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THE EVOLUTION OF JAPAN'S FINANCIAL SYSTEM IN THE INTERWAR PERIOD

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THE EVOLUTION OF JAPAN'S FINANCIAL
SYSTEM IN THE INTERWAR PERIOD

by

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THE EVOLUTION OF JAPAN'S FINANCIAL SYSTEM IN THE INTERWAR PERIOD

I. Introduction*

The role of finance in Japan's economic development is a fascinating, if not fully understood, phenomenon.¹ In the interwar period there was a flowering of the modern financial system concomitant with the overall process of industrial development and diversification. This paper first reviews the broad evolution of Japan's financial system from the end of World War I until the beginning of its profound transformation in the late 1930s as war-related direct controls and centralization were imposed. The second part provides a more detailed examination of the financing of corporate business, in particular the sources and uses of funds in the mid-1930s for the Mitsubishi zaibatsu first-line and second-line industrial and commercial enterprises as a case study. Main emphasis is upon the second-line subsidiaries, whose funding has not been considered previously in much detail, utilizing the Allied Occupation (SCAP) zaibatsu files in the United States National Archives.

II. The Interwar Financial System: An Overview

In most respects the basic features and even the structure of the financial system in the period 1920-1937 were determined by its earlier development. So too were the various problems in financial structure that became apparent during the period. In this section we briefly consider the heritage, the growth and diversification of the financial system, the very substantial changes in commercial banking structure, and the issue of financial dualism.

By 1905 or so, Japan's modern financial system, centered on the banking system, was well in place—in terms of the basic rules of the game, the institutional structure, the development of deposit banking, and the substantial degree of integration of financial markets (Teranishi and Patrick, 1978). The most important rule, to prevail until the late 1930s, was that interest rates in principle were determined by supply and demand in a competitive marketplace; this was the case for virtually all financial claims, ranging from bonds and loans even to rates on time and saving deposits. While the initial establishment of the banking system had been subsidized by various forms of government credit, by the end of Meiji this had become relatively unimportant. The financial system was able to exist and thrive on the basis of market demand for its services. According, "demand-following", market-oriented financial development was a major feature of the interwar period (Patrick, 1966).

Entry into banking had been very easy, resulting in a large number of commercial banks, some 1867 at its peak in 1901. Banks ranged tremendously in size, from tiny "dwarf" banks to such immense banks as the Fifteenth, Mitsui, Dai-ichi, and Yasuda. Moreover, the overall financial structure had been established well prior to World War I. Japan had commercial banks, savings banks, a central bank, long-term credit banks, life and non-life insurance companies, a small but active capital market in bonds and equities, and attendant securities companies and other institutions.

The World War I boom was an important force in the shaping of Japan's interwar industrial and financial structure.² In particular many well-established large firms made such substantial profits that they no longer needed much external long-term or short-term credit.

Others, especially those established during World War I, were not yet sufficiently competitive relative to imports, a problem exacerbated by Japan emanating from World War I with a price level somewhat above the major industrial nations. Financial institutions, large as well as small, were subject to similar disparities in performance in the 1920s as a consequence of differential growth and growth strategies during the war period.

Growth and Diversification of the Financial System

In looking at the interwar period as an entire period, the most striking features are rapid financial growth, increasing diversification among types of financial institutions, and substantial reduction in the number of banks. In Goldsmith's macro measurements,

"The decade [of the 1920s] witnessed one of the most intensive phases in the growth of the financial system compared to national wealth and income, the ratio of financial assets to gross national product rising...from just over three in 1920 to five-and-one half in 1930, from about 3.3 to 5.4 with stocks at market value" (Goldsmith 1972, ch. IV, pp. 77-78).

In the 1930s the expansion of financial assets kept approximately in step with that of national product, the ratio remaining in the neighborhood of five-and-one half (Goldsmith 1972, ch. V, p. 79). Between 1918 and 1938 not surprisingly the ratio of money supply (M_1) to GNP increased only slightly while the more broadly defined M_2 /GNP ratio, including time and savings deposits, rose rapidly (Fujino and Teranishi, 1975, pp. 338-9).

For the interwar period as a whole the government sector, the foreign sector, and the business sector were in deficit. The deficit of the government, particularly pronounced in the 1930s, was financed through the issuance of government bonds, while that of the foreign sector was

matched by the decrease in foreign currency reserves which had been accumulated during World War I. Although the corporate sector was in deficit its retained earnings were relatively large. This sector obtained outside funds both through flotation of stocks and bonds, especially in the 1920s, as well as borrowings from financial intermediaries. The household sector was, of course, a surplus sector; it held its assets in the form of deposits as well as bonds and stocks.

Table 1
here

The increasing diversification of the financial system is shown in Table 1. During the interwar period, growth is particularly rapid in the loanable funds and hence loans and investments of financial institutions for agriculture and small business, trust companies, the Postal Savings and Deposit Bureau, and life insurance companies. Accordingly the relative share of the commercial banks as a whole decreased sharply, but the share of the "large" banks increased, greatly relative to local banks but even relative to the financial system as a whole by 1940.³

The five special banks for long-term credit were of considerable importance. They floated their own bonds as the main source of funds, as well as serving as a conduit for government funds. While privately-owned, profit-maximizing institutions, they were subject to considerable government influence. Trust companies and insurance companies, while growing, had a smaller market share. Although postal savings provided the basis for substantial government financial intermediation, its funds were mainly directed to the central and local governments and to social overhead investment (through the special banks and local municipalities).

The stock market continued to expand during the 1920s. In addition, the Japanese bond market developed particularly strongly during the 1920s

and 1930s. While the central government continued to be an important borrower, local governments, special banks, and large industrial corporations (especially electric power companies) relied increasingly on new bond issues in a free, competitive capital market (Shimura, 1969).

Concentration in the Commercial Banking Structure

The increasing concentration within the banking system during the interwar period is an important topic which has received considerable attention. The figures are stark.⁴ Japan had 2,001 ordinary and savings banks in 1919; by 1929 this had declined to 976, and by 1939 to 389. New banks were established throughout, 244 in the first ten-year period and 69 in the second. However, there were substantially more bank failures, 348 and 328 in the respective subperiods. There were even more mergers, 838 and 438, typically among small banks many often on the verge of bankruptcy, rather than with the Big Five (Dai-ichi, Sumitomo, Yasuda, Mitsui, Mitsubishi) or other large banks. The one exception was the emergence of the Sanwa Bank in 1933 as an amalgamation of three medium-sized Kansai banks, thereby changing the Big Five to the Big Six.

The overall growth of the financial system masks the tremendous, recurrent turbulence to which the financial system was subjected during the interwar period, turbulence reflected in the 81 percent decline in the number of banks. There were two basic causes at work: structural defects of the banking system itself; and a series of external events and random shocks which subjected the banking system to one crisis after another.

The large number of small banks, operating in markets limited geographically and hence in diversification of borrowers by industry, without

serious constraints on proportion of loans to a few borrowers, without depositor insurance or other forms of depositor protection, and without adequate outside inspection of the quality of bank assets, made the structure highly vulnerable. There were two, interrelated problems: that of the failure of an individual bank due to insolvency (insufficient value in assets to cover deposits) or illiquidity (inadequate liquid asset reserves combined with inadequate ability to convert other assets into cash quickly in event of strong shift in depositor preference toward currency); and the spreading effects of a single bank failure on depositor confidence in other banks. The structure of the banking system did little to protect individual banks or the banking system from bank runs and panics.

