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Wartime Financial Control and Allocation of Capital: The Case of Japan during World War II*

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Abstract

During World War II, the Japanese government implemented financial controls to reduce funds for "nonessential and nonurgent" industries, and thereby secured funds for the strategic industries. For this purpose, the government classified industries into classes, and regulated fund flows to Class C industries, regarded as "nonessential and nonurgent." This paper identifies the impact of this regulation on capital allocation using firm-level panel data. The regulation lowered capital growth by around 6.5 percentage points, and that the total capital of the Class C industries in 1942 was around 30% lower than its counterfactual value assuming there had been no regulation.

Key words: Economic control, financial control, war economy, fund allocation, Japan

JEL classification numbers: G18, G21, G38, N25, P21

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1. Introduction

World War II had a great impact on the economies of the countries involved. In addition to the loss of people and physical assets as a result of warfare, the governments of the belligerent countries mobilized huge amounts of resources to contribute to their war efforts (Eloranta et al. 2025). The extent of such mobilizations has been well documented in the literature for major countries (Harrison ed. 1998; Eloranta et al. 2016; Eloranta et al. 2025). Harrison (1998) showed that the military outlays of the United States, United Kingdom, Germany, and Japan were 42%, 55%, 70%, and 43% of national income, respectively.

This large-scale mobilization during the war occurred under extensive economic controls by the government. Higgs (1992, 1999) stressed that the US economy was a "command economy" from late 1940 to 1946, while Rockoff (1984, 2012) provided a detailed description of wage, price, and production controls in the US during World War II. Temin (1991) compared the processes of economic planning in Nazi Germany and Soviet Russia in the 1930s and concluded that there were many similarities. Buchheim ed. (2008) provided detailed case studies on economic controls on German industries. Concerning Japan, a large literature, including Hara (1967, 1969, 1976, 1998, 2013), Nakamura (1974, 1977, 1999), Okazaki (1987, 1988, 2023, 2025), Okazaki and Okuno-Fujiwara eds. (1999), and Yamazaki (2016), has investigated the development and consequences of economic planning and controls in the late 1930s and the early 1940s.

Thus, World War II was a period when controlled economies operated in major belligerent countries, providing us with an opportunity to explore how nonmarket mechanisms worked and substituted for market mechanisms. To my knowledge, however, the function of economic controls and their impact on resource allocation has not been well studied, in particular, quantitatively. Important recent exceptions are Fetter (2016) and Okazaki (2023). Fetter (2016) examined the impact of rent controls on home ownership in the US. By exploiting the variation in the severity of rent controls across regions, he found that they increased home ownership substantially. Okazaki (2023) focused on schemes of foreign exchange allocation to cotton spinning firms in the late 1930s in Japan and found that adoption of the scheme linking foreign exchange allocation to each firm's export performance reproduced the function of market mechanisms in firm dynamics, and thereby enhanced average labor productivity in this industry.

This paper follows Fetter (2016) and Okazaki (2023) to address the impact of controls on a different aspect of the economy, that is financial controls, focusing on the late 1930s and early 1940s in Japan. Japan, a natural-resource-scarce country, imposed

large-scale resource mobilization efforts and extensive economic controls from the late 1930s, when it started the Second Sino–Japanese War. The financial system and funds' allocation were the main targets of wartime economic controls (Hara 1976, 1998; Nakamura 1999). Although the existing literature has described the background and the system of financial controls in detail (Hara 1967; Okazaki 1999; Shibata 2011), its function and the impact of fund allocation are yet to be explored.

In this paper, we quantitatively identify the impact of financial controls on the flow of capital. Japan is advantageous for this study for two reasons. First, financial controls were implemented according to an objective criterion. That is, the government designated certain "nonessential and nonurgent" industries for which funds' supply should be strictly regulated, and at the same time, even within those industries, the firms with less capital than a certain upper bound were exempt from regulation. Second, firm-level data on capital are available for all the firms including very small ones, although the data are limited to Hyogo Prefecture, the third largest prefecture in terms of corporate capital, next to Tokyo and Osaka[1]. These two advantages enable us to identify quantitatively the impact of financial controls, specifically that of the regulation on corporate capital.

To preview the main results, first, after the implementation of financial controls in September 1937, capital growth of the firms designated as "nonessential and nonurgent" industries or the Class C industries (*Hei* industries) declined significantly, relative to the Class A (*Ko* industries) and Class B (*Otsu* industries) industries[2]. This, however, reflects not only the effect of the financial controls but also the effect of demand shifts because the breakout of the full-scale war with China increased munition demand and stimulated the expansion of the industries related to munition production, most of which were classified into Class A and Class B.

Second, at the same time, the capital growth of the small firms in the Class C industries exempted them from regulation, and thus they were not significantly affected by the implementation of the financial controls. The difference between the small firms exempted from the regulation and the other firms within the Class C industries indicates the impact of the financial controls. According to our estimation results, the annual

[1] In 1936, the total capital of the firms in Hyogo Prefecture was 1,359 million yen (5.7% of total corporate capital in Japan), whereas those in Tokyo and Osaka prefectures were 10,818 million yen (45.1%) and 4,417 million yen (18.4%), respectively (The Ministry of Commerce and Industry, *Kaisha Tokei-hyo (Statistics on Corporations), 1936 issue)*).

[2] *Ko, otsu*, and *hei* are the Japanese system of ranking, with *ko* the highest and *hei* the lowest.

capital growth of the nonexempted firms was around 6.5 percentage points lower than that of the exempted firms. Furthermore, by a simple calculation using the estimation results, we found that the total capital of the Class C industries in 1942 was around 30% lower than its counterfactual value assuming that there had been no financial regulation.

The remainder of the paper is organized as follows. Section 2 provides an overview of the war economy in Japan and describes the system of financial controls. Section 3 overviews capital fund allocation across industries. Section 4 evaluates the impact of the financial controls using panel data. Section 5 concludes.

2. Japan's war economy and financial controls

Japan started a full-scale war with China in July 1937, which escalated into the Pacific War in 1941 and continued until August 1945. During the war, a drastic resource reallocation occurred in the Japanese economy. Figure 1 illustrates the change in resource allocation at the macro-level. From 1937, government expenditure expanded sharply, reflecting the increase in military expenses. In addition, private capital formation, which had already been increasing in the boom of the early 1930s, continued to increase. Conversely, private consumption declined sharply. Indeed, private consumption in 1944 was just 64% of that in 1936. Simultaneously increasing military consumption and investment in production capacity, given the limited production factors, and the blockade by the Allied Nations, resulted in the suppression of private consumption[3].

The increase in private capital formation occurred because of not only the military demand for munitions but also the government policies to expand industries producing basic materials. "Expansion of production capacity" was one of the policy goals given top priority in late 1930s Japan. A long-term (five years) plan for expanding production capacity for basic materials was initiated by the Army and, at the Army's request, drawn up by the cabinet beginning in early 1937. When the cabinet with Fumimaro Konoe as the Prime Minister was established in June 1937, the Minister of Finance, Okinori Kaya, and the Minister of Commerce and Industry, Shinji Yoshino, announced the "Three Principles of Public Finance and Economy," namely: (a) expanding production capacity, (b) balancing international payments, and (c) adjusting the supply of and demand for commodities. That is, the government officially declared that it would adopt a policy of

[3] Katsumi Yamazumi, the head of Corporation Department, the Ministry of Finance, wrote in his book, published in 1941, that "Japan's war economy expanding defense production capacity carries two burdens of funding government bonds and production capacity expansion. The only way to address this difficulty is reducing consumption by people's mental power" (Yamazumi 1941, p. 59, author's translation).

expanding production capacity while maintaining the balance of international payments, and that to pursue these two goals simultaneously, it would intervene in the supply of and demand for commodities (Nakamura and Hara 1970; Hara 1976; Okazaki 1987). In an interview after the war, Kaya stated in retrospect that the "Three Principles were the first attempt to manage the whole economy premeditatedly" (Ministry of Finance 1978, pp. 19–20, author's translation).

Figure 1

The change in resource allocation corresponded to changes in the flow of funds. Figure 2 illustrates the investment–savings balance by sector. The war period is characterized by huge funds flows between sectors. Although the government and the corporate sector had a large deficit of funds, the household sector had a large surplus. For the overseas sector, investment and savings were almost balanced. Maintaining the balance of payments was one of the top priorities of Japan's economic policy (Nakamura 1974; Hara 1976, 2013). This implies that a huge amount of funds flowed from the household sector to the government and the corporate sector during the war. The funds flow was mediated by the financial markets, and the government endeavored to control financial markets to concentrate funds with the government and the industries that were the targets of the production capacity expansion policy.

