}*URBAN t-1 are positive and statistically significant, as we expected, and at the same time the coefficients of LAWYER_{t-1} become statistically insignificant (equation (6) and (8) in Panel B of Table 6). The results of fixed effect regressions implies that the legal institution supported financial development, and that the importance of this function was conditional on the function of local communities.

5. Concluding remarks

Since the late nineteenth century, Japanese people brought many cases to courts. The dominant part of the cases were on monetary issues. It implies that the court played a substantial role in arbitrating disputes concerning economic transactions. Through regression analyses of prefecture-level panel data, it was found that frequency of law suits was positively correlated with the scale of economic activities, and that this relationship was conditional on the function of local communities. That is, economic development gave a positive impact on the number of law suits, but it was only in case economic development was accompanied by urbanization or decline of local communities. At the same time, it is found that increase of the capacity of the legal system enhanced financial development. In this case also, the importance of the capacity of the legal system was conditional on the function of local communities.

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		1895	1905	1915	1925
Number of courts	Total	358	367	242	399
	Supreme Court	1	1	1	1
	High Courts	7	7	7	7
	District Courts	49	49	50	51
	Ward Courts	301	310	184	340
Number of newly accepted cases	Total	136,087	164,307	246,060	288,909
(civil litigation, first trial)	District Courts	15,941	20,332	23,402	51,178
	Ward Courts	120,146	143,975	222,658	237,731

Table 1 Basic features of the Japanese court system

Source: Statistical Yearbook of the Japan Empire, various issues.



Table 2 Major subcategories of manetary issues disposed at ward courts

1895		1925	
Issues	Number of cases	Issues	Number of cases
Loans without collaterals	29,919	Loans	54,526
Sales prices	4,948	Sales credits	29,799
Loans with real estates as collaterals	3,339	Bills	16,993
Deposits	3,335	Sales prices	5,157
Damages	2,102	Reserve funds	4,607
Reserve funds	1,455	House rents	3,928
Advances	1,236	Damages	3,410
Contracted payments	1,194	Amusement expenses	2,872
Reparations	1,123	Deposits	1,770
House rents	1,069	Maney paid in stocks	1,762
		Guaranteed debts	1,704
		Advances	1,645
		Wages	1,333
		Rents	1,160
Others	71,295	Others	96,011
Total	121,015	Total	226,677

Notes: Subcategories which had more than 1000 cases.

Source: Statistical Yearbook of Civil Litigation, 1895 and 1925 issues.







Table 3 Regional	distribution	of law	suits
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		1895	1905	1915	1925
Number of suits	Total	120,146	143,975	222,391	237,025
newly accepted	Hokkaido	3,453	5,574	9,250	13,823
	Tohoku	16,690	20,225	22,356	19,759
	Kanto	21,981	25,469	33,723	35,668
	Tokyo	7,715	7,456	14,683	18,997
	Chubu	19,871	28,870	34,746	34,142
	Kinki	21,894	21,552	45,434	46,940
	Osaka	8,315	5,687	17,342	19,235
	Chugoku	10,236	14,786	29,505	28,688
	Shikoku	7,807	7,239	13,585	13,907
	Kyushu	18,214	20,260	33,792	44,098
Per 1000 persons	Total	2.85	3.01	4.09	3.97
	Hokkaido	6.14	5.04	5.13	5.53
	Tohoku	3.60	3.88	3.88	3.21
	Kanto	2.99	2.84	3.33	2.90
	Tokyo	4.64	3.06	5.13	4.24
	Chubu	2.17	2.96	3.19	3.02
	Kinki	3.30	2.85	5.15	4.67
	Osaka	6.17	3.22	7.63	6.29
	Chugoku	2.28	3.08	5.64	5.58
	Shikoku	2.70	2.38	4.08	4.38
	Kyushu	2.80	2.73	3.99	4.86

Figure3 Correlation between financial development and number of





Number of law suits per 1,000

Per capita amount of bank bills (1934-36price)

Table 4 Economic development and demand for suits

Dependent	variavle: S	UIT							
BILL	0.0673	(3.52)	***						
LOAN				0.5120	(2.76)	***			
FACTORY							0.0136	(2.27)	**
1900	0.0020	(0.84)		0.0002	(0.84)		0.0003	(1.08)	
1905	0.0013	(0.60)		0.0002	(0.71)		0.0002	(0.79)	
1910	-0.0005	(-0.24)		0.0000	(-0.12)		0.0000	(-0.05)	
1915	0.0010	(3.87)	***	0.0010	(3.86)	***	0.0011	(4.05)	***
1920	-0.0008	(-3.61)	***	-0.0007	(-3.32)	***	-0.0007	(-3.11)	***
1925	0.0007	(2.32)	**	0.0070	(2.30)	**	0.0009	(3.04)	***
Constant	0.0028	(17.07)	***	0.0028	(16.97)	***	0.0027	(16.00)	***
R ²	0.209			0.195			0.196		
Obs.	329			329			329		

Note: Heteroskedasticity robust t-values are in parentheses.