And the structure was tested by a series of exogenous events. Of great importance was the greater inflation in Japan during World War I than elsewhere, combined with the effort throughout the 1920s to deflate the economy sufficiently to return to the gold standard at the prewar parity.⁵ This difficulty was exacerbated by the world business cycle exogenous to Japan; the recession of 1920-21 and the depression of 1930-31 had major impacts. It is estimated that during 1921-22, as a consequence of recession and sharply declining price levels, about 20 percent of all commercial bank outstanding loans and advances could not be paid off on schedule; underlying collateral was either illiquid or valueless (Kang, 1960, p. 238).

And then there was the random shock: the Kanto earthquake of 1923. The earthquake caused tremendous additional losses. The government and Bank of Japan correctly stepped in rapidly to provide support, including the discounting of what came to be known as "earthquake bills", some of which never did achieve any underlying value. Their life and use was

extended until the denouement of spring 1927, when debate over the issue of further extension of the guarantee of the remaining ¥109 million in commercial bank portfolios led to disclosure of the possible unsoundness of several banks holding earthquake bills; this resulted in bank runs culminating in the most profound banking crisis Japan has ever endured. Deposits shifted dramatically from small banks especially to postal savings (a completely riskless form of time deposit) and to some extent to large banks (true more of monetary than time deposits).⁶ The succession of bank runs and eroding confidence of depositors in small banks was the basic cause of the failure and merger of banks during the interwar period.

Government policy abetted this process of consolidation. The short-run response of the monetary authorities to a bank panic was to attempt to contain it from spreading through substantial provision of emergency loans to affected banks deemed worth saving; this was fully appropriate. The longer-run response was to strengthen the financial system by imposing high liquidity and capital requirements.⁷ It was difficult to impose minimum requirements on commercial banks, but the Banking Act of 1927 set large minimum paid-in capital requirements to be enforced by 1932, ranging from ¥500,000 for towns under 10,000 population to ¥2,000,000 for Tokyo and Osaka. That, combined with the banking crisis of 1927, gave the Government the will and the legislation to force bank consolidation.

The interwar period is often regarded as the period of the concentration of finance into the "Big Five" banks, and the attendant consolidation of the power of the "Big Four" zaibatsu. While to some extent this was true, more so when zaibatsu-controlled insurance and trust companies are included, it appears that (a) the extent of aggressive zaibatsu

efforts at financial concentration prior to the wartime controls of the late 1930s has been exaggerated, and (b) focus on the "Big Five" is in part an artifact of historical scholarship. The large banks generally behaved quite conservatively throughout this period, particularly following the 1927 crisis. They tended to have surplus funds, and managed their portfolios conservatively. They sought safe, large customers, not small. Moreover, there was considerable turmoil within the large bank sector, particularly following World War I.⁸ Interestingly the Fifteenth Bank, initially by far the largest commercial bank in Japan (with half the capital of the total banking system at its formation), is seldom included in the discussion of large banks. The formation of the Sanwa Bank in 1933 poses an analytical problem for those supporting the "Big Four" zaibatsu financial concentration thesis; it thereby became the largest bank in Japan, with total assets 16.6 percent greater than its next competitor Sumitomo Bank, and 30-40 percent above Mitsui and Mitsubishi Banks respectively.

Financial Dualism

The growth of large banks relative to small and the sharp reduction in numbers of smaller banks, together with the evolving interplay between the modern financial system and traditional sources of finance, raise important issues concerning the nature and degree of financial dualism during the interwar period.⁹ The clearest indicators of financial dualism are differentials in interest rates on borrowed funds and in access to funds by category of borrower (such as firm size) substantially in excess of transactions costs and default risks. These differentials arise through financial market imperfections, due to underdeveloped financial markets or to oligopolistic market power of financial institu-

tions (and to government regulation, not so important in prewar Japan), and through non-profit-maximizing behavior of individuals and institutions. Financial dualism is analagous to the much better documented differentials and dualism in labor markets (Yasuba, 1976).

These differentials are frequently associated with "traditional" versus "modern" sectors. The traditional sector consisted of very small-scale units of production, essentially all agriculture and miniscule industrial and commercial enterprises (defined as having less than ¥10,000 total assets and fewer than seven workers on average, predominantly family members or apprentices, in 1932). Traditional sources of finance were family and friends, moneylenders, and rotating credit co-operatives (tanomoshiko or mujin). It is important to understand that location in the traditional sector does not necessarily imply either non-profit-maximizing behavior or a high degree of segmentation between traditional and modern financial markets. For example, we do not know the extent to which family and friends provided credit on maximizing or other criteria, or how the relative importance of such criteria evolved over time. By the interwar period individuals throughout the economy had a wide range of options among financial and real assets.

Empirical evidence on interest rate differentials or access to credit by firm size is so fragmentary for the interwar period that it is not yet possible to assess how significant financial dualism was. Contemporary literature refers to the difficulties small business had in borrowing in the 1928-32 period of bank consolidation but little empirical evidence is presented. Survey data by firm size for Tokyo wholesale and retail firms in 1931 and for Tokyo, Yokohama, and Kobe manufacturing firms for 1932 do not indicate any substantial interest rate differentials

except for those largest firms able to issue bonds. Moreover, it appears that most firms of all sizes in the interwar period were able to finance long-term investment needs internally or through equity issue (in most cases sold privately of course, in smaller firms typically to family and friends). Debt equity ratios were low and declining over the period (Fujino and Teranishi, 1975, p. 339). These fragmentary bits of information suggest that, while large banks and other financial institutions may have provided the loan and investment funds primarily to large industrial enterprises and smaller banks to smaller businesses, the financial system as a whole was sufficiently competitive with specific financial markets sufficiently interrelated that serious market segmentation and major interest rate differentials and access to funds by firm size within the modern sector was not a major feature of the interwar economy. That is to say, financial dualism may well not have been a significant feature of the modern sector. With the evidence so scanty, this can be regarded only as a hypothesis deserving further research.

An alternative approach is to examine the relative importance of modern versus traditional sources of funds by different types of borrowers, and hence their degree of integration into the modern financial system. At the apex were the very large industrial corporations, able to issue bonds and borrow funds virtually at will. While reliance on external funds apparently was approximately constant by firm size for all but the largest (which borrowed more), the composition shifted substantially. As firm size decreases, the proportion of external credit derived from modern financial institutions decreases and that from traditional sources (moneylenders, family and friends) increases. Miniscule firms relied overwhelmingly on traditional sources of finance.

Traditional sources of finance continued to be very important in agriculture as well. An agricultural survey in 1932 indicates some 52 percent of agricultural credit continued to come from traditional sources, despite the growing role of modern financial institutions specifically designed for farmers (Table 1 and Teranishi, 1976).

Moneylenders are the prototype of the traditional financial intermediary. Linkages between the traditional and modern financial sectors had become sufficiently close by the beginning of the twentieth century that the lending rates of moneylenders and banks moved rather closely together. This continued in the interwar period. Moneylender interest rates fluctuated less cyclically than bank loan rates, and were (not surprisingly) always higher.¹⁰ The number of moneylenders reached a peak in 1924 or so, and did not begin to decline substantially until after 1935. Their working capital showed a similar pattern, reaching a peak of ¥733 million in 1925, and declining only after 1930. (These data are based on Tax Bureau statistics, hence presumably are underestimates.) Interest rates on moneylender loans were lower in urban than rural areas, and lower in more developed than less developed rural areas. As Shibuya notes, this reflects the greater development of, and competition from, modern financial institutions in these economically more advanced areas.¹¹

It seems evident that the predominant financial dualism in the period continued to be between the traditional and modern sectors, in agriculture, industry, and finance. Miniscule firms, continuing to rely upon relatively simple technology, very small amounts of capital, and family labor, had only limited though presumably increasing access to credit from modern financial institutions. Accordingly they continued to rely predominantly upon traditional sources of finance. At the same

time there was sufficient interconnection between traditional and modern financial markets, with flows of funds and interest rate determination in the latter increasingly dominating the former, that it is not clear that the extent of the financial dualistic gap was severe. On this point too further research is needed.

