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Bank Behavior in Regional Finance and the Development of Regional Industries: The Case of Prewar Fukushima, Japan

Tetsuji Okazaki （The University of Tokyo）*

Abstract

Because of the unstable financial market after World War I, the Japanese financial system experienced a wave of bank mergers, which resulted in an increase in bank scale and the development of branch banking. In this paper, we explored the implications of the expansion of branch banking, using bank-office-level data for Fukushima Prefecture. We found that branch offices that belonged to banks headquartered in other cities, counties, or prefectures tended to have a lower propensity to loan compared with the offices of banks headquartered in the same cities and counties as the offices. We also find that concentration of deposits on bank offices headquartered in other cities, counties, or prefectures had a substantial negative impact on the development of the weaving industry. The structural change in the banking industry after World War I altered the spatial allocation of funds and thereby affected the development of regional industries.

JEL Classification: G2, N2, N9

Keywords: bank, branch banking, bank merger, regional economy, economic history, Japan

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1. Introduction

After World War I, the financial system in Japan experienced substantial change during a period of instability in the financial markets. In this period, after a few small bank panics, a serious financial crisis occurred in 1927, the so called Showa Financial Crisis, where forty-five banks closed following runs on their deposits, and the government declared a three-week bank moratorium. The cause of the financial crisis was the large number of nonperforming loans that had accumulated, because the banking industry included numerous small banks and banks with close bank–firm relationships. There were also negative macroeconomic impacts, such as the collapse of an asset bubble in 1920 and the Great Kanto Earthquake in 1923 (Kato 1957; Okazaki, Sawada and Yokoyama 2005; Okazaki, Sawada and Wang 2007). The instability of the financial system and the consequent policies of the financial authorities caused a surge in bank mergers in the 1920s (Goto 1985; Okazaki and Sawada 2007). This wave of bank mergers brought about an important change in the structure of the banking industry, namely the expansion of branch banking. The large banks that emerged from these mergers had broad branch networks across cities, counties, and prefectures.

This paper explores the implications of the development of branch banking in 1920s Japan. The impact of the increase in the banks' scale and the expansion of branch banking have been extensively investigated in the context of the present financial system and the increasing dominance of "megabanks." Through those studies, the following view (the "conventional paradigm") has been well established, at least concerning the US financial market until the early 2000s (Berger and Udell 2002; Berger et al. 2005; Berger, Goulding and Rice 2014; Stein 2002). That is, as Berger et al. (2014) summarize, "opaque small businesses would be best served by small, single-market, local banks, while large, multimarket, nonlocal institutions would tend to serve more transparent firms," and hence "(t)he large banks, multimarket banks, and nonlocal banks created by consolidation may be disadvantageous in relationships based on soft information and may be more likely to sever relationships or withdraw credit than the small, single-market, and local institutions they replace" (ibid., pp. 264–5).

If this view is valid for the prewar Japanese financial market, the above-mentioned changes in the 1920s would have a substantial impact on bank lending and businesses, and as we will see later, the Japanese government indeed had a similar view and concern about bank lending to small local businesses. This paper is, to our knowledge, the first attempt at a systematic examination of the impact of bank mergers and branch banking on bank lending in prewar Japan from the standpoint of the "conventional paradigm." In addition, we intend to contribute to this strand of literature

by using bank-office-level deposit and loan data, obtained from various issues of the *Statistical Yearbook of Fukushima Prefecture* (*Fukushima-ken Tokeisho*). Unlike the existing literature, based on bank-level or firm-level data, this paper directly observes the activities of each bank office.

In the context of Japanese economic history, this paper is related to a broad hypothesis that Takafusa Nakamura proposed in his classic book (Nakamura 1971). His basic idea is that the prewar Japanese economy experienced a shift of growth patterns in the early 1910s. While indigenous industries, as well as modern industries based on Western technologies and institutions, achieved "balanced growth," supporting each other before World War I, after the war indigenous industries stagnated and the "dual structure" of modern large firms and small indigenous firms emerged. From our viewpoint, it is remarkable that as evidence for this view, Nakamura (1971) mentioned the difficulties local small businesses faced accessing finance due to bank mergers (pp. 199–200). By exploring the change in bank behavior and its implications for industries, we intend to contribute to a better understanding of the long-term growth patterns of the Japanese economy.

This paper is organized as follows. Section 2 provides an overview of bank mergers and the development of branch banking after World War I. In section 3, we investigate the implications of branch banking for deposits and loans, using bank-office-level data for Fukushima Prefecture. In section 4, we explore the impact of branch banking on the development of the weaving industry in Fukushima Prefecture. Section 5 concludes the paper.

2. Development of branch banking in prewar Japan: an overview

The history of the modern banking system in Japan dates back to 1872, when the National Bank Act provided the legal framework for national banks, that is, private banks that were privileged to issue bank notes. According to the Act, 153 national banks were founded by 1879, when the total amount of national bank notes that the national banks were allowed to issue reached its upper limit. In 1882, the Bank of Japan was established as the central bank, and it began to issue Bank of Japan notes in 1885. National banks were then closed or transformed into private banks without the privilege of issuing bank notes within 20 years from the date when each national bank was licensed. In 1893, the Bank Act was legislated as the legal framework for private banks, which resulted in a sharp increase in the number of private banks (Figure 1). The number of private banks reached a peak of 2,334 in 1901, comprising 1,890 ordinary banks and 444 savings banks.

Figure1

The private banks had some distinctive features, including close ties with industrial firms (Okazaki, Sawada and Yokoyama 2005; Okazaki, Sawada and Wang 2007). First, the scale was basically small. The average amount of paid-up capital of ordinary banks was 134,000 yen in 1901 (Goto 1970), or US$264,000[1]. Second, related to the first feature, each bank had few branches. Figure 2 indicates the total number of branches of ordinary banks[2]. As shown in the figure, the average number of branches was less than 1 in the early 1900s. In other words, branch banking was underdeveloped in Japan in this period.

