FINANCING OF MEIJI INDUSTRIAL FIRMS: 1868-1912
A PRELIMINARY REPORT*

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In the summer of 1965 when I began to read company histories, bank histories and biographies and diaries of leading businessmen under the guidance and stimulation of those persuasive business historians located on a bank of the Charles River, I began to have increasing difficulty in reconciling what I read with some of the views long-maintained in a large amount of existing literature on Japanses industrialization.[1] Ihis paper deals with one of these views: namely, the currently accepted view on the pattern of financing industrial firms in Meiji Japan.

The current view could perhaps be best seen in the follow-quotations from a recent essay by Professor High Patrick. First, as a "plausible generalization," he observed that: "It appears that most individual subscriptions to new corporate stock issues were financed to a considerable degree by loans from commercial banks . . ."[2] Secondly, he stressed the importance of bank loans by saying that:

> How then did enterprises, once established, finance their expansion? . .Industrial enterprises relied on two main sources of funds: new capital stock issues, sold mainly to existing stock holders; and short-term and long-term loans from banks. It is not clear which was more important in the early years, but by the turn of the century bank loans were clearly the major source.[3]

Lastly, Professor Patrick noted that:

> The policy of high dividend payout did not mean a complete loss of funds for industrial capital, since part was probably used to finance not only the purchase of additional shares in the same company but also the establishment of new enterprises through stock purchase by dividend-recipient owners of already established enterprises.[4]

Similar to identical expressions could have been easily found in a score of books dealing with the subject--either in Japanese or in English. At this stage of my research, I quote Professor Patrick only to help focus the main issues of this paper as briefly as possible

Questions I began to ask of this view are: When the company histories and biographies of Meiji entrepreneurs seem to indicate that internal reserves and stock issues were much more important than bank loans, even after the turn of the century, how could the current view be true? Is there sufficient evidence to show that stock issues were financed "to a considerable degree" by loans from commercial banks and that a "policy of high dividend payment" helped sell new stock issues?

Thus to investigate these questions empirically and systemically, I chose to examine existing semi-annual financial reports of firms during the Meiji period along with data contained in published company histories.[5] Before proceeding to report the preliminary findings, I must emphasize the tentative nature of my observations. As all business historians know, the task of drawing general conclusions from annual reports of sample firms is a difficult one at best. In this particular case, even leaving aside the difficulties involved in reading occasional calligraphy in brush strokes, I might add that the task requires extreme care because it was during the early years of Meiji when traditional bookkeeping methods yielded gradually to a more familiar modern accounting procedure. The transition evidently perplexed Meiji accountants and causes no small amount of difficulties for a researcher who must make use of this material.

Beginning with the cotton weaving industry which "led" the Japanese industrialization from about 1890, what we discover for this industry sets the tone of our findings. A conclusion to be reached from examination of semi-annual reports of six firms, fourteen company histories which contain usable data and several studies on the industry is that paid-in capital and internal accumulation played a much more important role than bank loans in financing the firms in the industry.

Instead of numerous tables which could be supplied, let me illustrate the nature of the data as follows. First, taking the case of the Kurashiki cotton weaving company--the weakest example in supporting the conclusion described above--we find that the ratio of the sum of long- and short-term loans to the total assets ranged between 5.09 percent and 24.87 percent with a mean of 12.77 percent; the ratio exceeded 20 percent only once during the crucial years of 1890-1907 in spite of rapid expansion of the firm. During the eighteen years the financial records of the company clearly indicate that expansion was financed by increases in paid-in capital and by rapidly increasing internal reserves and publicly sold bonds. For example, by the second half of 1900, the company's paid-in capital had increased from 150,000 yen to 337,500 yen, accumulated reserves reached 100,000 yen and outstanding bonds of 153,000 while there was no short-term borrowing and a long-term loan debt of 68,000 yen.

On the other end of the spectrum, such firms as Nisshin Cotton Weaving Company financed themselves almost entirely without bank loans. All through the Meiji years the firm borrowed only twice--one long-term and one short--from a bank and in both cases the loans were no more than slightly over 4 percent of the total assets.