One final point should be made in this overview. The World War II period, 1937-1945, brought profound changes in the rules of the game of the financial system and in the banking structure. Interest rates were controlled administratively, credit was allocated directly, entry was virtually ended, the commercial banking system was consolidated further into a few (nationwide) city banks and, in principle, one local bank per prefecture. This was the period in which major zaibatsu financial and other economic power became highly concentrated (Bisson, 1954 and Hadley, 1970). And it was this wartime-engendered set of controls, policies, and banking structure—rather than those of the interwar period and earlier—which have determined the financial policies and structure of the financial system since World War II.

III. The Financing of Corporate Business

As analyzed elsewhere in this volume, economic growth during the interwar period was led by investment and production in manufacturing and facilitating industries. The financing of large enterprise has been relatively well documented, but we still know little about the financial relations of smaller firms. The Allied Occupation zaibatsu company files provide information on the financing of smaller (second and third line) as well as the major companies under the 83 designated zaibatsu

holding companies.¹² Data on the Mitsubishi zaibatsu are relatively comprehensive, and are here used for a case study.¹³

Table 2
here

Evidence on the sources and uses of funds for major industrial firms is provided in Table 2. Several points stand out. One is the always substantial reliance on increases in paid-in capital. This was mainly by allotment to existing shareholders (including zaibatsu holding companies), though some shares were newly issued for public subscription through the stock market (Shimura, 1969, p. 222, Table 4-11). Second is the relative modest reliance on retained earnings (reserves) except in the 1932-36 period. A third is the increasingly large importance of corporate bond issue during the 1920s. The commercial banks, trust companies, and insurance companies were major purchasers. Correspondingly, reliance on (bank) borrowing, trade credit, and other short-term sources was quite modest until 1937-41.

The funding of the Mitsubishi major industrial corporations in the mid-1930s follows these general patterns. The overall growth and evolution of Mitsubishi, especially the family-owned holding company Mitsubishi Goshi (incorporated in 1937 as Mitsubishi Honsha) and its first-line subsidiaries, have been quite well documented.¹⁴ There are problems in defining the membership and size of the prewar Mitsubishi zaibatsu. Takahashi and Aoyama (cited in Hatade, 1978, pp. 322-3) indicate Mitsubishi in 1937 comprised 73 industrial companies, including six first-line and 29 second-line, having 5.5 percent of Japan's total industrial paid-in capital. Iwai (1937) used a somewhat more restricted definition, and a slightly different listing of first-line companies; by that definition the Mitsubishi share, including financial institutions, in 1937 was 3.3 percent of total corporate paid-in capital (Hadley, 1970,

pp. 54-5).¹⁵

The first-line subsidiaries, under the formal authority of the holding company, were the most important operational component of the zaibatsu. Here too definitional difficulties exist, especially over time, due mainly to the dynamic evolution of individual firms.¹⁶ For analysis of the 1935-37 period I use Hatade's listing (1978, p. 300) of first-line industrial subsidiaries plus Mitsubishi Chemical Industry (see Table 3) because it grew so rapidly in fixed investment between 1935-37 as to rank fourth in total assets (¥48.1 million) in 1937, though still far behind the three dominant companies: Mitsubishi Trading (¥390.2 million), Mitsubishi Heavy Industries (¥308.3 million) and Mitsubishi Mining (¥214.1 million). The first-line subsidiaries also included three financial institutions: Mitsubishi Bank, Mitsubishi Trust Company, and Mitsubishi Marine and Fire Insurance Company.¹⁷

The detailed data for 1935-37 reflect the evolution of the funding process for first-line subsidiaries since the end of World War I. Most important was the transformation of Mitsubishi Goshi from an operating to a holding company, still fully Iwashaki-owned, as it spun off departments into first-line subsidiary companies. Hatade argues (1978, ch. 5-6) that one reason for these organizational changes was the inability of Goshi¹⁸ to finance expansion from its internal resources and, more importantly, that by the early 1930s Goshi had substantially turned over management operating decisions concerning finance as well as other matters to first-line subsidiaries. Almost all Goshi's investments were in shares in subsidiaries. In two cases foreign capital was involved in first-line companies; Westinghouse Electric Company invested in 10 percent of Electric Manufacturing's shares from 1923, and Oil was an

essentially 50-50 joint venture with Tidewater Associated Oil Company established in 1931. Initially, most stock issues were absorbed within Mitsubishi. However, during the 1920s several companies (Mining, Bank, Trust) opened new stock issues to public subscription. While this may initially be in substantial part due to government pressure, by deliberate strategy it became an increasingly important external source of funds by the mid-1930s as discussed below. Also companies issued bonds. To what extent they were purchased by Bank, Trust and the various insurance companies is not clear but apparently it was substantial. For instance Shipbuilding's bond issue in the 1920s was purchased entirely by Bank (Hatade, 1978, ch. 5).

Table 3,
, 5 here

By the mid-1930s a quite clear pattern of finance had emerged, well demonstrated in the balance sheet data for 1935 (Table 3) and the sources and uses of funds for 1936 and 1937 (Tables 4 and 5).¹⁹ Long-term investments, in fixed assets and securities, were essentially funded entirely by long-term sources, in both stock and flow terms. Net worth was the overwhelming source; bond issue was negligible with the important exceptions of Mining and Chemical Industries in 1937. Almost two-thirds of net worth was in paid-in capital and its increases. Reliance on short-term credit—borrowings, trade credit, advance payments, accounts payable—varied considerably; Trading naturally used large amounts and proportions of trade receivables and payables and short-term bank borrowings to finance its net trade credit balances.

Firm growth was funded from three categories of sources: internal to firm, internal to the Mitsubishi zaibatsu, and external funds from the public. It appears that firm internal sources were used first, to fund relatively modest new investments. However, the earlier priority toward

funding internal to the zaibatsu, was somewhat attenuated in 1935-37-- in part probably due to the constraints upon zaibatsu internal sources relative to the substantial increases in fixed investment and in equity funds to subsidiaries by Heavy Industries and Mining in both 1936 and 1937, and by Chemical Industries' fixed investment in 1937.

The sources of funds generated internally by the firm are straightforward: retained earnings, depreciation allowances, and legal and optional reserve funds. They are all long-term in nature. Despite the substantial growth and profitability of first-line firms, by 1935 internally generated funds were only 54.9 percent of paid-in capital. Firms were expected to pay most profits out in dividends. This was an effective technique for transferring funds upward (often to Goshi and the Iwasaki families) where they could be allocated to new areas of rapidly growing investment requirements. Funds which might have been internal to the firm thereby became internal to the zaibatsu as a whole, depending on the degree to which stock was held publicly.

Funds internal to the Mitsubishi zaibatsu were both long-term and short-term, and in a variety of forms. Full data are not available, but the Occupation records indicate general patterns. Shares were held vertically by Goshi, laterally by other first-line companies, and in small amounts by senior employees, and in a few instances directly by Iwasakis (see Table 3). The Occupation records do not indicate holders of the bonds issued, but probably Mitsubishi financial institutions were predominant.