Figure 2

From the early 1900s, the number of banks declined steadily, which reflected a shakeout of banks. As Figure 3 shows, a substantial number of banks exited the market each year, mainly through dissolution, bankruptcy, or closure. As a result of this process, the average scale of banks gradually increased, and branch banking developed. In the 1920s, especially in the latter part of the decade, the decline in bank numbers accelerated. The number of ordinary banks and savings banks declined from 1,987 in 1920 to 872 in 1930[3]. The major factor in this decline was mergers and acquisitions, promoted by government regulation. In 1928, after the Showa Financial Crisis, the Bank Law was enacted, which introduced a lower limit on capital, that is, an ordinary bank was required to have capital of not less than one million yen (Asakura 1988, pp. 159–61; Okazaki and Sawada 2007)[4]. When the law was enacted, 807 of 1407 ordinary banks failed to meet this criterion. These banks were given five years to meet the criterion, but as the Ministry of Finance did not allow these small banks to increase their capital by themselves, they were obliged to either merge with other banks or close.

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[1] Converted at the average of the highest and lowest exchange rates between Yen and the US dollar in 1901 (Yamazawa and Yamamoto 1979, p. 256).
[2] The data include sub-branches (*shucchojo*). We include both branches and sub-branches, for simplicity.
[3] The Savings Bank Law enacted in 1922 imposed strict restrictions on the business of savings banks (Asakura pp. 141–2), and consequently 515 savings banks converted to ordinary banks (Bureau of Banks, Ministry of Finance 1925, p. 515). A discontinuity of the diagram in Figure 1 reflects this wave of conversions.
[4] If the headquarters of a bank was located in Tokyo or Osaka, the minimum capital was two million yen, while it was five hundred thousand yen if the headquarters was located in a town or village whose population was not larger than ten thousand people.

As a result, from the late 1920s to the early 1930s, a huge wave of bank mergers occurred (Figure 2). Following this wave of mergers, branch banking developed substantially. The average number of branches of an ordinary bank was 2.1 in 1920, but it had risen to 8.6 by 1930 (Figure 3).

Figure 3

It is notable that during this process of development of branch banking, branch networks expanded across regions. Table 1 classifies bank branches into two types; those that belonged to banks in the same prefectures, and those that belonged to banks in other prefectures. The data include a small number of special banks, as well as ordinary and savings banks[5]. In 1910, the share of bank branches in a prefecture other than that of their headquarters (headquarters and branches are called offices hereafter) was just 8.7%. In other words, financial markets were segmented within each prefecture. However, this share subsequently increased, and had become 19.0% by 1930. This implies that the financial market of a prefecture came to be influenced more by banks headquartered in other prefectures. As we will see in the next section on Fukushima Prefecture, a similar change occurred within each prefecture. That is, banks' branch networks expanded across cities and counties within a prefecture.

The development of branch banking aroused concerns that it might concentrate funds on metropolitan areas. Indeed, this was one of the major issues in the discussion of bank merger policy in the 1920s. We can see this in the records of the Financial System Research Council (*Kin'yu Seido Chosakai*) established under the Ministry of Finance from 1926 to 1927. Concerning the bank merger promotion policy, Rhuichiro Nagaoka, a council member and the Chief of the Social Bureau of the Ministry of Home Affairs, submitted the following memorandum to the council[6] (Financial System Research

[5] Special banks were private banks founded for policy purposes by special laws. Special banks include Yokohama Shokin Ginko (Yokohama Species Bank), Nihon Kogyo Ginko (Industrial Bank of Japan), Nihon Kangyo Ginko (Hypothec Bank of Japan), Hokkaido Takushoku Ginko, Taiwan Ginko (The Bank of Taiwan), Chosen Ginko (The Bank of Chosen), and the agricultural and industrial bank for each prefecture.
For example, in 1930, the number of headquarters (A), branches of the banks in the same prefecture (B1), and branches of the banks in the other prefectures (B2) of the special banks were 25, 95 and 75, respectively.

[6] "Minutes of the Special Committee on the System of Ordinary Banks," third meeting (October 25, 1926), reprinted in the Research Bureau of Bank of Japan, ed. Kin'yu-shi Shiryo, series of Meiji and Taisho Eras, vol. 18, Tokyo: Printing Bureau of the Ministry of Finance, 1956.

Council 1926, p. 162).

> "If small lots loaned in rural areas tend to decline and they are shifted to large lots loaned to large-sized commercial and industrial firms in urban areas as a result of bank mergers, it is concerning that this trend might dry up regional finance to impoverished agricultural areas. I want to have appropriate measures taken to prevent this problem."

Nagaoka's serious concern about the negative consequences of bank mergers is significant because the Ministry of Home Affairs was in charge of administering rural regions. This concern was shared by the bureaucrats in the Ministry of Finance, who were in charge of the financial system. For example, the Chief of the Bank Bureau of the Ministry of Finance, Osamu Matsumoto, said in a press interview in 1925, "the merger in which an urban bank merges rural banks to make them branches will cause a concentration of rural industrial funds in urban areas and dry up local finance. Also, as the urban bank and its rural branches have little information about the rural industries, they will be too cautious about loans and bring about undesirable consequences."[7]

3. Branch banking and bank behavior in Fukushima Prefecture

As mentioned in section 1, detailed office-level data on loans and deposits are available for Fukushima Prefecture in the *Statistical Yearbook of Fukushima Prefecture* (*Fukushima-ken Tokeisho*) annually until 1928. Here, we focus on the period from 1914 to 1928, when branch banking developed. During this period, Fukushima Prefecture comprised two cities (Fukushima and Wakamatsu) and seventeen counties. Although Koriyama Town and Koharada Village in Asaka County were reorganized into a new city, Koriyama City and became independent from Asaka County in 1924, we assume that Koriyama City remained in Asaka County for continuity of the data.

Figure 4 shows the number of offices of ordinary banks and savings banks in Fukushima Prefecture, including branches of the banks whose headquarters were located in other prefectures. We can see that the number increased substantially from the late 1910s to the early 1920s. In 1920, for example, there were 112 offices, which is 1.6% of the total number of offices of ordinary banks and savings banks. Associated with the increase in the number of offices, the amount of loans and deposits also increased from the late 1910s to the early 1920s. It is notable that the growth rate of loans was higher than that of deposits, which implies that the loan–deposit ratio rose.

[7] *Osaka Asahi Shinbun*, February 26, 1925.

Figure 4

In Figure 5, we classified bank offices into three types; (a) those that belonged to banks headquartered in the same cities or counties, (b) those that belonged to banks headquartered in the other cities or counties in Fukushima Prefecture, and (c) those that belonged to banks headquartered in other prefectures. This figure indicates that while all three types increased from the 1910s to the 1920s, the growth rate of type (b) was the highest. This reflects the aggressive expansion of branch networks of some major regional banks in Fukushima Prefecture.