The rest of the firms in the sample appear to fall between these two cases, and this observation is supported by F. Yamada's data for later years. Yamada's data, shown in Table 1, indicate that the ratio of "outside loans" to total assets of all firms in cotton textiles was 10.8 percent in 1905, slightly over 12 percent in 1908, 19 percent in 1911, and 15 percent in 1913. Note here that Yamada's definition of "outside loans" includes an increasing amount of publicly sold bonds.

Table 1

Sources of Capital for the Cotton-Textile Industry (1,000 yen)

Year	Paid-in Capital	Internal Reserve	Outside Loans	Total
1905	34,332	11,598	5,565	51,496
1908	57,595	26,108	11,638	95,341
1911	63,409	26,693	21,225	111,327
1913	83,617	39,442	21,494	144,553

Source: Fumio Yamada, "Capital for Japan's Cotton-Textile Industry," Keizaigaku Ronshū (Economic Essays), University of Tokyo, Vol. 6 No. 2, p. 147

In other light industries which began to emerge at an increasing tempo around the turn of the century, we find the role played by bank loans to have been even less than it was for the cotton weaving industry. The data covering twenty firms in the flour milling, sugar refining, paper and beer industries reveal again the importance of sales of shares and internal reserves.

As the financing patterns of these firms are essentially similar, with a few exceptions, we can describe the following cases as being representative of those firms which I was able to examine. Kirin Beer Company, which was established in 1907, borrowed an average of 8.1 percent (loans to total asset ratio) with the maximum of 12 5 percent. Keeping the dividend rate to a low 6-8 percent range, the firm increased its internal reserve rapidly.

The bank loans for the Japan Flour Milling Company never exceeded 3.21 percent of the total assets during the Meiji period. This company, established in 1897, increased its nominal capital from 300,000 yen to 1.55 million yen by the end of the Meiji era (1912) and the paid-in capital too rose from 75,000 yen to in excess of 1.3 million yen during the same period. The reserve in 1912 stood at 221,000 yen with bonds of 500,000 yen. Another flour milling firm, Nissin Flour Milling, which grew rapidly to become one of the largest in the industry, showed its financial independence more clearly. The company grew by increase in capitalization and a large reserve built by a conservative dividend policy (the maximum of 10 percent). Before 1920, it borrowed only once (in 1907) in the amount of approximately 3 percent of the total asset. The financing pattern of the sugar refining firms during the Meiji era was quite similar to those described for the flour milling industry.

One exception, an interesting case which foreshadows much of what takes place during the 1920s, is the financing pattern of the Oji Paper Company. This company's loan ratio to total assets, like others we have seen above, was not high (a mean of 9.83 percent) until the first half of 1908. But beginning from the second half of 1908, the ratio suddenly increased to 27.26 percent and continued to rise during the Meiji era to 37-40 percent. The reason for this is that, beginning in 1908 when the company began to expand into Hokkaido in search of new and larger sources of its raw material, the House of Mitsui with its bank capital decided to move into the company. Oji Paper, one of its large shareholders had been Mitsui since its inception in 1874, thus became a Mitsui subsidiary.

Since we know that during the 1920s and especially into the 1930s Zaibatsu control of firms be means of Zaibatsu bank loans became a common practice, we could consider the case of Oji Paper as one foreshadowing what was to follow but one relatively atypical before the height of the First World War boom.

Finally, coming to those industries such as the shipbuilding, machine tool, shipping and electric power industries, which are usually considered to belong in the government-protected and heavily bank-financed group of industries, we find that the amount of loans incurred by firms in these industries too were not what one could call either considerable or predomiant. Let me present four examples which I consider to represent the basic patterns of borrowing among these firms. The data available for Shibaura Machine Tool Company begins from 1904 and its loan ratio to total assets for 1904 to 1906 is high in the 25-29 percent range. But we must note immediately that this was a unique period of the firm, namely, it was those years in which the House of Mitsui, through its Mitsui bank, made large loans to save the firm which was on the verge of bankruptcy. A more balanced picture of the dependence of this firm on loans is obtained by realizing that the ratio of loans to total assets declined from 12-14 percent for 1907-1909 to less than 10 percent by the end of the Meiji period. Although it applies to all firms discussed in this paper, in this case I regret especially that the time allotted me is insufficient to describe financial hardships which Hisashige Tanaka, the founder of the firm, endured from the establishment of his firm in 1875.