The most substantial shift to external sources occurred in new share issues over 1935-37 totalling ¥93.5 million. Goshi took only 18.6 percent. It maintained its full ownership of Trading and proportionate share of

Oil, increased absolute holdings but decreased its share of Heavy, and modestly decreased holdings in Mining, Warehouse, and Electric Manufacturing. The share issues of Electric, Warehouse, Mining, and part of Heavy, about 45 percent of the total, were sold to the public. Chemical, a close second to Heavy in increase in paid-in capital 1935-37, had all its equity provided by its joint owners Asahi Glass and Mining.²⁰ (It could be argued that Mining's own public equity issue was used to finance Chemical.) The public demand for Mitsubishi shares were apparently strong. They were sold at a premium, and the Heavy Industries 1935 issue was oversubscribed 27 times (Economic Planning Agency, 1958, pp. 140-41).²¹ The securities holdings of first-line company were overwhelmingly stocks, predominantly of subsidiaries but also small amounts in other first-line firms, the limited bond holdings were non-related, mainly government.

By contrast first-line sources and uses of short-term funds were quite heavily internal to the Mitsubishi zaibatsu, at least in the first instance.²² By and large trade credit was to and from subsidiaries, other first line firms notably Trading, and affiliates. Heavy Industries received substantial advance payments from the Navy Department, as well as extending it smaller but significant amounts of credit. Borrowing was predominantly from Bank, with two major exceptions. Trading, by far the largest short-term borrower, obtained about 30 percent from Bank, slightly less from Yokohama Specie Bank, and the remainder from other (unspecified) non-Mitsubishi institutions. Oil was the only clear case of competition; during 1935-37 it borrowed substantially more from Sumitomo Bank and Sumitomo Trust Company than from Mitsubishi Bank and Mitsubishi Trust Company—and at lower interest rates. The data suggest interest rate competition: in 1936 Mitsubishi charges 4.75 percent, Sumitomo 4.38 percent; in 1937 Mitsubishi dropped to the 4.38

percent rate, but Sumitomo charged 4.015 percent.²³ Deposits were mainly in Bank and Trust, though Trading also had substantial deposits in Yokohama Specie Bank. Interestingly, some firms held temporarily surplus funds in their parent, Heavy Industries in Goshi and Chemical Industries in Mining and Asahi Glass.

All first-line firms had a system of employee deposits; for Mining and Heavy Industries they were not negligible, in 1935 comprising 4.9 percent and 7.7 percent of total liabilities respectively. Worker deposits were apparently perceived as a fringe benefit to employees, since interest rates paid were substantially above individual fixed deposit rates in banks or company borrowing rates from banks. Mining paid a 6.57 percent interest rate on employee deposits in 1936 and 1937, while it was borrowing in 1937 at 4.4 percent from Bank. It appears that worker deposits and pension funds were also used substantially to finance company investments in securities of subsidiaries and other zaibatsu members.

The Allied Occupation zaibatsu files are one of the few sources of fairly detailed financial data on smaller companies for the 1935-45 period. Tables 6, 7, and 8 provide balance sheet and sources and of funds data for the 15 second-line Mitsubishi subsidiaries which existed in 1935 and for which the files contain data. As their names indicate, six were subsidiaries in the Empire, Shanghai, or Singapore.²⁴ While size varied substantially, all were small, with company assets less than ¥10 million as of 1935. Only one, Tokyo (later Mitsubishi) Steel Products, graduated to first-line subsidiary status by war-end. Seven firms were in manufacturing, three in coal mining, two in wholesale trade, and one each in a railroad for coal mining, warehousing, and rubber plantations.

As Table 6 indicates, Mining owned by far the most subsidiaries in the sample, mostly coal mines and related railroad facilities which financially

Table 6,
8 here

were little more than operating divisions. Trading had small equity positions in a large number of companies whose purchases and sales it handled, and probably exercised substantial control through marketing arrangements rather than ownership. For three companies ownership was sufficiently spread among first-line companies and Goshi that control could not be ascertained. Consolidated Sangyo, interestingly, was owned directly by the Iwasaki families, with no involvement of zaibatsu firms.²⁵ Mitsubishi control prevailed; all companies were privately-held, even where Mitsubishi ownership was not complete.

The financing patterns for second-line subsidiaries were similar to those for first-line companies, but simpler and more pronounced. The predominant source of funds was internal to the zaibatsu, mainly from parent firms; both internally generated funds and those external to Mitsubishi were much less important. Long-term financing needs, predominantly for fixed investment, were entirely financed by net worth, as indeed were the preponderance of total assets. In 1935, 88.4 percent of the net worth of the 15 companies amounting to ¥40.1 million (compared with ¥296.6 million for the 7 first-line companies) was in paid-in capital, and net worth equalled 72.0 percent of total assets. Reliance on equity funding varied with the degree of fixed investment in total assets, with capital-intensive coal mining at one extreme and the trading companies at the other. Moreover, firms based overseas had substantially higher net worth/total asset ratios than domestic firms, even within manufacturing and mining.

Between 1935-37 total assets increased for every firm except Sakai Chemical and Shanghai Warehouse. While absolute amounts of investment were substantial for the coal mining companies, the relative rates of growth due to fixed investment were most rapid for Mitsubishi Chemical Industry

Machinery (1937 total assets 4.2 times those in 1935), Manchuria Mitsubishi Engineering (3.9 times), and Tokyo Light Alloy (2.6 times), and investments in inventories and receivables by Ryobi (2.1 times). Growth was funded primarily by new stock issue to parent firms, which accounted for 74.9 percent of the increase in net worth in 1936-7 of ¥27.7 million and, more than meeting long-term uses, alone funded 59.2 percent of the growth in total assets. Interestingly, the relationship between profitability and growth of assets by firms was roughly inverse. Engineering and Chemical Industry actually made losses, while the most profitable firms included Sakai, Bibai, Yabetsu, and Shoko. Presumably high growth firms were newer and had higher start-up costs, but had good future prospects. This disparity in individual firm sources and uses helps explain the large stock issue, since retained earnings and depreciation allowances in 1936-7 was equal to 85.0 percent of second-line fixed investment. It also appears that firms were using stock issue in 1937 to build up liquid assets in anticipation of further fixed investment plans.

While internal sources of funds increased, most funding came from other sources within the Mitsubishi zaibatsu. Notably, any subsidiaries engaging in substantial fixed investment (other than highly profitable Consolidated Sangyo) funded it through stock subscription by parent firms and other stockholders essentially proportional to holdings. All were closely-held subsidiaries; public stock subscription was not used, not surprising given their relatively small size. Changes in the structure of ownership within Mitsubishi did occur, notably the sharp decline in Goshi's ownership of Tokyo Steel Products with Mining becoming the largest shareholder followed by Heavy Industries. Only one firm, Chemical Machinery, had long term borrowings, obtained from Mitsubishi Trust.

With the exception of the two second-line trading companies and Shoko Glass, reliance on short-term funds was relatively limited. Several companies financed fixed investment from short-term sources in 1936, covered by the parents' provision of long-term equity funds in 1937; Yabetsu simply obtained advances from its parent, Mining, and Light Alloy and Chemical Machinery borrowed from Mitsubishi Bank. Most domestic second-line companies had a banking relationship with Mitsubishi Bank, evidently their main source of bank loans. In addition several had deposit relationships with a number of competitor banks. This somewhat surprising fact may well be explained in terms of convenience, since Mitsubishi Bank had only 27 branches during this period. Data on overseas company banking relationships, while limited, suggests they relied primarily upon Yokohama Specie Bank and the semi-governmental colonial banks. The practice of depositing short-term funds with the parent company, noted for first-line companies, was implemented at this level as well in the cases of Bibai, Ryobi, and Yabetsu at least. Most of the second-line firms had trade and trade credit relationships with Trading in addition to their parent firm; they provided normal trade credit to a variety of customers, most of which were not zaibatsu members.