Figure 5

Let us look briefly at the case of Dai Hyaku-shichi Bank, the largest regional bank in Fukushima Prefecture. This bank was founded as a national bank in 1878 based on capital raised mainly from wealthy landowners in Fukushima Prefecture, in particular in Shinobu County and Date County[8]. The headquarters was in Fukushima Town in Shinobu County, which became Fukushima City in 1907 (Dai Hyaku-shichi Bank 1924, p. 30; Fukushima Prefecture 1971, pp. 813–4). When the bank was founded in 1878, it established Tokyo Branchi[9], but its first branch in Fukushima Prefecture was Hobara Branchi in Date County, established in 1879. Then, it expanded its branch network to Nihonmatsu in Adachi County in 1899 and to Shirakawa in Nishishirakawa County in 1906 (Dai Hyaku-shichi Bank 1924, pp. 359–60). By 1914, Dai Hyaku-shichi Bank had eight branches in seven different counties in Fukushima Prefecture, and by 1921 its branch network in Fukushima Prefecture had expanded to one city (Wakamatsu City) and ten counties.

An important point in the context of this paper is that the change in the branch network depicted in Figure 4 had an impact on the flow of funds. Because of the increasing number of branches of banks headquartered in other cities or counties, the proportion of funds collected by these banks increased. As shown in Figure 5, the share of deposits in offices headquartered in other cities or counties increased substantially in the early 1920s, while the share of offices that belonged to banks headquartered in the same city or county declined. This change was significant, because the functions of the different types of bank office differed. This is clearly indicated in Figure 6, which shows

[8] It was converted into an ordinary bank in 1897 (Dai Hyaku-shichi Bank 1924, p. 37).
[9] Tokyo Branch was abolished in 1887 (Dai Hyaku-shichi Bank 1924, p. 357).

the loan–deposit ratios by type of office. The offices that belonged to banks headquartered in the same county or city, including the headquarters themselves, had a higher propensity to make loans, while the offices that belonged to the banks headquartered in other cities or counties in Fukushima Prefecture had a lower propensity to make loans. We confirmed this observation by regression analyses.

Figure 6

For our regression analyses, we use office-level bank deposit and loan data as well as other relevant variables for the period from 1914 to 1928. Table 2 reports the basic statistics of the data. We exclude 15 observations whose loan–deposit ratios are lower than the 1st percentile point and 16 observations whose loan–deposit ratios are higher than the 99th percentile point[10]. We then have 1,532 observations of office*year. To examine the difference in loan propensity between office types, we estimate the following equations.

$$LOAN_{it}=\beta_0+\beta_1 DEPOSIT_{it}+\beta_2 DEPOSIT_{it}*OTHERC_i+\beta_3 DEPOSIT_{it}*OTHERP_i +\beta_4 CAPITAL_{it}+\delta_i+\lambda_t+\varepsilon_{it} \quad (1)$$

$$LNLOAN_{it}=\gamma_0+\gamma_1 LNDEPOSIT_{it}+\gamma_2 LNDEPOIT_{it}*OTHERC_i +\gamma_3 LNDEPOSIT_{it}*OTHERP_i+\gamma_4 LNCAPITAL_{it}+\delta_i+\lambda_t+\varepsilon_{it} \quad (2)$$

$LOAN_{it}$ is the loan stock of office i at the end of year t, while $DEPOIT_{it}$ is the deposit stock of office i at the end of year t. $OTHERC_i$ denotes the dummy variable that takes a value of 1 if the office is that of a bank whose headquarters was located in another city or county in Fukushima Prefecture, and 0 otherwise. $OTHERP_i$ denotes the dummy variable that takes a value of 1 if the office is that of a bank whose headquarters was located in a prefecture other than Fukushima, and 0 otherwise. δ_i is the city/county dummy, and λ_t is the year dummy. ε_{it} is the error term. CAPITAL and LNCAPITAL represent the paid-up capital of the bank to which the office belonged and its log value, respectively. In this specification, β_1 is the increase in loans associated with a one-unit increase in deposits, i.e., the propensity to make loans, while γ_1 is the deposit elasticity of loans. The interaction terms $DEPOIT_{it}*OTHERC_i$, $DEPOSIT_{it}*OTHERP_i$, $LNDEPOIT_{it}*OTHERC_i$, and $LNDEPOSIT_{it}*OTHERP_i$ are introduced to see whether there is a difference in the propensity to make loans and the elasticity of loans between

[10] These 31 outliers are included in Figures 4, 5 and 6.

types of offices.

The estimation results are reported in Table 3. It is clear that the offices that belonged to the banks headquartered in other cities, counties or prefectures had a lower propensity to make loans and lower elasticity of loans to deposits. For example, given the result in column (2), where the office that belonged to a bank in the same city or county applied 1.334 yen to loans there when it collected deposits of 1 yen, the office headquartered in another city/county in Fukushima Prefecture applied 0.875 yen there and the office headquartered outside Fukushima Prefecture applied 0.782 yen there. These results are robust, whether we include city/county dummies or exclude them and add the banks' paid-up capital. These results are consistent with the observation in Figure 6. We can conclude that the offices that belonged to banks in the other cities, counties, or prefectures applied a smaller portion of funds they collected through deposits to loans there.

4. Impact on industrial development

From our findings in the previous section, we can infer that if the deposit share of offices headquartered outside the city or county increased, it would have a negative impact on the industrial development in that area. This is what the Ministry of Finance was concerned about in promoting bank mergers in the 1920s. We now examine whether this concern was justified or not.

For this purpose, we use the city- and county-level data of the weaving industry in Fukushima Prefecture, as well as the bank deposit and loan data aggregated at the city and county level. The weaving industry, especially the silk weaving industry, as well as the silk reeling industry, was one of the major industries in Fukushima Prefecture from the nineteenth century onwards. The weaving industry was distributed across most of the cities and counties in Fukushima Prefecture, which allows us to identify the impact of the change in deposit share by type of bank office.

