

# THE "DUAL STRUCTURE" OF FINANCE IN POST-WAR JAPAN

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The "high growth rate" of the Japanese economy after World War II was accelerated by financial concentration, and thus it has been necessary to impose strong credit rationing continuously on the medium and smaller enterprises. From this emerged a "dual structure" of finance. It is the aim of this paper to divide this "dual structure" into the two aspects, the "dual structure of borrowers" and the "dual structure of lenders," to explain how these structures came into existence, and, at the same time, to attempt some theoretical analysis regarding the meaning of "credit rationing" in these contexts.

## FOREWORD

The "high growth rate" of the Japanese economy after World War II was accelerated by the "dual structure" in Japanese industry, but what has sustained this growth rate financially has been that which Professor Shinohara has called the "mechanisms of financial concentration."<sup>1</sup> Furthermore, the structure of the money market which has revolved around the "mechanisms

Table 1. COMPONENT RATIOS OF FUNDS SUPPLIED TO INDUSTRY (%)

Fiscal Year	Stocks & Shares	Industrial Bonds	Private Financial Institutions			Government Financial Institutions	Loan Special Accounts		Foreign Investment	Owned Funds		Grand Total
			Loans	Total	All Banks		Total	Trust Fund Bureau		Held Over	Depreciation	
1931-35	32.5	2.4	Δ6.0	Δ7.1	Δ12.6	—	1.0	1.0	—	7.9	63.2	100.0
1936-40	27.9	4.3	32.5	32.1	26.4	—	0.3	0.3	—	9.1	26.2	100.0
1941-44	18.1	8.0	39.9	38.7	42.4	—	1.1	1.1	—	12.5	21.6	100.0
1946-49	10.7	0.8	54.7	47.9	34.3	6.4	0.4	Δ0.1	—	13.4	20.4	100.0
1950-58	7.0	1.9	41.6	36.9	25.8	3.1	1.6	0.5	0.3	13.3	35.9	100.0
1959-61	10.0	3.8	39.8	36.1	21.7	2.8	0.9	0.8	0.8	15.5	30.0	100.0
1962-65	6.1	1.8	45.3	41.3	23.3	3.2	0.8	0.6	0.8	10.9	35.0	100.0

Note: Δ indicates minus figures.

Sources: Bank of Japan, *Hompō keizai tōkei* (Economic Statistics of Japan), and Economic Planning Agency, *Kokumin shotoku nempō* (Annual Report of National Income), etc.

<sup>1</sup> Miyoei Shinohara, "Ryūdōsei to keiki junkan" ("Liquidity" and the Business Cycle), *Kinyū*, No. 143, Feb., 1959, and *Nihon keizai no seichō to junkan* (Growth and Cycles in the Japanese Economy), Tokyo, Sōbun-sha, 1961.

of financial concentration" also came to assume a special form reflecting the "dual structure" of Japanese industry. This is the "dual structure" of finance.

As is shown in Table 1, the war-time economy operated in such a way as to heighten the degree of dependence on indirect financing, centred upon bank loans, in the Japanese economy, and this, continuing after the war, produced the financial concentration. In particular, among the measures of the Occupation Forces after the war the discontinuance of subsidies to armaments manufacturers and the blocking of deposits laid this burden largely on the shareholders of the armaments firms, and the burden on the banks as creditors was lightened. *Zaibatsu* dissolution did not affect the *zaibatsu* banks, and the movement for the democratization of security holdings collapsed because of the Dodge deflation policy at a time when the repayment of bank credits from the armaments firms had been completed through an increase in their capital. Subsequent capital accumulation was pushed forward through bank credits. The fiscal system also operated to accelerate this tendency. Thus were completed the preparations for a high growth rate with indirect finance as a catalyst. Since then, the groups of the big banks, trust banks, life insurance companies, ordinary insurance companies, etc., each of which had been formerly organized under the *zaibatsu*, as well as the new big banks and the long-term credit banks, have pushed forward concentrated financing with so-called "one-set behaviour," that is, "a policy of each *keiretsu* of companies collecting under its control a complete set of the new industries."<sup>2</sup> As a result, financial concentration was established. In this process, "credit rationing," the counterpart of "financial concentration," came to be more strongly imposed on the medium and smaller enterprises. But with a dual structure in Japanese industry it was inevitable that some consideration at the policy level of alleviating the impact of "credit rationing" should be necessary. In 1951 the Mutual Loan & Savings Bank Law and the Credit Association Law were passed, and then government-affiliated financial institutions for medium and smaller enterprises were also provided. What came into being in this fashion was the "dual structure" of finance.