Three other examples can be described briefly. Tokyo Electric Company borrowed from banks only twice in the large amount of 28.65 and 26.01 percent, but otherwise the ratio fluctuated around a mean of 7 percent during the Meiji years. The Osaka Shipping Company was a case in which the ratio of loans steadily declined from 19.83 in 1898 to less than 2 percent by the end of the Meiji era. Finally, the loans incurred by the Ishikawajima Shipbuilding Company ranged between 16.52 percent and 1.40 percent with a mean of approximately 8.5 percent. In short, even for this group of firms, the role played by bank loans was neither considerable nor significant.

Because of the abbreviated nature of this paper, instead of more illuminating evidence from biographies and company histories, let me add the following brief comments on the quotations cited earlier from Professor Patrick's recent essay. First, the indirect evidence he presented for his "plausible generalization" that banks financed "to a considerable degree" the purchase of stocks by individuals is highly questionable. Professor Patrick noted that shares were used as collateral for 34.8 percent of the total bank loans made in 1894. However, we must note that the total paid-in capital in 1894 was approximately 175 million yen; thus this means that 34.8 percent of the total bank loans were in fact less than 25 percent of the total paid-in capital. Furthermore, surely not all of this 25 percent was borrowed to buy more shares. One-third (33.1 percent) of it, for example, consisted of short-term loans of less than 6 months. Thus, if we eliminate this part of the loans from the earlier figure of 25 percent contributed by bank loans for paid-in capital the figure is now reduced to about 17.5 percent. However, if we examine the borrowers of all bank loans by occupational groups, "industrial" and "company" accounted for 8.3 percent of total loans while "agricultural" and "commercial" accounted for 53.2 percent with 40.8 percent for the "commercial" being by far the largest for one occuptational group.[6] The most likely pattern, it seems then is that shares were used as collateral by "commercial" borrowers to borrow for the period less than one year. All this, of course, indicates that the 17.5 percent might significantly overstate the bank loans for the purpose of buying shares. Similar evidence for the years after 1894 also clearly suggests that this type of financing (i.e., bank loans) continued to decrease as a trend until the First World War. For example, the proportion of shares held by banks in 1902 was 9.5 percent and in 1908, 9.4 percent of total shares issued.

Secondly, in support of the observation that "by the turn of the century bank loans were clearly the major source" for industrial financing, Professor Patrick's only concrete evidence--and I must add in fairness to Patrick, the only available evidence--was the Industrial Bank's data of which source and coverage are unknown. According to these data the sources of "a total of 247 million yen in industrial funds supplied to main industrial corporations between 1897 and 1913 were bankloans (57.5 percent), new stock issues (32.4 percent), corporate debentures (6.5 percent) and internal reserves (3.6 percent). I believe these data are small in coverage and heavily biased to overemphasize bank loans. The new stock issues increased by about 700 million yen during the period of 1897-1913 and this means that the coverage of the Industrial Bank's data was slightly over 11 percent in terms of new stock issues because 32.4 percent of 247 million is slightly over 80 million yen. It seems evident that the data covered only a small fraction of the total bank loans made to the industrial firms. Also, regardless of the coverage and source, the 3.6 percent figure attributed to internal reserve is hardly acceptable to anyone who reads through company and industry studies of the period.