Figure 2

To control the financial markets, the government legislated the Temporary Law for Fund Adjustment (*Rinji Shikin Chosei Ho*) in September 1937, just after the breakout of the Second Sino–Japanese War; it also implemented the Temporary Measure Law for Export and Import Commodities (*Yushutsunyuhin-to Rinji Sochi Ho*), which aimed at controlling the real side of the economy (Ministry of Finance 1969, p. 85). These two laws were consistent with the Three Principles of Public Finance and Economy, mentioned above. The Temporary Law for Funds Adjustment aimed at "adjusting utilization of domestic funds to balance the demand for and supply of commodities and funds" (Article 1, author's translation). "Adjustment" is the author's literal translation of the Japanese word "*chosei*." Although this law was used to control the flow of funds, as described below, the government intentionally chose a mild word to avoid criticism and negative impacts on financial markets[4]. The Temporary Law for Funds Adjustment continued to be the fundamental legal basis for financial control throughout the war

[4] Bank of Japan, 1984, p. 287. Okinori Kaya stated in retrospect that in preparing the Law, he thought that the Funds Control Law was a natural name, but because Chuji Machida, the President of the largest political party, insisted that "The word control is unacceptable. Could you not manage to change the name?", they decided on the mild name it was given (Ministry of Finance 1978, pp. 19–20, author's translation).

Bank of Japan 1970, p. 103; Ministry of Finance 1957, p. 67)..

This law regulated both nonfinancial firms (to control the demand side of funds) and financial institutions (i.e., the supply side). First, concerning nonfinancial firms, the law introduced a licensing system applying to (a) the foundation of a firm with capital of 500,000 yen or more, (b) a capital increase or merger that made a firm's capital 500,000 yen or more, (c) alteration of the purpose of a firm with capital of 500,000 yen or more, and (d) paying-in capital, issuing corporate bonds, or investing in equipment of 100,000 yen or more through internal funds by a firm with capital of 500,000 yen or more. Second, concerning financial institutions, the law introduced a licensing system applying to (a) long-term funds loans of 100,000 yen or more for installation, expansion, or modification of industrial equipment, and (b) purchasing, underwriting, or dealing in corporate bonds of 100,000 yen or more (Ministry of Finance 1957, pp. 69–71).

Although licensing authority belonged to the Minister of Finance, associations of financial institutions authorized by the government were allowed to undertake "self-adjustment" of loans, underwriting, dealing, etc., and did not require licenses issued by the Minister of Finance in this case. In other words, a financial institution could loan long-term funds to, for example, a nonfinancial firm if the self-adjustment association with which it was affiliated approved the loan. There were 24 authorized self-adjustment associations at the end of 1938, including 17 regional associations of ordinary banks organized under the Bank of Japan (BOJ) branches, the Association of Trust Companies, and the Association of Life Insurance Companies (Ministry of Finance 1957, pp. 76–77; Yamazumi 1941, p. 178).

Licensing and self-regulation were executed according to the Standard for Adjustment of Industrial Funds (*Jigyo Shikin Chosei Hyojun*), determined by the Temporary Committee of Funds Adjustment (*Rinji Shikin Chosei Iinkai*), established according to the Law and headed by the Prime Minister. The Standard classifies 533 industries into six classes, i.e., A1 (*Ko-i*), A2 (*Ko-ro*), B1 (*Otsu-i*), B2 (*Otsu-ro*), B3 (*Otsu-ha*), and C (*Hei*)[5]. The A1 industries had the highest priority, and their applications for raising funds were to be approved in principle, whereas the C industries had the lowest priority and their applications were to be rejected in principle. The classification was based on the attributes of each industry, such as (a) relationship to the Production Capacity Expansion Plan, (b) relationship to the military demand, (c) relationship to the improvement of the international balance of payments, and (d) existing production capacity and supply of raw materials (Ministry of Finance 1957, pp. 73–74; Bank of

[5] "*i*, *ro*, and *ha*" are Japanese kana letters, and the order of the letters is often used to indicate ranking, with *i* the highest.

Japan 1984, pp. 293–294). The Standard was related to self-regulation in that a self-adjustment association should consult with the BOJ in advance before it could approve a long-term loan of 500,000 yen or more to a firm in the B1, B2, B3, or C industries (Ministry of Finance 1957, pp. 77–79).

The controls by the Temporary Law for Funds Adjustment were strengthened after the enactment of the Law. In August 1938, the capital criterion for a firm to be exempted from the regulation was reduced from smaller than 500,000 yen to smaller than 200,000 yen. This revision was a part of the overall tightening of economic controls, given the unexpected decline in exports and shortage of foreign exchange (Nakamura and Hara 1970; Hara 1976), but there was another reason specific to the financial controls. That is, after the legislation was passed, many firms were established with capital of 480,000 or 490,000 yen, including firms that were not desirable from the standpoint of the policy for production expansion (Yamazumi 1941, pp. 132–133; Ministry of Finance 1957, pp. 79–81; Bank of Japan 1984, p. 297). At the same time, the upper limits on the amounts of long-term loans and on purchases, underwriting, or dealing in corporate bonds or foreign securities below which a financial institution was exempted from the controls were reduced from less than 100,000 yen to less than 50,000 yen. In addition, the threshold under which a self-adjustment association could approve loans without prior consultation with the BOJ was reduced from less than 500,000 to less than 300,000 yen for firms in the Class B1, B2, B3, and C industries (Ministry of Finance 1957, pp. 81–87).

3. Overview of capital fund allocation

For prewar and wartime Japan, comprehensive data on corporations are available in *Kaisha Tokei-hyo* (*Corporate Statistics*) by the Ministry of Commerce and Industry. Although the data items are limited, these statistics provide information on capital, reserves, profit, loss, and dividends, by industry and by prefecture from 1920 to 1942, which covers all the incorporated firms in Japan[6]. According to it, the total number of incorporated firms (hereafter we will omit "incorporated" for simplicity) was 65,041, and their capital stock was 19,486 million yen in 1932 (Table 1). Until the breakout of the Second Sino–Japanese War in 1937, the number of firms increased rapidly, reflecting the recovery of the Japanese economy from the Great Depression. When the war started, it once stagnated, but increased again in the early 1940s. Meanwhile, the capital stock

[6] For the period from 1920 to 1924, the statistics were compiled and published by the Ministry of Agriculture and Industry, which was reorganized to be the Ministry of Commerce and Industry in 1925.

continued to grow until 1942.

Table 1

As stated in the previous section, in September 1937, the Temporary Law for Fund Adjustment was legislated, and for implementing the regulation according to the Law, the Standard for Adjustment of Industrial Funds was determined, which classified 533 industries into six categories, i.e., Class A1, A2, B1, B2, B3, and C, based on the strategic importance of each industry for the war economy. The classification of industries by the Standard is available in the Ministry of Finance (1957). For simplicity, we merge A1 and A2 into A, and B1, B2, and B3 into B, and classify industries in Corporate Statistics into these three classes, A, B, and C. Table 1 shows the number of firms and their capital by class of financial control. In terms of the number of firms, Class B was the largest, whose share was around 65%, followed by Class C, and the share of Class A firms was just around 5%. Meanwhile, in terms of capital, the shares of the three classes were almost comparable. Looking at the over time change, we find that while the capital of the firms in Class A and Class B grew faster than the firms in Class C even before 1937, the gap in the growth rate increased from 1937, and the share of Class C firms declined faster than before.

It is important to examine the composition of firms by capital size because the government exempted firms with capital of less than 500,000 yen (until August 1938) or 200,000 yen (from August 1938), from financial regulation, as stated above. In terms of the number of firms, the share of firms with capital of less than 500,000 yen was higher than 90%, and that of firms with capital of less than 200,000 yen was higher than 85%. In this sense, the majority of firms were exempt from financial regulation by the Temporary Law for Fund Adjustment. In terms of capital, however, the share of the firms with capital of less than 500,000 yen was around 10%–15%, and that of the firms with capital of less than 200,000 yen was around 10%. These figures explain why the government exempted small firms from financial regulation. By focusing on a limited number of larger firms, the government could expect to regulate the majority of capital flows, while reducing administrative costs.

Table 2

For 1942, capital data by industry and by capital size are available. The data are important because the aim of the financial controls was to regulate funds flow to

"nonessential and nonurgent" industries, and the data indicate the share of the small firms exempted from financial regulation, in Class C industries. As shown in Table 3, the capital of the firms with capital of less than 200,000 yen was just 13.6% of the total capital of Class C firms. That is, the majority of the capital flows for Class C industries was subject to financial regulation.