We collected city- and county-level production and employment data for the weaving industry in Fukushima Prefecture from 1914 to 1928. The weaving industry includes silk, cotton, flax, wool and special weaving industries. We focus on the impact of changes in the flow of funds caused by the expansion of branch banking on the activities of the weaving industry. In order to capture the effect of branch banking, we use the deposit share of the offices headquartered in other cities or counties, DSHAREOTHERC, and the deposit share of the offices headquartered in other prefectures, DSHAREOTHERP, for each city or county. We also use the sum of these two variables, DSHAREOTHER. It is expected that the increase in these variables had a negative

impact on the industrial activities through decline of funds supplied. The equation to be estimated is as follows.

$$X_{it}=\beta_0+\beta_1 DSHAREOTHERC_{it}+\beta_2 DSHAREOTHERP_{it}+\delta_i+\lambda_t+\varepsilon_{it} \quad (3)$$

X_{it} is the output or employment of the weaving industry in city or county i in year t, in log form (LNPROD and LNWORKER, respectively). δ_i and λ_t are the city/county dummy and year dummy, respectively. Because we include city/county fixed effects, we avoid the potential correlation between the explanatory variables and the error term that might originate from the time-invariant portion of the error term. In addition, to take account of the remaining potential endogeneity, we estimate the equation with lagged explanatory variables.

$$X_{it}=\beta_0+\beta_1 DSHAREOTHERC_{it-1}+\beta_2 DSHAREOTHERP_{it-1}+\delta_i+\lambda_t+\varepsilon_{it} \quad (4)$$

The basic statistics of the observations are reported in Table 4, and the estimation results are presented in Table 5.

The coefficients of the deposit-share variables are negative and statistically significant for both the one-year lagged and unlagged estimates. The magnitudes of the coefficients are not negligible. For example, in column (5) the coefficient of $DSHAREOTHERC_{t-1}$ is –1.627, which means that the weaving industry's output would be about 15.0% smaller if the deposit share of the bank offices headquartered in other cities and counties was 10% larger. Similarly, in column (7) the coefficient of $DSHAREOTHERC_{t-1}$ is –0.672, which means that employment in the weaving industry would be about 6.5% smaller if the deposit share of bank offices headquartered in other cities and counties was 10% larger. Absorption of the funds of a city or county into banks headquartered in other cities, counties, or prefectures had a substantial negative impact on regional industrial production.

5. Concluding remarks

Because of the unstable financial market after World War I, the Japanese financial system experienced a wave of bank mergers, which resulted in an increase in bank scale and the development of branch banking. In this paper, we explored the implications of the expansion of branch banking, using bank-office-level data for Fukushima Prefecture. We found that branch offices that belonged to banks headquartered in other cities, counties, or prefectures tended to have a lower propensity

to loan compared with the offices of banks headquartered in the same cities and counties as the offices. The contemporary financial authorities were concerned that bank mergers might result in a concentration of funds in metropolitan areas and consequent restriction of access to finance for small local businesses. Our findings indicate that this concern was justified. We also find that concentration of deposits on bank offices headquartered in other cities, counties, or prefectures had a substantial negative impact on the development of the weaving industry. The structural change in the banking industry after World War I altered the spatial allocation of funds and thereby affected the development of regional industries.