*** statistically significant at 1% level

** statistically significant at 5% level

Dependent variavle: S	SUIT								
BILL	-0.4488	(-1.03)							
LOAN				-0.4526	(-0.89)				
FACTORY							-0.004	(-0.64)	
URBAN	0.0005	(0.88)		0.0009	(1.55)		0.000	(0.06)	
BILL*URBAN	0.1655	(2.32)	**						
LOAN*URBAN				1.2440	(1.47)				
FACTORY*URBAN							0.052	(2.67)	***
1900	0.0002	(1.02)		0.0003	(1.11)		0.000	(0.98)	
1905	0.0002	(0.82)		0.0002	(0.91)		0.000	(0.75)	
1910	0.0000	(0.10)		0.0001	(0.24)		0.000	(0.03)	
1915	0.0011	(4.08)	***	0.0011	(4.09)	***	0.001	(4.08)	***
1920	-0.0005	(-1.88)	*	-0.0004	(-1.70)	*	-0.001	(-2.91)	***
1925	0.0010	(3.03)	***	0.0011	(2.93)	***	0.001	(3.27)	***
Constant	0.0028	(17.43)	***		(17.18)	***	0.003	(16.26)	***
R ²	0.225			0.219			0.227		
Obs.	329			329			329		

Table 5 Economic development, urbanization and demand for suits

Note: Heteroskedasticity robust t-values are in parentheses.

*** statistically significant at 1% level

** statistically significant at 5% level



Table 6 Legal institution and financial development

a. Estimates by pooled OLS

	(1)			(2)			(3)			(4)		
Dependent variable	BILL			BILL			LOAN			LOAN		
LAWYER _{t-1}	28.8312	(4.71)	***	16.1262	(1.71)	*	4.8699	(6.63)	***	3.4418	(2.63)	***
FACTORY _{t-1}	0.1913	(5.89)	***	0.1480	(5.79)	***	0.0126	(4.96)	***	0.1349	(5.77)	***
URBAN _{t-1}				0.0128	(6.63)	***				-0.0003	(-1.17)	
LAWYER _{t-1} *URBAN _{t-1}				-25.7562	(-1.45)					2.8249	(1.13)	
1905	0.0005	(1.85)	*	0.0004	(1.47)		0.0000	(0.65)		0.0000	(0.71)	
1910	0.0002	(0.67)		0.0001	(0.40)		0.0000	(-0.03)		0.0000	(0.19)	
1915	0.0004	(0.99)		0.0002	(0.83)		0.0001	(1.75)	*	0.0001	(1.78)	*
1920	0.0028	(5.76)	***	0.0027	(6.59)	***	0.0003	(6.93)	***	0.0003	(7.09)	***
1925	0.0016	(3.17)	***	0.0018	(4.64)	***	0.0003	(8.01)	***	0.0003	(8.19)	***
Constant	-0.0014	(-3.85)	***		(-3.22)	***	-0.0001	(-3.55)	***	-0.0001	(-1.79)	*
R ²	0.693			0.792			0.777			0.781		
Obs.	282			282			282			282		

Note: Heteroskedasticity robust t-values are in parentheses.

- *** statistically significant at 1% level
- ****** statistically significant at 5% level
- * statistically significant at 10% level

b. Estimates by	fixed	effect	model
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	(5)			(6)			(7)			(8)		
Dependent variable	BILL			BILL			LOAN			LOAN		
LAWYER _{t-1}	16.9170	(1.92)	*	-5.2413	(046)		7.8286	(7.46)	***	-1.2243	(-1.01)	
FACTORY _{t-1}	0.1646	(4.80)	***	0.1491	(4.36)	***	0.0143	(4.42)	***	0.0139	(4.32)	***
URBAN _{t-1}				0.0104	(2.44)	**				-0.0007	(-1.61)	
$LAWYER_{t^{-1}} * URBAN_{t^{-1}}$				79.8405	(2.99)	***				21.9788	(6.48)	***
1905	0.0005	(1.70)	*	0.0004	(1.54)		0.0000	(0.94)		0.0000	(0.82)	
1910	0.0003	(1.17)		0.0001	(0.62)		0.0000	(-0.56)		0.0000	(0.62)	
1915	0.0005	(1.65)		0.0002	(1.03)		0.0000	(1.82)	*	0.0001	(2.51)	**
1920	0.0030	(7.93)	***	0.0025	(8.43)	***	0.0003	(7.03)	***	0.0003	(9.70)	***
1925	0.0020	(4.80)	***	0.0016	(4.06)	***	0.0003	(6.65)	***	0.0003	(7.34)	***
Constant	-0.0008	(-1.81)	*	-0.001	(-2.15)	***	-0.0002	(-4.98)	***	-0.0002	(-0.48)	
R ²	0.679			0.685			0.750			0.640		
Obs.	282			282			282			282		

Note: Heteroskedasticity robust t-values are in parentheses.

*** statistically significant at 1% level

** statistically significant at 5% level

* statistically significant at 10% level