Table 3

4. Impact of financial controls: Analyses of micro-data

The *Corporate Statistics* data were collected annually by the office of each municipality (city, town, or village) on behalf of the Ministry of Commerce and Industry, using a survey form, named *Kaisha-hyo* (Corporate Survey Form). The original survey forms are not available, but for Hyogo Prefecture, the prefecture government published *Hyogo-ken Kaisha Ichiran* (*Handbook on Corporations in Hyogo Prefecture*) for every year from 1929 to 1940, which contains firm-level data from the *Kaisha-hyo* (Hyogo Prefecture 1933, preface). We obtained information on the firm name, address, major industry, month and year of foundation, name of the representative person, and capital, from the 1932, 1934, 1936, 1938, and 1940 issues of *Hyogo-ken Kaisha Ichiran*. According to the data of *Corporate Statistics*, Hyogo Prefecture was the third largest prefecture both in terms of the number of firms and their capital, next to Tokyo and Osaka. Figure 3 shows the number and capital of firms in Hyogo Prefecture and its share in Japan. As is shown, its share was around 5%.

Figure 3

From the data of *Hyogo-ken Kaisha Ichiran*, we constructed a firm-level panel dataset, linking each firm by its name, name of the representative person, address, and month and year of foundation. For 1,812 firms, information on all of the five data points, i.e., 1932, 1934, 1936, 1938, and 1940, is available, and they are the sample firms used in this section.

We classify firms based on industry information in *Hyogo-ken Kaisha Ichiran* and the Standard for Adjustment of Industrial Funds (Ministry of Finance, 1957). Table 4 shows the result aggregated by class. In terms of the number of firms, the share of Class A firms was just 2.4%, whereas those of Class B and Class C firms were 52.9% and 44.7%, respectively. In terms of capital, Class C firms had the largest share, but the share declined substantially over time, whereas the share of Class A firms increased sharply,

which suggests the impact of the financial control on capital allocation.

Table 4

We further classify each class of firms according to capital size, as we did on the Japan total for 1942 in Table 3. The overall feature is qualitatively the same as Table 3, but the share of the firms with capital smaller than 200,000 yen or 500,000 yen is still higher in terms of the firm number, whereas the share of those firms is still lower in terms of capital. What is of interest in the context of this paper is the share of those small firms in the Class C industry, especially in terms of capital. As we can see in Panel B of Table 5, the share of the firms with capital smaller than 200,000 yen was lower than 5%, which means that the majority of Class C firms were subject to the financial regulation.

Table 5

Using the panel data, we can evaluate the impact of financial control econometrically. The key fact is that the financial controls started in September 1937 and capital flow to the Class C industries became regulated, and even for firms in the Class C industries, the firms with capital of less than a certain upper bound were exempted from the financial regulation. Because the Class C industries were "nonessential and nonurgent," they would be negatively affected by a relative decline in demand, as well as by the financial regulation. However, as the negative demand shock would be common to all the firms in the Class 3 industry irrespective of their sizes, by comparing the difference between the smaller firms exempted from the financial regulation and larger firms subject to the financial regulation, within the Class C firms, we can identify the impact of the financial regulation. This is the basic identification strategy of this paper. The equation for the baseline estimation is:

$$GCAPITAL_{it} = \beta_0 + \beta_1 LNCAPITAL_{it-2} + \beta_2 CLASSC_i \times CONTROL_t + \beta_3 CLASSC_i \times CONTROL_t \times EXEMPT_{it} + \beta_4 CONTROL_t \times EXEMPT_{it} + \beta_5 EXEMPT_{it} + \gamma_j + \delta_t + \lambda_r + e_{it}. \quad (1)$$

$GCAPITAL_{it}$ is the annual growth rate of capital of firm i. Because our data are biennial, $GCAPITAL_{it} = (LNCAPITAL_{it} - LNCAPITAL_{it-2})/2$, where LNCAPITAL is the natural log of capital. $CLASSC_i$ is a dummy variable that equals 1 if firm i was in the Class C industries, and 0, otherwise. $CONTROL_t$ is a dummy variable that equals 1, if year t is

1938 or 1940, when the financial controls were implemented, and 0, otherwise. $EXEMPT_{it}$ is a dummy variable that equals 1 if the capital of firm i was less than 500,000 yen for 1938, and if it was less than 200,000 yen for 1940. That is, if a firm's capital was less than the upper limit of capital for exemption of financial regulation in each year, $EXEMPT_{it}$ equals 1, and 0, otherwise. γ_j, δ_t, and λ_r are industry fixed effect, year fixed effect, and city-county fixed effect, respectively. Based on the identification strategy stated above, we intend to capture the impact of the financial regulation by coefficient β_3, i.e., the coefficient of the interaction term of CLASSC, CONTROL, and EXEMPT. Basic statistics are reported in Table 6.

Table 6

We estimate equation (1) using OLS, and the estimation results are presented in column (1) in Table 7. β_3, the coefficient of interest, is 0.0650 and statistically significant. Meanwhile, β_2, the coefficient on CLASSC × CONTROL is –0.0647, and statistically significant. These results indicate that the annual growth rate of the capital of the firms in the Class C industries declined by 6.47 percentage points, relative to the firms in Class A and Class B industries, and that this relative decline was almost completely canceled for the Class C firms exempted from the financial regulation. The fact that β_2 and β_3 have opposite signs with almost the same absolute value strongly suggests that β_3 ($\times -1$) captures the impact of the financial regulation. Looking at the coefficients on other variables, we find that the coefficient on $LNCAPITAL_{t-2}$ is negative and statistically significant, which would reflect the mean reversion of the size of capital. The coefficient on EXEMPT is also negative and statistically significant, which implies that smaller firms tended to have lower capital growth rates, after controlling for the mean reversion effect. Column (2) of Table 7 reports the result when we add firm age (years from foundation). The results are similar to those in column (1), and β_2 and β_3 have opposite signs with almost the same absolute value in this case as well.

Table 7

Because four data points are available for estimation, i.e.,1934, 1936, 1938, and 1940, we can conduct an event study to check the parallel trends. That is, we estimate:

$$GCAPITAL_{it} = \beta_0 + \beta_1 LNCAPITAL_{it-2} + \Sigma_t \beta_{2t} CLASSC_i \times YEAR_t + \Sigma_t \beta_{3t} CLASSC_i \times YEAR_t \times EXEMPT_{it} + \Sigma_t \beta_{4t} YEAR_t \times EXEMPT_{it} + \beta_5 EXEMPT_{it}$$

$$+ \gamma_j + \delta_t + \lambda_r + e_{it}. \quad (2)$$

The estimation results are reported in Table 8. Regarding the coefficient β_{3t}, whereas it is positive but not statistically significant until 1936, it becomes positive and significant from 1938. Furthermore, the magnitude is fairly large, i.e., 0.0912 for 1938, and 0.0549 for 1940.

In addition, the upward trend from 1934 to 1936 is weak and not statistically significant[7]. Concerning the coefficient β_{2t}, whereas it is negative but not statistically significant until 1936, it becomes negative and statistically significant from 1938. In addition, there is no downward trend until 1936. The results of the DID analyses and the event studies confirm that the financial controls within the Temporary Law for Financial Adjustment had a substantial impact on the allocation of capital, in the direction that the government intended.

Table 8

Finally, we evaluate the magnitude of the impact of the financial controls using a simple counterfactual simulation on the total capital of the firms in Class C industries. That is, we calculate their counterfactual capital for 1937 as their actual capital in 1937 times [(actual growth rate from 1936 to 1937) + 0.065 × 0.85], where 0.065 is the estimated coefficient on CLASSC × CONTROL × EXEMPT in column (1) of Table 7, and 0.85 is the approximate share of larger firms not exempted from financial regulation in the Class C industries (Table 2, Table 3). Then, for the years from 1938 to 1942, counterfactual capital, $CFCAPITAL_t$ is calculated as $CFCAPITAL_{t-1}$ × (actual growth rate + 0.065 × 0.85). Figure 4 shows the simulation results. The counterfactual capital of Class C firms diverged from the actual capital from 1937, and in 1942 it was 43.1% (5,009 million yen) larger than the actual capital. In other words, the financial regulation suppressed the total capital of the Class C industries to be 30.1% (1–100/143) smaller than that in the case where the financial regulation had not been implemented.