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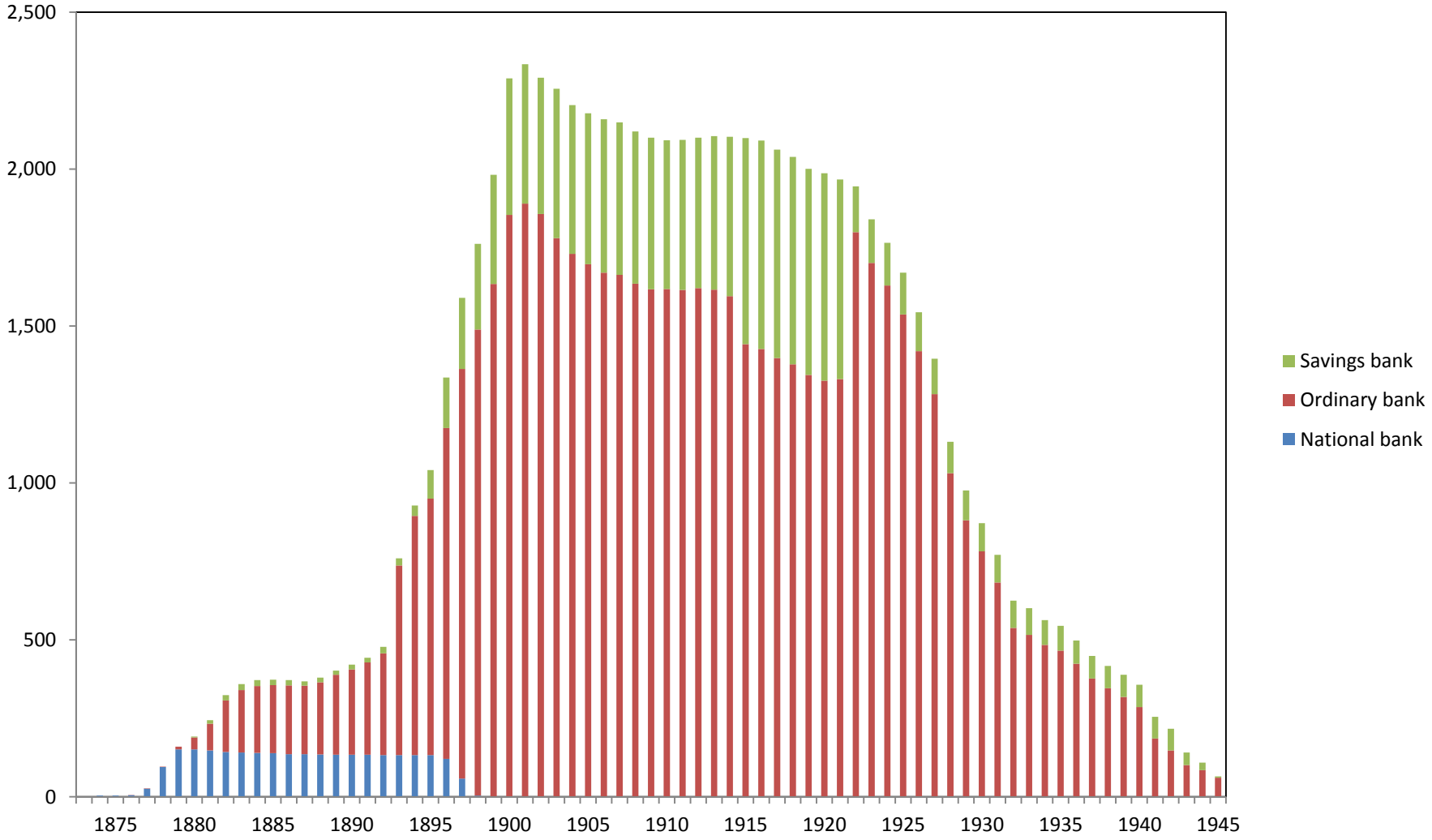
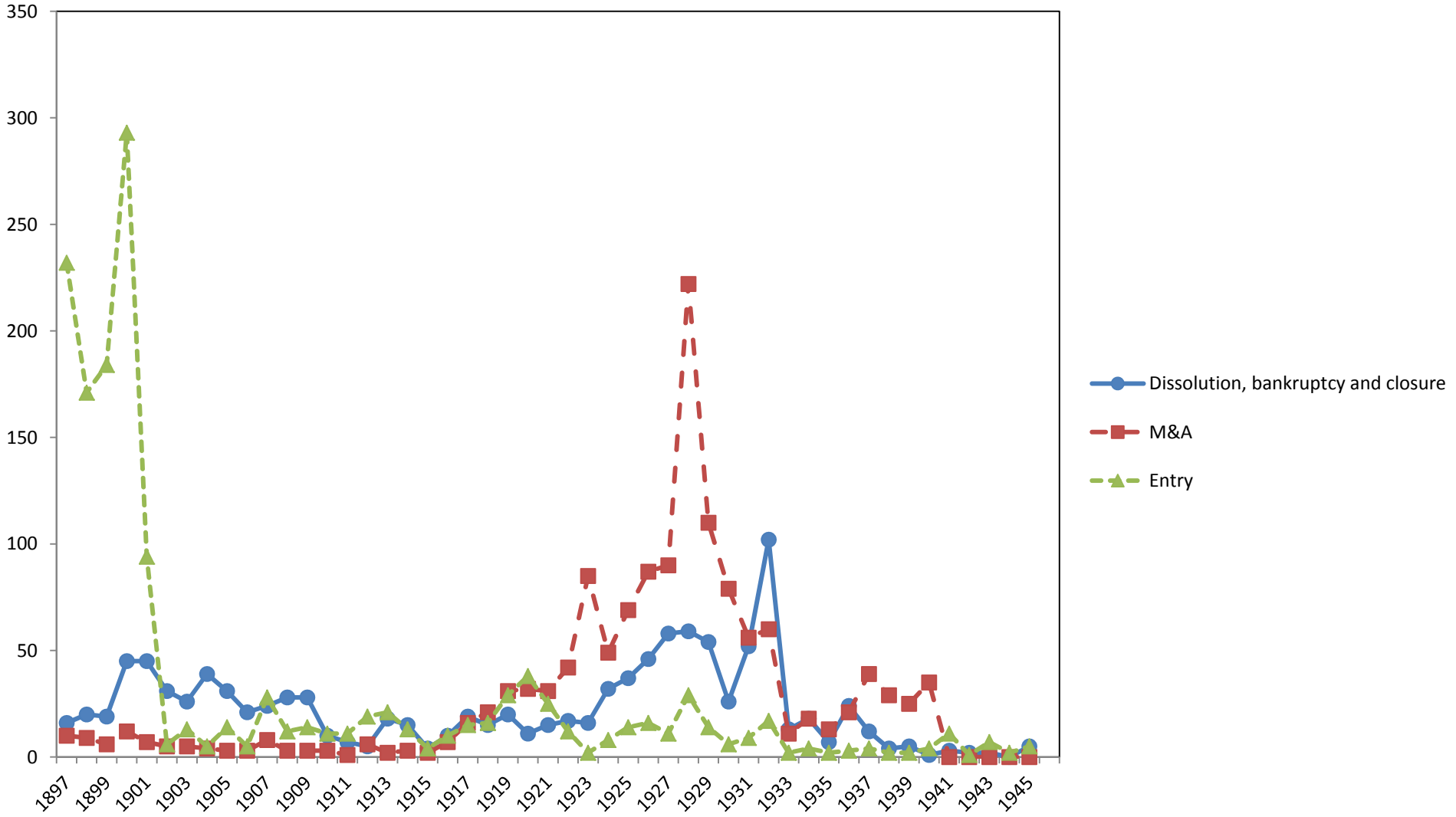
Figure 1 Number of Banks in Japan