In sum, the second-line companies were much more dependent on their parent for both long-term and short-term funds than was the case for first-line companies, and hence more dependent on funding internal to the Mitsubishi zaibatsu. They were too small to obtain funds from the public or outside financial institutions, with the important exception of those firms operating in the Empire, especially Manchuria, where semi-governmental funding was possible. Yet there is no evidence that these firms suffered from a short of funds, total or equity. In one sense the first-line companies were their financial intermediaries with the outside world. More importantly,

they were their owners and masters. The reliance upon and provision of equity capital suggests it was the (first-line) parent companies that decided when to expand, and where. In this perceptive second-line company financial dependency was part and parcel of their overall dependence.

IV Conclusion

This essay reflects, and supports a general point of view which sees the development of Japan's financial system in the interwar period as one of natural, evolutionary growth and diversification based on rather competitive market forces, within financial markets and in business demand for credit and related financial services. Large financial institutions serviced large corporations, small institutions small. Nonetheless there was sufficient interaction among financial markets that significant financial dualism did not emerge within the modern sector. The main financial dualism was between the modern and the traditional sector of agriculture and miniscule industrial and commercial firms. Zaibatsu firms and financial institutions grew during the period as a whole, but so too did others. The overwhelming concentration of economic power to the Big Four zaibatsu was to come about later within the context of the controlled, centralized economy of World War II.

The Mitsubishi zaibatsu provides a useful case study of the evolution of corporate finance. There was, first, the predominant reliance on funding internal to the zaibatsu. Net worth for the first-line subsidiaries in 1935 was equal to 51.1 percent of total assets, 70.4 percent when Trading with its huge trade credit and borrowings is excluded, and for second-line subsidiaries 72.0 percent. This was overwhelmingly in the form of paid-in capital rather than retained earnings and reserve accounts in individual

firms. Nonetheless most of the equity was derived from accumulated profits internal to the zaibatsu as a whole. Between 1935 and 1937 this pattern changed substantially for first-line companies, as about 45 percent of the large amount of new shares issued was sold, directly or indirectly, to the public. For second-line firms, however, reliance on zaibatsu-internal funds through their first-line parents persisted. Both first-line and second-line short-term financial relationships—deposits, loans, trade credit received and extended—were substantially with Mitsubishi financial institutions. On balance these probably represented net inflows from the public, mainly because of the large share of Mitsubishi Trading in total current liabilities (58.6 percent of both first-line and second-line companies in 1935) combined with its predominant reliance on bank loans from non-Mitsubishi sources. However, lack of data prevent any quantitative assessment. Given internal profits, the strength of its financial institutions and the attractiveness of new share issues by first-line companies in the open market it is difficult to argue that the Mitsubishi zaibatsu was constrained to grow less rapidly than it desired due to lack of access to finance. The evidence indicates that, through the financial support of their parents, this was as true of second-line subsidiaries as those in the first rank.

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FOOTNOTES

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¹An extensive, detailed, though not fully comprehensive literature exists in Japanese. The English language literature is much more sparse, and is frequently derivative of Japanese scholarship. Useful references in English for the interwar period include Yamamura (1972) and (1978), Patrick (1971), Teranishi (1977), and Fuji Bank (1967). In addition, important materials exist in manuscript form, especially Goldsmith (1972), Feldman (1976), and Kang (1960).

²See, for instance, the paper in this volume by Hidemasa Morikawa, as well as Patrick (1971) and Yamamura (1972).

³This is in part a definitional artifact, due to the establishment of the Sanwa Bank in 1933. The "Big Five" bank share of deposits as defined in Table 1 was 15.5 percent in 1940 (computed from Mitsubishi Bank, 1954, p. 277).

⁴For annual data and analysis see Teranishi (1977, p. 451f).

⁵For a discussion of this macro problem, and the difficulties its policy implementation caused the financial system, see Patrick (1971).

⁶For analyses see Teranishi (1977) and Feldman (1976).

⁷Under the Savings Bank Act of 1921 savings banks had to have a minimum capital of ¥500,000 and had to hold government and other bonds, as well as reserves with the Ministry of Finance Deposit Bureau. Trust companies under the 1922 law required capital of ¥1,000,000. In fact,

savings banks had by far the highest deposit/paid-in capital ratios and accordingly the highest profit rates of all major categories of financial institutions (Feldman, 1976, pp. 33-38).

⁸The essay by Hidemasa Morikawa in this volume is particularly useful on these points.

⁹This discussion is based substantially on Teranishi and Patrick (1977).

¹⁰This paragraph is based on Shibuya (1962).

¹¹The evolutionary process whereby traditional financial institutions first became, in effect, hybrids and then modern financial institutions is best exemplified in mujin, the traditional rotating credit cooperative for mutual help among people who knew each other. Eventually they became less personalized installment deposit and lending organisations, particularly for small business. The first commercial mujin was started in 1901; by 1915 the number had increased so rapidly that the Mujin Business Law was passed to regulate them. Extensive revision of the law in 1931 stipulated that mujin had to be joint-stock companies.

¹²These included major cotton spinning companies and their subsidiaries (Hadley, 1970, pp. 464-5). SCAP required information on some 3,000 companies regarded as first, second, and third line subsidiaries or affiliates. These materials are in individual company files in approximately 80 boxes in the U.S. National Archives at Sutland, Maryland. In principle companies reported, in English, from 1935 annual balance sheets, ownership, long-term debt, stock and bond holdings by issuer, loans and other liabilities by source, and related financial data. Actual coverage varies widely; in some cases, especially for smaller companies, files are so incomplete as to be virtually useless.

¹³Substantial materials are also available on the Mitsui zaibatsu; they were not sampled since other studies are available (see Shibagaki 1965 and 1971).

¹⁴See, for example, Economic Planning Agency (1958), Hatade (1978), Iwai (1937), as well as Bisson (1954), Hadley (1970), and the essay by Morikawa in this volume.

¹⁵By the end of World War II Mitsubishi consisted of 241 companies, with 8.3 percent of total paid-in capital in Japan Proper and 29.7 percent of the much smaller amount outside Japan (Hadley, 1970, pp. 26, 50-51, 459). Definitions turn substantially on the degree of control Mitsubishi Honsha or its subsidiaries exercised over affiliated or "collateral-line" companies in which only minority equity was held.

¹⁶Thus Mitsubishi Steel, never very successful, was absorbed into Nippon Steel Company in 1935; Mitsubishi Airplane and Mitsubishi Shipbuilding merged to become Mitsubishi Heavy Industries; Mitsubishi Real Estate was finally separated out from the holding company in 1937, much later than other major subsidiaries.

¹⁷Unfortunately annual data on these institutions for this period are not in the SCAP files.

¹⁸Hereafter Mitsubishi is left off company names.

¹⁹The sources and uses flows are derived from the balance sheet and data on depreciation allowances taken from profit and loss accounts; new fixed investment equals changes in fixed assets plus depreciation. The tables, and Tables 6-8, are derived from the Allied Occupation zaibatsu files in the National Archives. These tables must be used with some caution

since some reports, especially for second-line subsidiaries, are incomplete, there are data inconsistencies within and among reports, the English translations of accounting items were not always identical or correct, and more detailed entries have been consolidated.

²⁰This ownership pattern argues for classifying Chemical Industries as a second-line subsidiary. However, its size and growth were so large from 1937 that, in retrospect, it clearly was in transition to first-class status. Note that as of 1935 Goshi held minority ownership in other first-line companies, not only Oil but also Bank and Trust (Hatade, 1978, p. 320).

²¹Goshi used this opportunity to sell Heavy Industries shares in the market, making a capital gain of ¥8.5 million (Hatade, 1978, ch. 6). It repeated this process in 1937. This was another mechanism for obtaining external funds.