Figure 4

5. Conclusion

From the late 1930s to the early 1940s, the Japanese government implemented financial

[7] The null hypothesis that the coefficient $\beta_{2\,1934} = \beta_{2\,1936}$ is not rejected even at the 10% level.

controls to reduce funding for "nonessential and nonurgent" industries, and thereby secured funds for the industries strategic to the war and national bonds. For this purpose, the government classified industries into several classes, and strictly regulated funds flow to the Class C industries, regarded as "nonessential and nonurgent." This paper identifies the impact of this financial regulation on the allocation of capital, using firm-level panel data from Hyogo Prefecture and exploiting the characteristic of the regulation scheme that firms with capital of less than a certain upper bound were exempted from the regulation. It was found that after the implementation of the financial controls, the annual growth rate of capital of firms in the Class C industries became around 6.5 percentage points lower than the firms in the other industries, but that this relative decline was completely canceled for the small Class C firms exempted from the regulation. These findings indicate that the financial controls lowered capital growth by around 6.5 percentage points. Using a simple simulation based on this estimation result, we found that the total capital of the Class C industries in 1942 was around 30% lower than its counterfactual value assuming that there had been no financial regulation.

References

Bank of Japan. *Nihon Ginko 100-nen-shi (100 Year History of the Bank of Japan)* 4 (Tokyo: Bank of Japan 1984 (in Japanese).

Bank of Japan. "Fiscal and Financial History after the Manchurian Incident," reprinted in Bank of Japan ed., *Nihon Kin'yu-shi Shiryo (Materials on the Financial History in Japan)* 27. Tokyo, Printing Bureau of the Ministry of Finance, 1970 (in Japanese).

Buchheim, Christoph ed. *German Industry in the Nazi Period*, Stuttgart: Franz Steiner Verlag, 2008.

Economic Planning Agency. *Kokumin Shotoku Hakusho (Annual Report on National Income)* 1963 issue. Tokyo: Printing Bureau of the Ministry of Finance, 1964 (in Japanese).

Eloranta, Jari, Jeremy Land, Elina Kurelahti, and Price Fishback. "Introduction: Why Study the Economic History of War ?" In *The Routledge Economic History of War,* edited by Eloranta, Jari, Jeremy Land, Elina Kurelahti, and Price Fishback, 1–21. London: Routledge, 2025.

Eloranta, Jari, Eric Golson, Andrei Markevich, and Nikolaus Wolf eds., *Economic History of Warfare and State Formation.* Singapore: Springer, 2016.

Fetter, Daniel K. "The Home Front: Rent Control and the Rapid Wartime Increase in Home Ownership." *Journal of Economic History* 76, no.4 (2016): 1001–43.

Hara, Akira. "Shikin Tosei to Sangyo Kin'yu: Nikka Jihen-ki ni okeru Seisanryoku

Kakuju Seisaku no Kin'yu-teki Sokumen" (Fund Control and Industrial Finance: Financial Aspect of the Production Capacity Expansion Policy during the Second Sino-Japanese War), *Tochi Seido Shigaku (Journal of Agrarian History)*, 9, no.2 (1967): 52–74 (in Japanese).

Hara, Akira. "Nicchu Senso-ki no Koksai Shushi: Gaika Fusoku Mondai to Keizai Tosei" (The Balance of International Payments during the War Against China, 1937–1941), *Shakai Keizai Shigaku (Socio-Economic History)*, 34, no.6 (1969): 560–93 (in Japanese).

Hara, Akira. "Senji Keizai Tosei no Kaishi." (Start of the Wartime Economic Control) In Iwanami Koza Nihon Rekishi (Iwanami Series of the Japanese History) 7 (1976): 218–68 (in Japanese).

Hara, Akira. "Japan: Guns before Rice". In *The Economics of World War II: Six Great Powers in International Comparison,* edited by Mark Harrison, 224–67, Cambridge: Cambridge University Press, 1998.

Hara, Akira. *Nihon Senji Keizai Kenkyu (Research on the Japanese War Economy.* Tokyo: The University of Tokyo Press, 2013 (in Japanese).

Harrison, Mark ed. *The Economics of World War II: Six Great Powers in International Comparison.* Cambridge: Cambridge University Press, 1998.

Harrison, Mark. 'The Economics of World War II: An Overview". In *The Economics of World War II: Six Great Powers in International Comparison,* edited by Mark Harrison, Cambridge: Cambridge University Press, 1998.

Higgs, Robert. "Wartime Prosperity ?: A Reassessment of the US Economy in the 1940s,' *Journal of Economic History* 52, no.1 (1992): 41–60.

Higgs, Robert. "From Central Planning to the Marker: The American Transition, 1945–1947," *Journal of Economic History* 59, no. 3 (1999): 600–23.

Ministry of Finance, *Showa Zaisei-shi (Financial History in Showa Era)* 11. Tokyo* Toyo Keizai Shinpo-sha, 1957 (in Japanese).

Ministry of Finance, *Okurasho 100-nen-shi (100 Year History of the Ministry of Finance.* Tokyo: Okura Zaimu Kyokai, 1969 (in Japanese).

Ministry of Finance, *Senji Zaisei Kin'yu-shi (Fiscal and Financial History during the War)* Tokyo: Ministry of Finance, 1978 (in Japanese).

Nakamura, Takafusa. *Nihon no Keizai Tosei: Senji Sengo no Keiken to Kyokun (Economic Controls in Japan: Experience during and after the War and Its Lessons.)* Tokyo: Nihon Keizai Shinbun-sha, 1974 (in Japanese).

Nakamura, Takafusa. "Senso Keizai to Sono Hokai" (War Economy and Its Collapse.) In *Iwanami Koza Nihon Rekishi (Iwanami Series of the Japanese History)* 8 (1977): 109–60 (in Japanese).

Nakamura, Takafusa. 'Japan's War Economy as a "Planned Economy,"' in Erich Pauer ed., *Japan's War Economy*, edited by Erich Pauer, 9–22, London: Routledge, 1999.

Nakamura, Takafusa, and Akira Hara. "Shiryo Kaisetsu" (Introduction on Reprinted Materials) In *Gendaishi Shiryo (Materials on the Contemporary History)* 43 edited by Takafusa Nakamura and Akira Hara, xi-xxxix, Tokyo; Misuzu Shobo, 1970 (in Japanese).

Okazaki, Tetsuji. "Senji Keikaku Keizai to Kakaku Tosei" (Wartime Planned Economy and Price Control.) In *Senji Keizai (War Economy)*, edited by Kindai Nihon Kenkyu-kai (Research Group on Modern Japan), Tokyo: Yamakawa Shoten, 1987: 175–98 (in Japanese).

Okazaki, Tetsuji. "Dai-niji Sekai Taisen-ki no Nihon ni okeru Senji Keikaku Keizai no Kozo to Unko: Tekko Bumon wo Chushin to shite" (System and Working of the Wartime Planned Economy in Japan during World War II: Focusing on the Iron and Steel Sector), *Shakai Kagaku Kenkyu (Journal of Social Science)*, vol.40, no.4 (1988): 1–132 (in Japanese).

Okazaki, Tetsuji. "Wartime Financial Reforms and the Transformation of the Japanese Financial System". In Erich Pauer ed., *Japan's War Economy*, 144–70, London: Routledge, 1999.

Okazaki, Tetsuji. "Designing Wartime Economic Controls: Productivity and Firm Dynamics in the Japanese Cotton Spinning Industry, 1937–9." *Economic History Review* 76, no.4 (2023): 999–1022.

Okazaki, Tetsuji. "Planning Mass Production of Merchant Ships in Japan during the Pacific War." In *The Routledge Economic History of War*, edited by Eloranta, Jari, Jeremy Land, Elina Kurelahti, and Price Fishback, 1–21. London: Routledge, 2025.

Okazaki, Tetsuji and Masahir Okuno-Fujiwara eds. *Japanese Economic System and Its Historical Origins.* New York: Oxford University Press, 1999.

Rockoff, Hugh. *Drastic Measures: A History of Wage and Price Controls in the United States*, Cambridge: Cambridge University Press, 1984.

Rockoff, Hugh. *America's Economic Way of War: War and US Economy from the Spanish-American War to the Persian Gulf War*, Cambridge: Cambridge University Press, 2012.