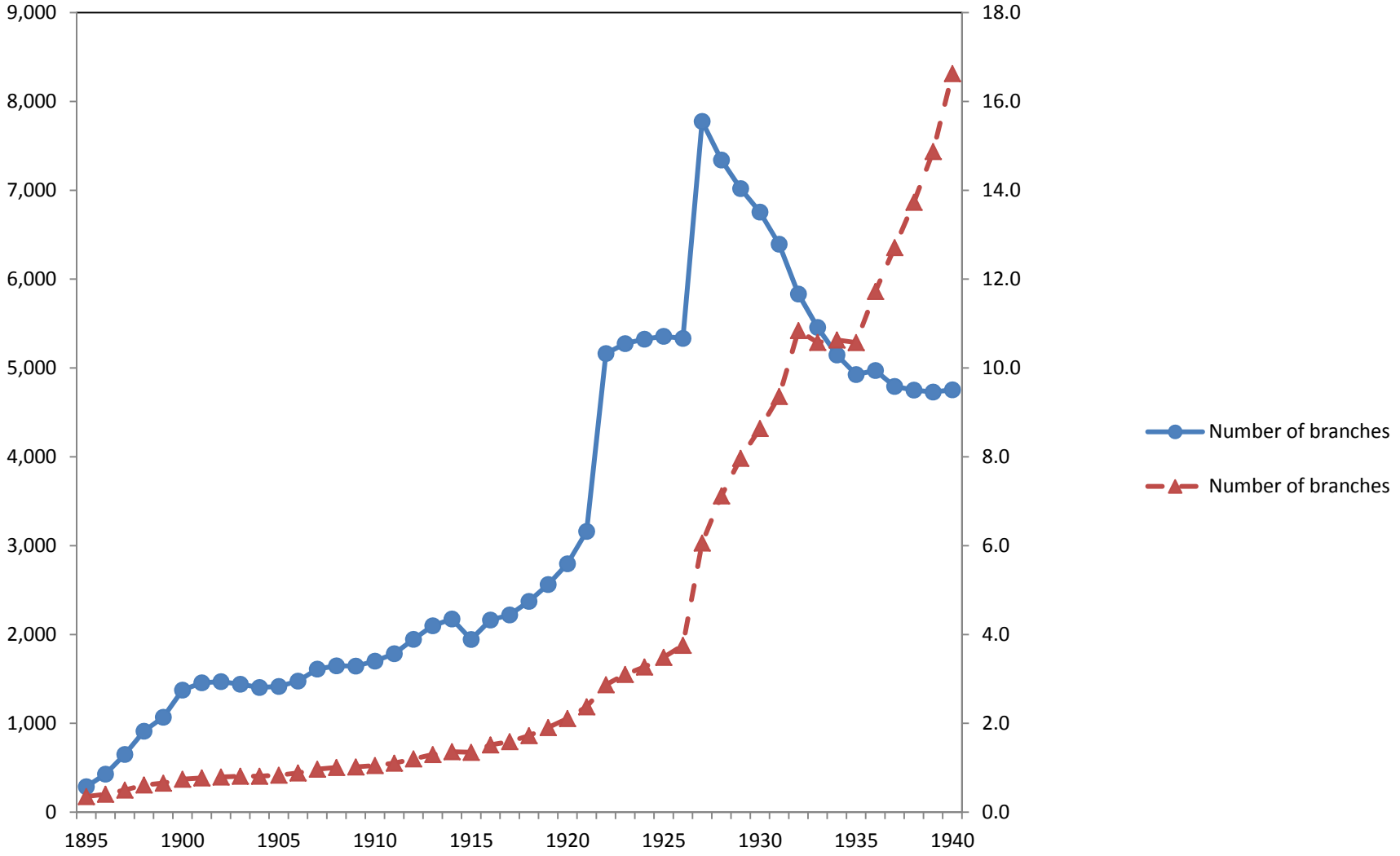
Source: Goto (1970).

Figure 2 Entry and exit of ordinary banks (excluding those through category change)



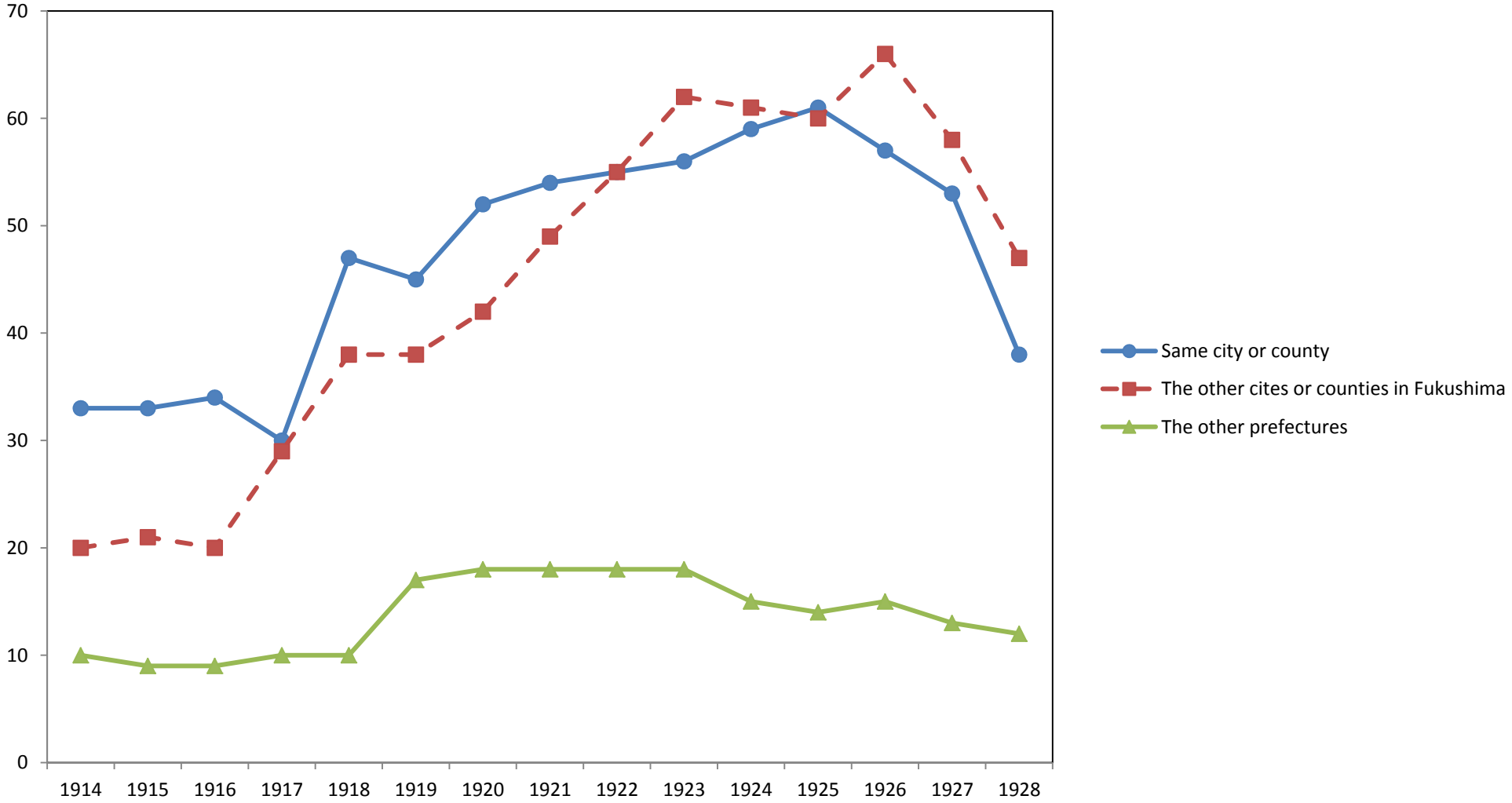
Source: Goto(1970).