²²Unfortunately data are not available on the proportion of deposits from and credit to Mitsubishi firms at Bank, Trust, and Mitsubishi insurance companies, so no evaluation can be made of Mitsubishi reliance on external funds generated by outsider deposits in its financial institutions. As noted below, the large borrowings of Trading from non-Mitsubishi sources is an additional external channel; it is not possible to know to what extent its trade credit and that of other Mitsubishi firms was internal to the zaibatsu. The evidence suggests much was not internal, at least by a fairly restrictive definition of the zaibatsu.

²³Unfortunately data in the Occupation files on interest rates are fragmentary.

²⁴Consolidated Sangyo Koshi. Shoko Glass was in Manchuria.

²⁵No data are available on its banking and trade credit relationships.

It was among the most profitable firms in the sample, earning about 14 percent on net worth 1935-37, thereby able to finance its considerable fixed investment internally.

TABLE 1. PERCENTAGE DISTRIBUTION OF DEPOSITS, AND LOANS AND INVESTMENTS, BY TYPE OF FINANCIAL INSTITUTION, 1910-1940

	1910 (1)	1910 (2)	1920 (1)	1920 (2)	1930 (1)	1930 (2)	1940 (1)	1940 (2)
Ordinary and Savings	72.8	73.6	70.3	72.1	47.4	50.7	46.4	45.5
Large ^a	12.7	12.0	14.4	12.2	14.7	14.7	20.5	19.9
Local	60.1	61.5	55.9	59.9	32.7	36.0	25.8	25.6
Special Banks ^b (Long-Term Credit Banks)	14.4	13.3	14.9	14.1	13.0	14.6	10.4	10.4
Financial Institutions for Agriculture and Small Business ^b	0.3	0.5	2.2	1.6	7.1	7.0	13.5	9.0
Trust Companies ^c	-	-	-	-	7.6	6.4	8.1	5.8
Life Insurance Companies ^d	3.8	2.9	4.4	3.2	6.6	6.4	5.6	8.1
Postal Savings and Deposit Bureau ^e	8.6	9.7	8.2	9.0	18.3	14.7	16.0	21.3
Total amount (million yen)	2010	2429	10916	12444	21680	22412	62816	61118

Source: Teranishi and Patrick (1977, Tables 1 and 2).

Notes: ^aFive banks 1910-1930, six banks 1940; ^bDeposits plus financial debentures; ^cTrust plus deposits; ^dReserves; ^ePostal savings and insurance and annuity.

(1) Deposits; (2) Loans and Investments

TABLE 2. SOURCES AND USES OF FUNDS OF LARGE INDUSTRIAL CORPORATIONS, 1914-1941

	A			B		
	1914	1922	1927	1928	1932	1937
	to	to	to	to	to	to
	1921 ¹	1926	1930 ²	1931	1936	1941
	(1)	(2)	(3)	(4)	(5)	(6)
I. Absolute Amounts (bill. yen)						
1. Paid-in capital	0.74	0.54	0.44	0.13	1.60	4.69
2. Reserves	0.30	0.16	0.12	-0.14	0.93	2.54
3. Corporate bonds	0.10	0.48	0.69	0.53	-0.05	1.48
4. Borrowings	0.23	0.33	0.30	0.11	-0.14	1.62
5. Other outside liabilities				-0.50	0.99	6.16
6. Sources - total	1.37	1.51	1.55	0.13	3.33	16.49
7. Fixed assets	1.41	1.16	1.12	0.60	1.20	3.53
8. Inventories	0.13	0.17	-0.00	-0.45	.67	4.36
9. Other current assets	0.55	0.18	0.39	-0.02	1.47	8.60
10. Uses - total	2.09	1.51	1.51	0.13	3.33	16.49
II. Percentage Composition (in percent)						
1. Paid-in capital	54	36	28	100	48	35
2. Reserves	21	11	8	-107	28	19
3. Corporate bonds	7	32	45	408	- 2	10
4. Borrowings	18	22	19	84	- 4	12
5. Other outside liabilities				-385	30	24
6. Sources - total	100	100	100	100	100	100
7. Fixed assets	68	77	74	461	36	21
8. Inventories	6	11	0	-346	20	27
9. Other current assets	26	12	26	- 15	44	52
10. Uses - total	100	100	100	100	100	100

Source: Bank of Japan (1966); A from Table 124, pp. 334-5 (coverage 50-75 firms); B from Table 125, pp. 336-7 (coverage 295-330 firms).

Notes: ¹From first half 1914 to second half 1921.
²From second half 1926 to first half 1930.

TABLE 3. ASSETS AND LIABILITIES, MITSUBISHI FIRST-LINE COMPANIES, 1935 (unit ¥1,000)

	Mitsubishi Heavy Industries	Mitsubishi Warehouse	Mitsubishi Trading	Mitsubishi Electric Manufacturing	Mitsubishi Oil	Mitsubishi Chemical Industries	Mitsubishi Mining
Net Worth							
Capital, paid-in	60000	10000	22500	15000	7000	2000	75000
Retained Earnings	6205	734	2162	2190	(62)	266	27542
Legal Reserves	7080	2500	1940	330	12	14	
Optional Reserves	25505	2770	6173	2800	118	10	16788
Subtotal	98790	16004	32775	20320	7068	2290	119330
Long Term Liabilities							
Debentures		2000					
Borrowings						500	
Subtotal		2000				500	
Current Liabilities							
Workers' Deposits	13588	743	2382	1978	97	239	6357
Borrowings	3000	2598	115241		5868		88
Trade Credit	43162	740	48930	6085	36	9	8529
Accounts Payable	6849	529	4948	3705	287	638	1384
Other	1386		2076		89	129	60
Subtotal	67985	4610	173577	11768	6377	1015	16418
Total Liabilities	67985	6610	173577	11768	6377	1515	16418
TOTAL	166775	22614	206352	32088	13445	3805	135748
Proportion of Paid-in Capital Held by							
Mitsubishi Holding Company	51.4%	100%	99.6%	90.0%	30.0%	0	57.8%
Mitsubishi Group	54.9%	100%	100%	90.0%	49.5%	97.8%	60.8%

TABLE 3 (CONTINUED):

	Mitsubishi Heavy Industries	Mitsubishi Warehouse	Mitsubishi Trading	Mitsubishi Electric Manufacturing	Mitsubishi Oil	Mitsubishi Chemical Industries	Mitsubishi Mining
Long Term Assets							
Tangible Fixed Assets	40343	19364	16086	7910	5393	2710	67258
Intangibles	566			150			
Securities	8805	1561	16907	1426	135	50	34068
Subtotal	49714	20925	32993	9486	5528	2760	101326
Current Assets							
Employee Benefits ^a							
Deposits	3544			4042			
Securities	27570			951			
Inventories	55887		56484	11118	5353	311	10223
Trade Credit	14586	1002	105138	4812	2475	379	17392
Deposits & Cash	15474	18	5439	1459	16	355	4108
Other		664	6296	220	73		2701
Subtotal	117061	1684	173357	22602	7917	1045	34424
TOTAL	166775	22609	206350	32088	13445	3805	135750
Annual Report Date	12/31/35	12/31/35	3/31/36	3/31/36	3/31/36	12/31/35	3/31/36

Notes:

^aSegregated in corporate accounts to fund employee deposits, pensions etc.

Small differences in asset and liability totals are the result of rounding.