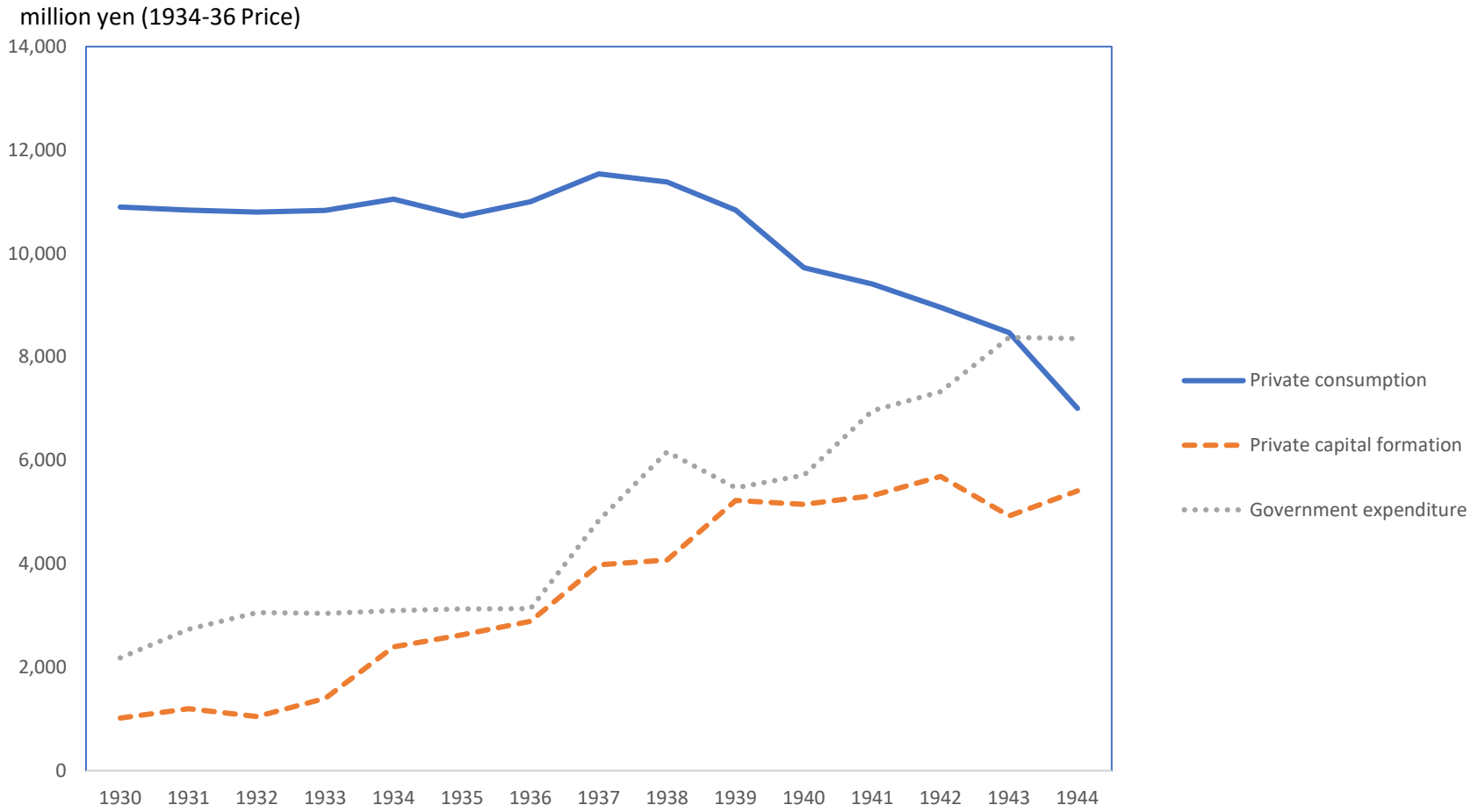
Shibata, Yoshimasa. *Senji Nihon no Kin'yu Tosei: Shikin Shijo to Kaisha Keiri (Financial Control in Wartime Japan: Financial Market and Corporate Finance)*. Tokyo: Nihon Keizai Hyoron-sha, 2011 (in Japanese).

Temin, Peter. "Soviet and Nazis Economic Planning in the 1930s," *Economic History Review* 44, no.4 (1991): 573–593.

Yamazaki, Shiro. *Taiheiyo Senso-ki no Busshi-doin Keikaku (Material Mobilization Plans during the Pacific War)*, Tokyo: Nihon Keizai Hyoron-sha, 2016 (in Japanese).

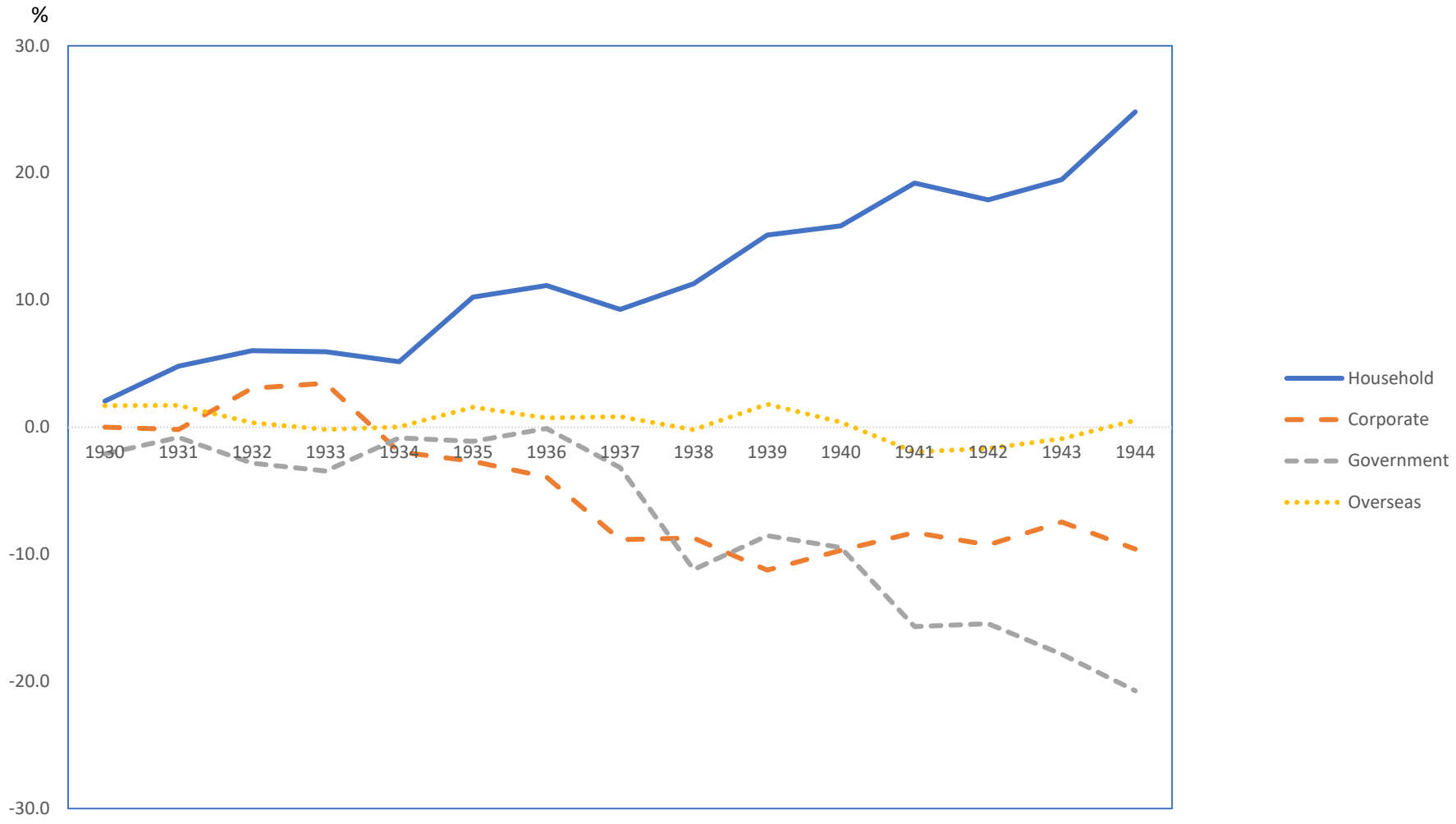
Yamazumi, Katsumi. *Shikin Chosei to Keiri Tosei (Fund Adjustment and Control of Corporate Finance).* Tokyo: Sangyo Keizai Gakkai, 1941 (in Japanese).

Figure 1 Change in the resource allocation at the macro level



Source: Economic Planning Agency ed., *Kokumin Shotoku Hakusho (Annual Report on National Income)* 1963 issue, Tokyo: Printing Bureau of the Ministry of Finance.