Figure 3 Development of branch network of ornary banks



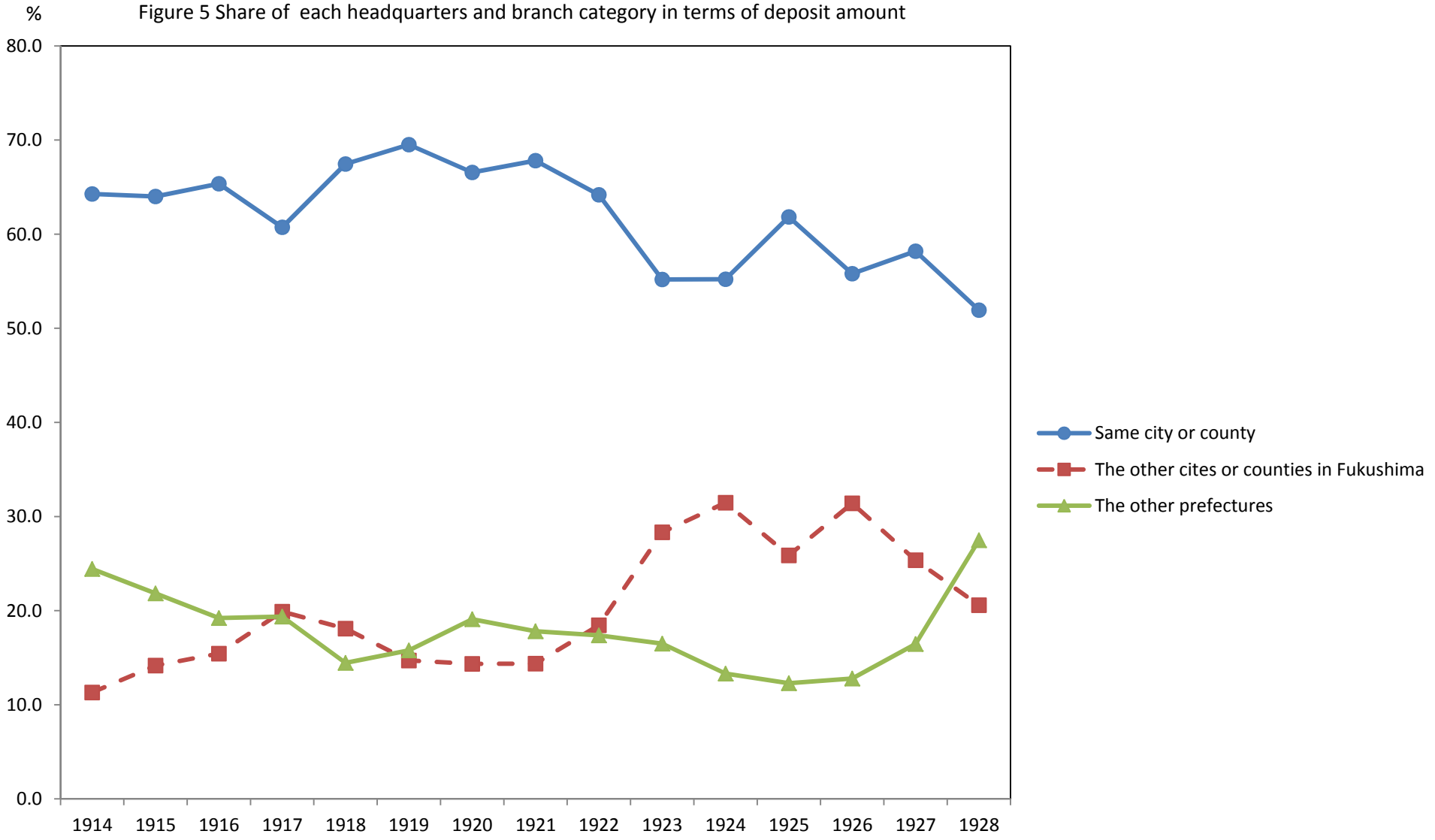
Source: Goto(1970).

Figure 4 Number of bank offices in Fukushima Prefecture by affiliation



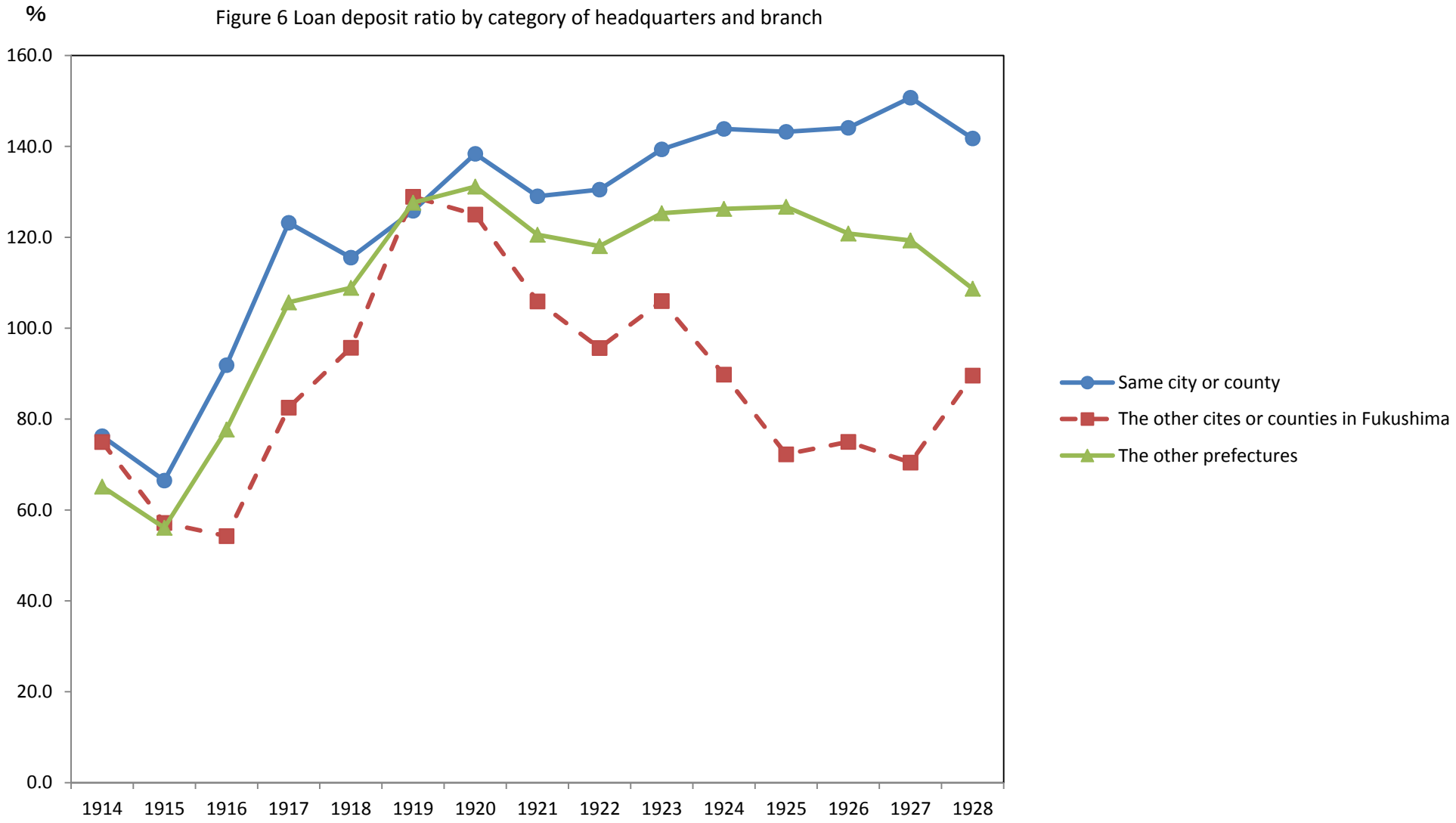
Source: *Fukushima-ken Tokeisho*, various issues.