TABLE 4. SOURCES AND USES OF FUNDS, LONG TERM AND SHORT TERM: MITSUBISHI FIRST-LINE COMPANIES, 1936 (UNIT ¥ 1,000)

	Mitsubishi Heavy Industries	Mitsubishi Warehouse	Mitsubishi Trading	Mitsubishi Electric Manufacturing	Mitsubishi Oil	Mitsubishi Chemical Industries	Mitsubishi Mining
A. Sources of Funds: Long-Term							
1) Increase in shareholder equity	8211	230	2643	15937	1327	13032	10313
Legal reserves	450	0	100	7170	32	4	0
Other reserves	6572	194	584	1059	76	0	6629
Retained earnings	1189	36	1959	208	1219	28	3684
Paid-in capital	0	0	0	7500	0	13000	0
2) Increase in long term debt	0	0	0	0	0	0	0
3) Decrease of fixed assets (depreciation)	3683	403	1096	786	359	81	6602
TOTAL (1 + 2 + 3)	11894	633	3739	16723	1686	13113	16915
B. Uses of Funds: Long-Term							
Decreases in debt	0	1000	0	0	0	500	0
Investment in fixed assets	6144	211	3008	3122	181	4877	15946
Capital participation + securities	17045	(96)	79	740	456	0	10368
TOTAL	23189	1115	3087	3862	637	5377	26314
C. Increase in Working Capital (A-B = D-E)	(11295)	(482)	652	12861	1049	7736	(9399)
D. Assets (Uses)							
Cash and deposits	7643	48	4006	10398	(13)	7127	(3769)
Receivables	(4941)	(171)	32130	591	1280	355	1663
Inventories	12341	0	34894	6425	1148	653	2148
TOTAL	15043	(123)	71030	17414	2415	8135	936
E. Liabilities (Sources)							
Workers' deposits	1852	108	332	332	30	158	1249
Short term debt	(300)	442	50100	0	524	0	3494
Trade credit	24025	(192)	19336	4221	877	173	5590
Other	811	0	609	0	(66)	68	3
TOTAL	26388	358	70377	4553	1365	399	10336

Note: () indicate negative figures. Small differences between A-B and C-D are due to rounding.

TABLE 5. SOURCES AND USES OF FUNDS, LONG TERM AND SHORT TERM: MITSUBISHI FIRST-LINE COMPANIES, 1937 (UNIT ¥ 1,000)

	Mitsubishi Heavy Industries	Mitsubishi Warehouse	Mitsubishi Trading	Mitsubishi Electric Manufacturing	Mitsubishi Oil	Mitsubishi Chemical Industries	Mitsubishi Mining
A. Sources of Funds: Long-Term							
1) Increase in shareholder equity	40270	5620	12410	2700	4354	15049	25213
Legal reserves	550	0	400	0	95	1	0
Other reserves	8439	334	3842	1336	1137	0	4590
Retained earnings	1281	286	668	1364	122	48	8123
Paid-in capital	30000	5000	7500	0	3000	15000	12500
2) Increase in long term debt	0	0	0	0	0	16000	20000
3) Decrease of fixed assets (depreciation)	3652	288	1515	755	378	158	6923
TOTAL (1 + 2 + 3)	43922	5908	13925	3455	4732	31207	52136
B. Uses of Funds: Long-Term							
Decreases in debt	0	1000	0	0	0	0	0
Investment in fixed assets	29844	242	5731	6374	3449	20632	23994
Capital participation + securities	2757	(112)	2964	1719	444	1667	29688
TOTAL	32601	1130	8695	8093	3893	22299	53682
C. Increase in Working Capital (A-B = D-E)	11321	4778	5230	(4638)	839	8908	(1546)
D. Assets (Uses)							
Cash and deposits	9083	2454	7812	(9315)	24	3351	(224)
Receivables	18003	1271	56713	6922	1743	3649	5633
Inventories	50927	-	38120	11847	4957	2239	5567
TOTAL	78013	3725	103676	9454	6724	9234	10973
E. Liabilities (Sources)							
Workers' deposits	1387	22	244	420	58	(50)	405
Short term debt	19406	(3040)	33939	0	5395	118	3981
Trade credit	44649	1962	64329	13677	133	207	8131
Other	1256	0	(69)	0	299	51	6
TOTAL	66692	(1056)	98443	14092	5885	326	12523

Note: () indicates negative figures. Small differences between A-B and C-D are due to rounding.

TABLE 6. ASSETS AND LIABILITIES, MITSUBISHI SECOND-LINE COMPANIES, 1935 (unit ¥ 1,000)

LIABILITIES AND NET WORTH	Japan Light Alloy Manufacturing	Sakai Chemical	Bibai RR	Yubetsu Colliery + RR	South Sakhalin Colliery + RR	Korean Anthracite Colliery + RR	Hokuyo Shokai	Nippon Architectural Steel	Ryobi Electric Machinery	Shanghai Mitsubishi Warehouse	Tokyo Steel Products	Mitsubishi Chem. Ind. Machinery	Manchuria Mitsubishi Engineering	Shoko Glass	Consolidated Sango Koshi
YEAR: 1935															
Net Worth															
Capital, paid-in	1000	1450	1800	5000	2750	7500	200	300	1000	1256	2000	1500	750	3000	5000
Retained Earnings	376	265	331	802	47	651	27	3	10	(30)	404	(191)		261	593
Legal Reserves	27		65				2			104	70			100	
Optional Reserves		64		90	22	32			39	374	842			100	75
Subtotal	1403	1779	2196	5892	2819	8183	229	303	1049	1704	3316	1309	750	3461	5668
Long Term Liabilities															
Debentures															
Borrowings											650	255			
Subtotal											650	255			
Current Liabilities															
Workers' Deposits				311	119					9	140			30	
Borrowings	277	356		21		518	30	763			672			20	241
Trade Credit	99	283	334	2844	3526	563	380	117	595	3	39	30	22	305	35
Accounts Payable	41	54		154	149						1042			41	
Other	19	236			40		82			36				97	
Subtotal	436	929	334	3330	3834	1081	492	880	595	48	1893	30	22	493	276
Total Liabilities	436	929	334	3330	3834	1081	492	880	595	48	2543	30	22	493	276
TOTAL	1839	2708	2530	9222	6653	9264	721	1183	1644	1752	5859	1594	772	3954	5944
Proportion of Paid-in Capital held by															
Mitsubishi Holding Company	0	0	0	0	0	0	0	0	0	50%	45.0%	0	24.9%	0	44.0% ^c
Mitsubishi Group	93.5%	51.1%	100%	100%	100%	28.8% ^b	100%	81.7%	96.2%	100%	85.0%	60.0%	100%	58.5%	?
Controlled by	Mining	Mining	Mining	Mining	Mining	Mining	Trading	Trading	Electric	Goshi- Warehouse	Goshi- Mixed	Mixed	Mixed	Asahi Glass	Isumaki

TABLE 6 (CONTINUED):

ASSETS	Japan Light Alloy Manufacturing	Sakai Chemical	Bibai RR	Yubetsu Colliery + RR	South Sakhalin Colliery + RR	Korean Anthracite Colliery + RR	Hokuyo Shokai	Nippon Architectural Steel	Ryobi Electric Machinery	Shanghai Mitsubishi Warehouse	Tokyo Steel Products	Mitsubishi Chem. Ind. Machinery	Manchuria Mitsubishi Engineering	Shoko Glass	Consolidated Sango Koshi
YEAR: 1935															
Long Term Assets															
Tangible Fixed Assets	391	984	1241	8688	5738	7571	1	296 46	7	1551	1658	1318	119	1239	5458
Intangibles															
Securities	17	102		5	109	158				4	499				
Subtotal	408	1086	1241	8693	5847	7729	1	342	7	1555	2157	1318	119	1239	5458
Current Assets															
Employee benefits ^a															
Deposits	1								33		202				
Securities															
Inventories	656	708		436	369	703	96	294	313		2467	83		686	232
Trade Credit	684	792	1290	76	426	824	591	535	740	46	942	2		554	234
Deposits & Cash	90	123		21	8	6	32	3	551	151	91	190	35	1457	16
Other								9					202	18	
Subtotal	1431	1623	1290	533	803	1533	719	841	1637	197	3702	275	653	2715	462
TOTAL	1839	2709	2531	9226	6650	9262	720	1183	1644	1752	5859	1593	772	3954	5940
Annual Report Date	11/30/35	4/30/36	12/31/35	5/31/36	12/31/35		8/31/35	3/31/36	3/31/36		3/31/36	3/31/36	12/31/35		12/31/35
Business	Aluminum and parts	Chemical	RR for coal	Coal mining	Coal mining	Coal mining	Trade	Manu- facture	Trade	Warehouse	Fabrica- tion	Machinery	Fabrica- tion	Sheet Glass	Rubber Plantation

Notes: ^aSegregated in corporate accounts to fund employee deposits, pensions, etc.