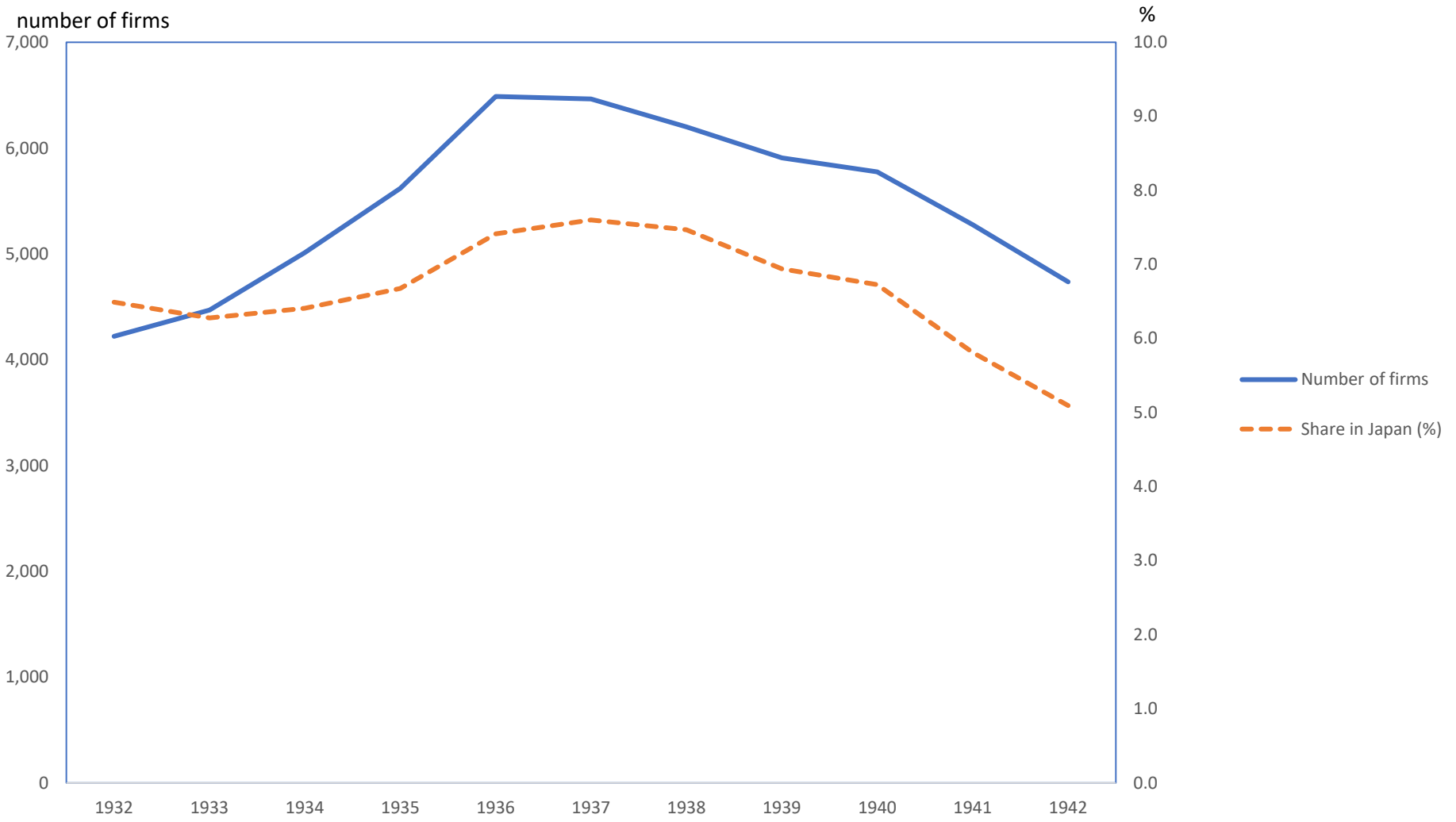
Figure 2 Iinvestment-savings balance by sector (percentage of GNP)



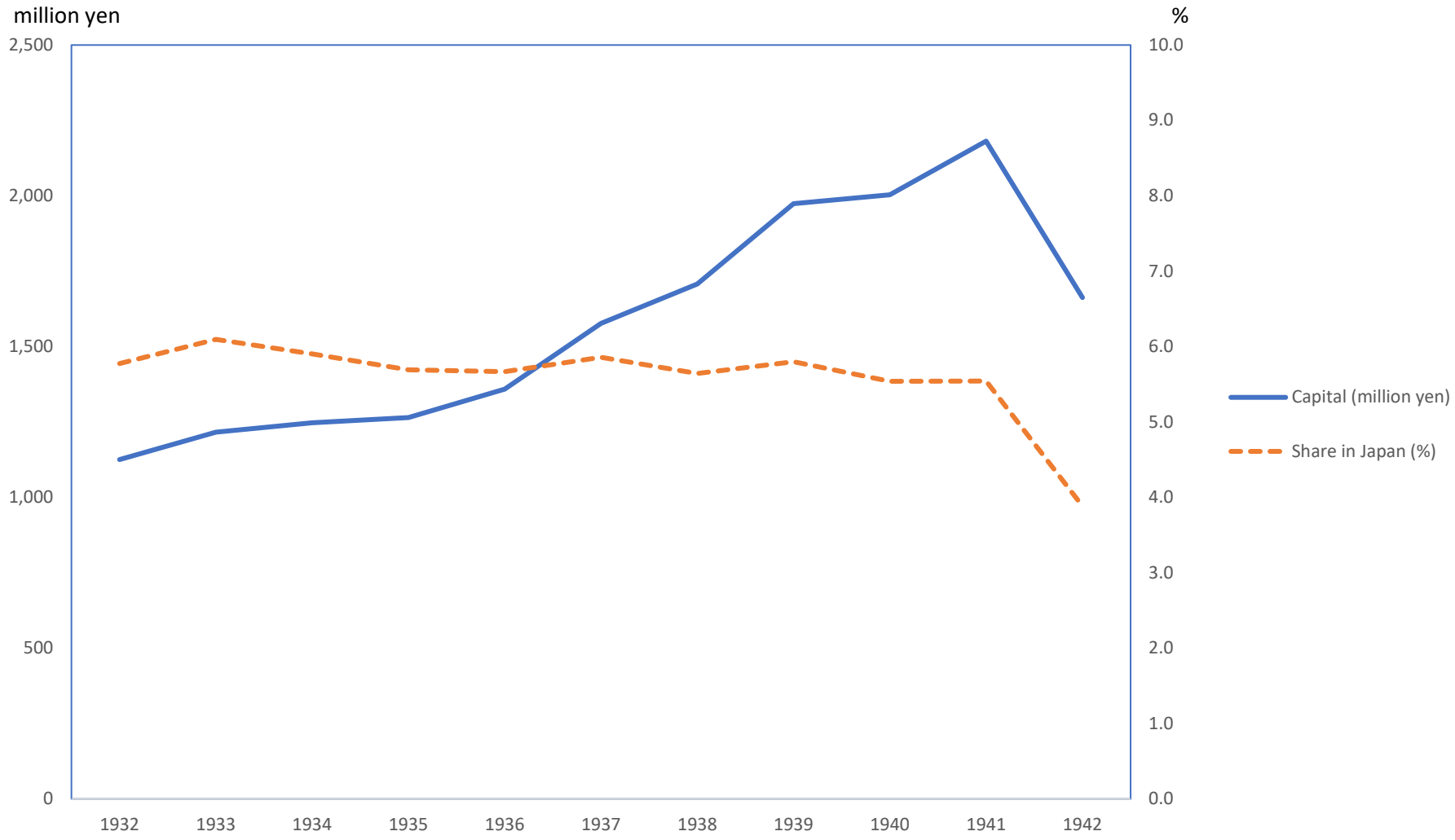
Source: See Figure 1.