Lastly, Professor Patrick, observed as many before him have done that the industrial firms of the Meiji era had a high dividend policy. As he described elsewhere in his essay, this of course was closely connected with the point that individuals could borrow funds from banks using shares as collateral. A high dividend, at least higher than the going rate of interest, would make it profitable for individuals to buy shares on borrowed capital.[8]

Although I must refrain from making any general statement before all the results are in, what I could report at this time on the basis of samples I have examined is that one would be hard put to produce enough cases to show that Meiji firms maintained a high dividend policy for long enough to justify this observation. In addition, the assertion that the high dividend policy was used to buy new shares of the dividend-paying firm would be contradicted, when available sample firms are analyzed, by the fact that most firms required capital to be paid in precisely when their dividends were low.

I realize that the evidence and observations presented above are not sufficient to make any firm points and some of my findings beg several questions which I am unable to deal with in this brief paper. But, even on the basis of my tentative findings, it seems clear that the view now generally held on financing industrial firms in Meiji Japan requires a thorough reexamination.

I believe that, in the otherwise well-researched economic history of Japan, contributions by business historians or economists interested in business history have been nearly nonexistent. Because of this, a few important generalizations such as on the role of Meiji entrepreneurs and the financing of Meiji industrial firms appear to face much contradictory evidence when such unexploited sources as company histories, bank histories, biographies and diaries of business leaders are examined. Historians, with whatever complexion, must generalize, but economic historians of Japan, it seems to me, have been generalizing prematurely without possession of more facts which business historians could and should provide.

Postcript:

Professor Rondo Cameron's comments made on this paper at the meeting were well taken. Many firms in the sample which had small long-term loans in relation to their respective total assets in fact resorted to short-term loans. This of course had an efect of releasing internally generated funds for long-term investment purposes. This point and others made by Professor Cameron and from the floor are currently being subjected to reexamination vis-a-vis more complete results of analyses that have become available during the past few months.

NOTES

*This is a preliminary report of my current research entitled "Sources of Capital for Japanese Industrial Firms, 1868-1940." The basic data for the research are obtained from semi-annual financial reports of 70 industrial firms and existing company histories. Financial assistance received from the Brookings Institution and A.C.L.S. (Asia grants) is gratefully acknowledged.

[1]For my reappraisals of existing views not discussed here, see: "The Founding of the Mitsubishi Zaibatsu, A Case Study in Japanese Business History," Business History Review (Fall, 1967); "The Role of Samurai in the Development of Modern Banking in Japan", The Journal of Economic History (June, 1967) and "A Reexamination of Entrepreneurship in Meiji Japan, 1869-1911", Economic History Review (April 1968).

[2]Hugh T. Patrick, "Japan, 1869-1914" in R. Cameron ed., Banking in the Early Stages of Industrialization (Oxford University press, 1967) p. 282. I wish to make it clear that the use of these quotations and my comments on them later in the text are not made as criticisms of Patrick's work. My reference to Patrick's work is for the purpose of focusing the main issues conveniently in this brief paper. The final version of my research will weigh all views expressed in Patrick's excellent essay more judiciously.

[3]Patrick, "Japan ...," pp. 283-284.

[4]Patrick, "Japan ...," p. 284.

[5]The semi-annual financial reports used here are: Yusho do Microfilm Publishing Co., "The annual reports of 1000 firms, 1868-1945" (Microfilms). All company histories, biographies, etc. are not listed here, but a part of the sources used are cited in my article mentioned in note 2.

[6]This observation still needs to be examined further of course. One could borrow on land to buy shares or money borrowed on shares could be used for other than share-buying purposes.

[7]To my knowledge there exists no systematic study on the sources of industrial capital before the 1930s. Lockwood cities both well known studies of the bank of Japan and the Mitsubishi Economic study group. W.W. Lockwood, The Economic Development of Japan (Princeton University, 1954) p. 289; The Industrial Bank's data appear to be the only survey for the pre-1914 period. A recent book by the Japanese scholars also cites the Industrial Bank data as if they are applicable to all industrial firms without the qualifications which Patrick was careful to add. Y. Chō et al, Nihon ni okeru ginkō no hattatsu [The Development of Banks in Japan] (Tokyo, 1959) pp. 96-97.

[8]It of course is possible to borrow money at the going rate of interest and speculate on increases in the price of shares. But, given sharp fluctuations of share prices, this remains to be examined systematically.