^bHeld by Mitsubishi Mining; no data available on other stockholders, presumably under control of M. Mining.

^cOwned directly by Iwasaki family; remainder to other Japanese individuals (Aizawa family 26.5%) and Japanese-owned firm incorporated in Sumatra.

Small differences in asset and liability totals are the result of rounding.

TABLE 7. SOURCES AND USES OF FUNDS, LONG TERM AND SHORT TERM: MITSUBISHI SECOND-LINE COMPANIES, 1936 (UNIT ¥ 1,000)

	Japan Light Alloy Manufacturing	Sakai Chemical	Bibai RI	Yubetsu Colliery + RR	South Sakhalin Colliery + RR	Korean Anthracite Colliery + RR	Hokuyo Shokai	Nippon Architectural Steel	Ryobi Electric Machinery	Shanghai Mitsubishi Warehouse	Tokyo Steel Products	Mitsubishi Chem. Ind. Machinery	Manchuria Mitsubishi Engineering	Consolidated Shoko Glass	Sanyo Kosai
A. Sources of Funds: Long-Term															
1) Increase in shareholder equity	123	31	31	373	2272	269	8	13	11	0	2197	51	758	492	729
Legal reserves	15	31	4	0	0	0	0	1	0	0	50	0	0	100	0
Other reserves	0	0	0	98	22	55	0	2	5	0	459	2	0	120	1
Retained earnings	108	0	27	275	0	214	8	10	6	0	188	49	8	272	728
Paid-in capital	0	0	0	0	2250	0	0	0	0	0	1500	0	750	0	0
2) Increase in long term debt	0	0	0	0	0	0	0	0	0	0	0	745	0	0	0
3) Decrease of fixed assets (depreciation)	36	43	86	903	326	0	0	49	2	31	0	33	0	358	64
TOTAL (1 + 2 + 3)	159	74	117	1276	2598	269	0	62	13	31	2197	827	758	850	817
B. Uses of Funds: Long-Term															
Decreases in debt	0	9	0	0	96	0	0	0	0	89	650	0	0	0	0
Investment in fixed assets	622	0	0	2370	1215	547	1	86	15	0	146	454	396	140	545
Capital participation + securities	0	(14)	0	37	21	118	0	0	67	0	0	0	0	1362	0
TOTAL	622	(5)	0	2407	1332	665	1	86	82	89	796	454	396	1502	545
C. Increase in Working Capital (A-B = D-E)															
	(463)	79	117	(1131)	1266	(396)	7	(24)	(69)	(58)	1401	373	362	(652)	272
D. Assets (Uses)															
Cash and deposits	46	(63)	0	(21)	(4)	49	(8)	3	(272)	(57)	778	(187)	180	247	(4)
Receivables	102	158	324	51	194	74	427	(14)	147	(8)	108	226	107	254	78
Inventories	(105)	(59)	0	297	523	318	(37)	341	243	0	(159)	854	55	(64)	63
TOTAL	43	36	324	327	713	441	382	330	118	(65)	727	893	242	437	157
E. Liabilities (Sources)															
Workers' deposits	0	0	0	(10)	21	0	0	0	0	2	22	0	0	6	0
Short term debt	332	(39)	0	16	0	732	(30)	(48)	0	0	(672)	435	0	1100	(64)
Trade credit	172	(194)	208	1452	(577)	105	404	402	187	1	(24)	84	(21)	(42)	(34)
Other	2	195	0	0	6	0	0	0	0	(0)	0	0	0	25	0
TOTAL	506	(38)	208	1458	(550)	837	374	354	187	(5)	(674)	519	(21)	1089	(118)

TABLE 8. SOURCES AND USES OF FUNDS, LONG TERM AND SHORT TERM: MITSUBISHI SECOND-LINE COMPANIES, 1937 (UNIT ¥ 1,000)

	Japan Light Alloy Manufacturing	Sakai Chemical Industries	Bibai Railroad	Yubetsu Colliery & Railroad	South Sakhalin Colliery & RR	Hokuyo Shokai	Ryobi Electric Machinery	Shanghai Mitsubishi Warehouse	Tokyo Steel Products	Mitsubishi Chem. Ind. Machinery	Manchuria Mitsubishi Engineering	Shoko Glass	Cons. Sango Koshi
A. Sources of Funds: Long-Term													
1) Increase in shareholder equity	1661	137	35	6128	5297	21	25	11	2102	1775	1500	667	993
Legal reserves	14	0	17	0	0	1	0	0	50	0	0	150	0
Other reserves	0	85	0	71	0	3	13	0	546	25	0	450	20
Retained earnings	147	52	18	1057	297	17	12	11	6	0	0	67	973
Paid-in capital	1500	0	0	5000	5000	0	0	0	1500	1750	1500	0	0
2) Increase in long term debt	0	0	0	0	0	0	0	0	0	500	0	0	0
3) Decrease of fixed assets (depreciation)	65	150	86	903	460	0	2	20	0	95	121	242	95
TOTAL (1 + 2 + 3)	1726	287	121	7031	5757	21	27	31	2102	2370	1621	909	1093
B. Uses of Funds: Long-Term													
Decreases in debt	0	0	0	0	2	0	0	81	0	99	209	0	0
Investment in fixed assets	492	22	0	2536	875	0	29	29	677	979	498	0	460
Capital participation + securities	10	1	0	0	92	0	80	0	126	0	0	1301	0
TOTAL	502	23	0	2536	969	0	109	110	803	1078	707	1301	460
C. Increase in Working Capital (A-B = D-E)													
	1224	264	121	4495	4788	21	(82)	(79)	1299	1292	914	(392)	633
D. Assets (Uses)													
Cash and deposits	400	30	0	52	(4)	(9)	(170)	(71)	871	114	366	(437)	620
Receivables	325	(140)	(34)	227	944	(12)	535	(6)	66	774	282	(123)	(1)
Inventories	1111	126	0	542	1000	111	1236	0	635	1985	437	621	(150)
TOTAL	1836	16	(34)	914	1940	90	1601	(77)	1572	2873	1085	56	475
E. Liabilities (Sources)													
Workers' deposits	0	0	0	40	(35)	3	0	(7)	(4)	0	0	8	0
Short term debt	626	(139)	0	7	0	0	0	0	0	115	0	15	(157)
Trade credit	(19)	48	(155)	(3627)	(2778)	122	1687	2	277	1464	28	386	0
Other	5	(161)	0	0	(38)	(56)	0	0	0	0	147	39	0
TOTAL	612	(252)	(155)	(3580)	(2851)	69	1682	(5)	273	1579	170	448	(157)

Note: Nippon Architectural Steel and Korean Anthracite Colliery and Railroad are excluded because of data inability.