Figure 3 Share of corporations in Hyogo Prefecture

A. Number of firms

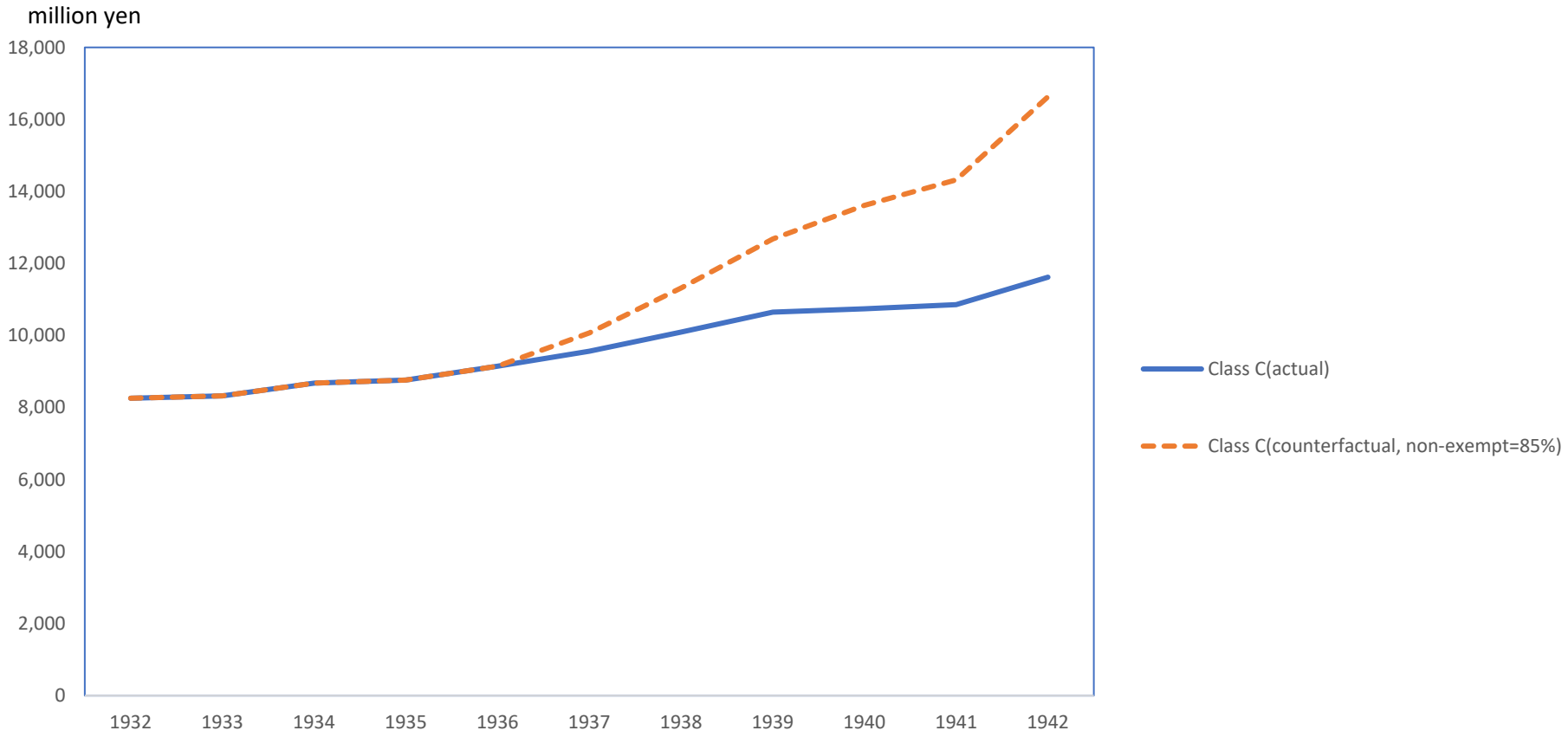


B. Capital



Source: *Kaisha Tokei-hyo (Corporate Statistics)*, various issues.

Figure 4 Counterfactual calculation of capital of Class C industries in Japan



Source: Author's calculation by the estimation result in Table 7 and the data from Kaisha Tokei-hyo

Note: See the text.

Table 1 Corporations by the class of the financial control

A. Number of firms

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
Total	65,041	71,196	78,198	84,146	87,511	85,042	83,042	85,122	85,836	90,778	92,951
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Class A	2,645	2,839	3,112	3,603	3,923	4,061	4,354	5,446	5,636	5,858	6,167
	(4.1)	(4.0)	(4.0)	(4.3)	(4.5)	(4.8)	(5.2)	(6.4)	(6.6)	(6.5)	(6.6)
Class B	41,586	45,771	50,717	55,158	57,584	55,380	53,694	54,871	55,533	58,414	55,875
	(63.9)	(64.3)	(64.9)	(65.6)	(65.8)	(65.1)	(64.7)	(64.5)	(64.7)	(64.3)	(60.1)
Class C	20,810	22,586	24,369	25,385	26,004	25,601	24,994	24,805	24,667	26,506	30,909
	(32.0)	(31.7)	(31.2)	(30.2)	(29.7)	(30.1)	(30.1)	(29.1)	(28.7)	(29.2)	(33.3)

B. Capital (million yen)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
Total	19,486	19,960	21,127	22,211	23,978	26,912	30,247	34,026	36,164	39,353	42,801
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Class A	6,006	6,139	6,624	7,030	7,660	8,565	9,827	11,661	12,584	13,256	14,832
	(30.8)	(30.8)	(31.4)	(31.6)	(31.9)	(31.8)	(32.5)	(34.3)	(34.8)	(33.7)	(34.7)
Class B	5,222	5,498	5,823	6,421	7,173	8,784	10,327	11,715	12,836	15,240	16,350
	(26.8)	(27.5)	(27.6)	(28.6)	(29.9)	(32.6)	(34.1)	(34.4)	(35.5)	(38.7)	(38.2)
Class C	8,258	8,324	8,680	8,761	9,145	9,563	10,093	10,650	10,743	10,857	11,619
	(42.4)	(41.7)	(41.1)	(39.4)	(38.1)	(35.5)	(33.4)	(31.3)	(29.7)	(27.6)	(27.1)

Source: Ministry of Commerce and Industry, *Kaisha Tokei-hyo (Corporate Statistics)*, various issues; Ministry of Finance (1957).
Note: For the class of financial control, see the main text.

Table 2 Composition of firms by class of capital

A. Number of firms

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
Total	65,041	71,196	78,198	84,146	87,511	85,042	83,042	85,122	85,836	90,778	92,951
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
capital<200,000 yen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	71,085	73,405	74,232	79,450	81,468
							(85.6)	(86.2)	(86.5)	(87.5)	(87.6)
capital<500,000 yen	60,204	65,290	73,114	78,793	81,865	78,911	76,791	78,675	79,260	84,264	86,132
	(92.6)	(91.7)	(93.5)	(93.6)	(93.5)	(92.8)	(92.5)	(92.4)	(92.3)	(92.8)	(92.7)

B. Capital (million yen)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
Total	19,485	19,960	21,127	22,352	23,978	26,912	30,250	34,026	36,164	39,353	42,801
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
capital<200,000 yen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,110	2,908	3,549	4,963	5,026
							(7.0)	(8.5)	(9.8)	(12.6)	(11.7)
capital<500,000 yen	2,284	2,398	2,583	2,796	3,008	3,160	3,636	4,373	4,957	6,335	6,376
	(11.7)	(12.0)	(12.2)	(12.5)	(12.5)	(11.7)	(12.0)	(12.9)	(13.7)	(16.1)	(14.9)

Source: Ministry of Commerce and Industry, *Kaisha Tokei-hyo (Corporate Statistics)*, various issues.

Table 3 Composition of firms by class of financial control and capital in 1942

A. Number of firms

Total	92,951	(100.0)
Capital<200,000 yen	58,593	(63.0)
Capital<500,000 yen	62,280	(67.0)
Class A	6,167	(100.0)
Capital<200,000 yen	4,464	(72.4)
Capital<500,000 yen	4,927	(79.9)
Class B	55,875	(100.0)
Capital<200,000 yen	26,643	(47.7)
Capital<500,000 yen	28,457	(50.9)
Class C	30,909	(100.0)
Capital<200,000 yen	27,486	(88.9)
Capital<500,000 yen	28,896	(93.5)

B. Capital

Total	42,801	(100.0)
Capital<200,000 yen	3,814	(8.9)
Capital<500,000 yen	4,889	(11.4)
Class A	14,832	(100.0)
Capital<200,000 yen	390	(2.6)
Capital<500,000 yen	542	(3.7)
Class B	16,350	(100.0)
Capital<200,000 yen	1,895	(11.6)
Capital<500,000 yen	2,422	(14.8)
Class C	11,619	(100.0)
Capital<200,000 yen	1,529	(13.2)
Capital<500,000 yen	1,924	(16.6)

Source: Ministry of Commerce and Industry, *Kaisha Tokei-hyo (Corporate Statistics)*, various issues; Ministry of Finance (1957).
Note: For the class of financial control, see the main text.