Figure 5 Share of each headquarters and branch category in terms of deposit amount



Source: *Fukushima-ken Tokeisho*, various issues.

Figure 6 Loan deposit ratio by category of headquarters and branch



Source: *Fukushima-ken Tokeisho*, various issues.

Table 1 Expantion of branch network across prefectures

	A Headquarters	B. Branches		
		B1 Banks in the same prefecture	B2 Banks in the other prefectures	B2/(A+B1+B2) (%)
1910	2,141	2,324	427	8.7
1920	2,040	4,008	1,005	14.2
1930	891	4,158	1,188	19.0

Note: The data include special banks as well as ordinary banks and savings banks.
Source: Bureau of Banks, Ministry of Finance eds. Ginko Soran (Handbook of Banks), various issues.

Table 2 Basic statistics

	Obs.	Mean	Sedev.	Max	Min
DEPOSIT	1,532	579,613	859,671	6,138,310	2,211
LNDEPOSIT	1,532	12.594	1.164	16.028	7.701
LOAN	1,532	670,961	1,313,542	14,324,348	1,525
LNLOAN	1,532	12.515	1.324	16.477	7.33
LNCAPITAL	1,532	13.200	1.554	18.345	9.616

Table 3 Propensity for loan by type of office

	(1)		(2)		(3)		(4)		(5)		(6)	
Dependent variable	LOAN		LOAN		LOAN		LNLOAN		LNLOAN		LNLOAN	
DEPOSIT	1.394	(18.58) ***	1.334	(18.52) ***								
DEPOSIT*OTHERC	−0.479	(−5.58) ***	−0.459	(−4.73) ***								
DEPOSIT*OTHERP	−0.556	(−5.19) ***	−0.552	(−5.12) ***								
LNDEPOSIT					1.337	(18.52) ***	0.913	(53.18) ***	0.892	(45.92) ***	0.904	(41.46) ***
LNDEPOSIT*OTHERC					−0.459	(−4.73) ***	−0.036	(−11.88) ***	−0.035	(−10.67) ***	−0.031	(−7.14) ***
LNDEPOSIT*OTHERP					−0.583	(−4.29) ***	−0.029	(−6.44) ***	−0.029	(−6.51) ***	−0.021	(−3.06) ***
CAPITAL					0.001	(0.47)						
LNCAPITAL											−0.031	(−1.58)
Const.	−142,582	(−2.61) ***	227,227	(0.43)	229,712	(1.44)	0.898	(3.92) ***	1.288	(4.42) ***	1.515	(4.88) ***
City/County dummies	NO		YES		YES		YES		YES		YES	
Year dummies	YES		YES		YES		YES		YES		YES	
R^2	0.762		0.768		0.770				0.762		0.763	
Obs.	1,532		1,532		1,532				1,532		1,532	

Note: Heteroschedasticity robust t−values are in parentheses.
*** Statistically significant at 1% level.

Table 4 Basic statistics

	Obs.	Mean	Sedev.	Max	Min
DSHAREOTHERC	256	0.340	0.335	1.912	0.000
DSHAREOTHERP	256	0.128	0.184	1.226	0.000
DSHAREOTHER	256	0.469	0.371	1.917	0.000
LNPROD	256	10.636	2.845	16.275	4.043
LNWORKER	255	4.555	1.986	8.459	0.693

Table 5 Impact of branch banking on the weaving industry

	(1)		(2)		(3)		(4)	
Dependent variable	LNPROD		LNPROD		LNWORKER		LNWORKER	
$DSHAREOTHERC_t$	−1.287	(−2.54) ***			−0.581 (−2.05)	**		
$DSHAREOTHERP_t$	−1.790	(−1.66) *			−0.510 (−0.88)			
$DSHAREOTHER_t$			−1.454	(−2.85) ***			−0.557	(−2.06) **
Const.	13.440	(38.44) ***	13.374	(43.72) ***	6.246 (25.51)	***	6.256	(27.27) ***
City/County dummies	YES		YES		YES		YES	
Year dummies	YES		YES		YES		YES	
R^2	0.842		0.842		0.877		0.877	
Obs.	256		255		256		255	
	(5)		(6)		(7)		(8)	
Dependent variable	LNPROD		LNPROD		LNWORKER		LNWORKER	
$DSHAREOTHERC_{t-1}$	−1.627	(−2.98) ***			−0.672 (−2.31)	**		
$DSHAREOTHERP_{t-1}$	−0.145	(−0.12) *			−0.020 (−0.03)			
$DSHAREOTHER_{t-1}$			−1.197	(−2.13) **			−0.482	(−1.78) *
Const.	14.59	(32.10) ***	13.418	(41.45) ***	5.486 (26.72)	***	5.6	(34.83) ***
City/County dummies	YES		YES		YES		YES	
Year dummies	YES		YES		YES		YES	
R^2	0.839		0.837		0.881		0.88	
Obs.	238		238		237		237	

Note: Heteroschedasticity robust t-values are in parentheses.

*** Statistically significant at 1% level.

** Statistically significant at 5% level.

* Statistically significant at 10% level.