Table 4 Composition of firms in the panel of Hyogo Prefecture by class of financial control

A. Number of firms

	1932	1934	1936	1938	1940
Total	1,812	1,812	1,812	1,812	1,812
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Class A	43	43	43	43	43
	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)
Class B	959	959	959	959	959
	(52.9)	(52.9)	(52.9)	(52.9)	(52.9)
Class C	810	810	810	810	810
	(44.7)	(44.7)	(44.7)	(44.7)	(44.7)

B. Capital thousand yen

	1932	1934	1936	1938	1940
Total	794,991	855,441	940,275	1,055,352	1,314,832
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Class A	142,834	203,336	210,121	293,649	491,729
	(18.0)	(23.8)	(22.3)	(27.8)	(37.4)
Class B	177,098	176,984	197,197	210,791	219,723
	(22.3)	(20.7)	(21.0)	(20.0)	(16.7)
Class C	475,060	475,122	532,957	550,913	603,381
	(59.8)	(55.5)	(56.74)	(52.2)	(45.9)

Source: Calculated by the panel deta compiled from various issues of *Hyogo-ken Kaisha Ichiran*. (see the text).

Note: Percentage of each class in parentheses.

Table 5 Composition of firms in the panel of Hyogo Prefecture by class of financial control and capital size

A. Number of firms

	1932		1934		1936		1938		1940	
Total	1,812	(100.0)	1,812	(100.0)	1,812	(100.0)	1,812	(100.0)	1,812	(100.0)
Capital<200,000 yen	1,454	(80.2)	1,434	(79.1)	1,424	(78.6)	1,407	(77.6)	1,414	(78.0)
Capital<500,000 yen	1,581	(87.3)	1,572	(86.8)	1,569	(86.6)	1,555	(85.8)	1,554	(85.8)
Class A	43	(100.0)	43	(100.0)	43	(100.0)	43	(100.0)	43	(100.0)
Capital<200,000 yen	11	(25.6)	10	(23.3)	8	(18.6)	6	(14.0)	6	(14.0)
Capital<500,000 yen	15	(34.9)	14	(32.6)	11	(25.6)	10	(23.3)	9	(20.9)
Class B	959	(100.0)	959	(100.0)	959	(100.0)	959	(100.0)	959	(100.0)
Capital<200,000 yen	843	(87.9)	828	(86.3)	821	(85.6)	812	(84.7)	815	(85.0)
Capital<500,000 yen	893	(93.1)	888	(92.6)	886	(92.4)	878	(91.6)	877	(91.4)
Class C	810	(100.0)	810	(100.0)	810	(100.0)	810	(100.0)	810	(100.0)
Capital<200,000 yen	600	74.1	596	73.6	595	73.5	589	72.7	593	73.2
Capital<500,000 yen	673	(83.1)	670	(82.7)	672	(83.0)	667	(82.3)	668	(82.5)

B. Capital thousand yen

	1932		1934		1936		1938		1940	
Total	794,991	(100.0)	855,441	(100.0)	940,275	(100.0)	1,055,352	(100.0)	1,314,832	(100.0)
Capital<200,000 yen	50,546	(6.4)	49,738	(5.8)	50,570	(5.4)	51,038	(4.8)	58,390	(4.4)
Capital<500,000 yen	83,384	(10.5)	84,790	(9.9)	88,970	(9.5)	89,355	(8.5)	95,477	(7.3)
Class A	142,834	(100.0)	203,336	(100.0)	210,121	(100.0)	293,649	(100.0)	491,729	(100.0)
Capital<200,000 yen	937	(0.7)	939	(0.5)	704	(0.3)	482	(0.2)	612	(0.1)
Capital<500,000 yen	1,787	(1.3)	1,789	(0.9)	1,354	(0.6)	1,362	(0.5)	1,662	(0.3)
Class B	177,098	(100.0)	176,984	(100.0)	197,197	(100.0)	210,791	(100.0)	219,723	(100.0)
Capital<200,000 yen	26,312	(14.9)	25,197	(14.2)	26,011	(13.2)	26,895	(12.8)	30,879	(14.1)
Capital<500,000 yen	39,207	(22.1)	40,436	(22.8)	43,184	(21.9)	44,295	(21.0)	47,619	(21.7)
Class C	475,060	(100.0)	475,122	(100.0)	532,957	(100.0)	550,913	(100.0)	603,381	(100.0)
Capital<200,000 yen	23,297	(4.9)	23,602	(5.0)	23,855	(4.5)	23,661	(4.3)	26,899	(4.5)
Capital<500,000 yen	42,390	(8.9)	42,565	(9.0)	44,432	(8.3)	43,698	(7.9)	46,196	(7.7)

Source: Calculated by the panel deta compiled from various issues of *Hyogo-ken Kaisha Ichiran*.
(see the text).

Note: Percentage of each class in parentheses.

Table 6 Basic statistics

	Obs	Mean	Std. dev.	Min	Max
GCAPITAL	7,248	0.030	0.198	−2.159	2.303
CLASS A	7,248	0.024	0.152	0.000	1.000
CLASS B	7,248	0.529	0.499	0.000	1.000
CLASS C	7,248	0.447	0.497	0.000	1.000
CLASS A+CLASS B	7,248	0.553	0.497	0.000	1.000
CLASS C × CONTROL	7,248	0.224	0.417	0.000	1.000
EXEMPT	7,248	0.843	0.364	0.000	1.000
EXEMPT × CONTROL	7,248	0.410	0.492	0.000	1.000
CLASS C × CONTROI × EXEMP	7,248	0.174	0.379	0.000	1.000
AGE	7,248	12.848	8.592	1.000	59.000

Table 7 Impact of financial control I : DID

Dependent variable: GCAPITAL				
$LNCAPITAL_{t-2}$	−0.0279	(0.0053) ***	−0.0290	(0.0054) ***
CLASSC × CONTROL	−0.0647	(0.0270) **	−0.0624	(0.0269) **
CLASSC × CONTROL × EXEMP	0.0650	(0.0284) **	0.0629	(0.0282) **
EXEMPT	−0.1265	(0.0178) ***	−0.1246	(0.0182) ***
EXEMPT × CONTROL	−0.0287	(0.0291)	−0.0279	(0.0291)
AGE			0.0008	(0.0004) **
1936	0.0123	(0.0087)	0.0107	(0.0088)
1938	0.0434	(0.0300)	0.0394	(0.0298)
1940	0.0505	(0.0277) *	0.0452	(0.0272) *
Const.	0.3691	(0.0854) ***	0.3697	(0.0871) ***
# of obs.	7,248		7,248	
Indystry FE	Yes		Yes	
City and county FE				
R^2	0.0538		0.0545	

Note: *** statistically significant at 1% level.
** statistically significant at 5% level.
* statistically significant at 10% level.
Standard errors clustered at industry are in paretheses.

Table 8 Impact of financial control II: Event study

Dependent variable: GCAPITAL				
$LNCAPITAL_{t-1}$	−0.0281	(0.0053) ***	−0.0292	(0.0053) ***
CLASSC × 1934	−0.0024	(0.0357)	−0.0041	(0.0359)
CLASSC × 1936	−0.0277	(0.0290)	−0.0296	(0.0287)
CLASSC × 1938	−0.1011	(0.0454) **	−0.1032	(0.0456) **
CLASSC × 1940	−0.0450	(0.0189) **	−0.0463	(0.0193) **
CLASSC × 1934 × EXEMPT	0.0103	(0.0359)	0.0130	(0.0360)
CLASSC × 1936 × EXEMPT	0.0190	(0.0280)	0.0220	(0.0277)
CLASSC × 1938 × EXEMPT	0.0912	(0.0413) **	0.0942	(0.0449) **
CLASSC × 1940 × EXEMPT	0.0549	(0.0234) **	0.0572	(0.0240) **
1934 × EXEMPT	−0.1390	(0.0273) ***	−0.1385	(0.0276) ***
1936 × EXEMPT	−0.1331	(0.0121) ***	−0.1329	(0.0120) ***
1938 × EXEMPT	−0.2226	(0.0496) ***	−0.2238	(0.0499) ***
1940 × EXEMPT	−0.1136	(0.0233) ***	−0.1132	(0.0233) ***
AGE			0.0008	(0.0004) **
1936	0.0153	(0.0327)	0.0139	(0.0327)
1938	0.0999	(0.0469) **	0.0970	(0.0467) **
1940	0.0045	(0.0237)	0.0000	(0.0228)
Const.	0.3700	(0.0940) ***	0.3702	(0.0953) ***
# of obs.	7,248		7,248	
Indystry fixed effects	Yes		Yes	
City and county FE				
R^2	0.0583		0.0591	

Note: *** statistically significant at 1% level.
** statistically significant at 5% level.
* statistically significant at 10% level.
Standard errors clustered at industry are in paretheses.