The "dual structure" of finance has two aspects. With respect to industry there is a "dual structure of borrowers," which means that conditions of borrowing are more favourable for large enterprises than for medium and smaller enterprises. On the other hand, there exists a "dual structure of lenders," consisting of the financial institutions which concentrate their financing on the large enterprises (ordinary banks, trust banks, long-term credit banks, insurance companies, government institutions such as the Development Bank and the Export-Import Bank, and others) and the financial institutions serving

<sup>2</sup> Yoshikazu Miyazaki, "'Katō-kyōsō' no ronri to genjitsu—keiretsu shihai kikō no kaimei" (The Logic and Reality of 'Excessive Competition'—An Elucidation of the Mechanisms of *Keiretsu* Control), Autumn Special Issue of *Ekonomisuto* (Economist), 1962. In addition, refer to the article by the same author in the present issue of *The Developing Economies*, especially for the word "*keiretsu*" to p. 330.

the medium and smaller enterprises whose task is solely that of alleviating credit rationing (the Mutual Loan & Savings Banks, Credit Associations, Credit Cooperatives, government institutions such as the Central Bank for Commercial & Industrial Cooperatives, People's Finance Corporation, Small Business Finance Corporation, and others).<sup>3</sup>

I. THE "DUAL STRUCTURE OF BORROWERS"

1. *A Quantitative Scarcity and Qualitative Inferiority of Funds*

If we take the figures showing the capital composition of incorporated enterprises at the end of September, 1964 for use in arriving at rough estimates of the differences in financial strength in borrowing according to scale of enterprise, we get the result shown in Table 2.

Table 2. CAPITAL COMPOSITION OF INCORPORATED ENTERPRISES (All Industries) BY SCALE OF ENTERPRISE (At End of September, Fiscal 1964) (%)

	Scale of Nominal Capital (million yen)					
	Under 2	2-10	10-50	50-100	100-1,000	Over 1,000
As Percentage of Total Capital Used						
Owned Capital	19.3	17.7	15.6	17.3	18.6	24.5
Current Liabilities	71.9	73.6	70.8	64.3	61.7	49.5
Fixed Liabilities	8.8	8.7	13.6	18.3	19.7	26.0
(Corporate Bonds)	(—)	(—)	(—)	(0.1)	(0.1)	(5.0)
Loans from Financial Institutions	23.7	23.7	23.7	27.7	27.8	34.4
Accounts Payable*	39.7	40.8	41.1	33.3	32.6	20.8
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Long-term Debt as % of Loans from Financial Institutions	23.2	21.1	33.1	40.4	44.4	49.5
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Fixed Liabilities as % of Fixed Assets	32.2	31.4	46.7	52.5	53.0	56.3
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Owned Capital and Fixed Liabilities as % of Fixed Assets	102.9	95.3	100.3	102.0	102.7	109.3
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Percentage of Bills Discounted to Accounts Receivable**	21.1	21.6	32.9	30.6	30.7	23.0
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Turnover Rate of Total Capital	1.20	1.06	0.97	0.79	0.69	0.54

Notes: \* Including notes and bills payable.

\*\* Including outstanding notes and bills receivable and discounted.

Source: Ministry of Finance, *Hōjin-kigyō tōkei kihō* (Financial Statements of Incorporated Business—Quarterly Report).

The table shows that the ratio of owned capital in the incorporated enterprises of Japan, including the large enterprises also, is conspicuous for being far too small. And in comparison with the large enterprises with a nominal capital of ¥ 1,000 million and over owned capital is smaller still in

<sup>3</sup> Hiroshi Kawaguchi, *Nippon no kinyū—yūshi shūchū no mekanizumu* (Japanese Finance—The Mechanisms of Financial Concentration), Tokyo, Nihon hyōron-sha, 1966.

firms of a smaller scale. Furthermore, in comparison with the large enterprises, the medium and smaller enterprises have a higher percentage of current liabilities in the capital used and a lower percentage of fixed liabilities. Also, they have a low percentage of loans from financial institutions and a high percentage of accounts payable (including bills and notes payable). Moreover, long-term loans as a percentage of loans from financial institutions are conspicuously low as are fixed liabilities as a percentage of fixed assets. The ratio of long-term stable funds (fixed liabilities plus owned capital) to fixed assets, that is, the reciprocal of the fixed long-term congruity ratio, does not reach 100%, being 95%, particularly in the case of enterprises with a nominal capital of between ¥2 million and ¥10 million. This is in contrast with the 109% of the enterprises with a nominal capital of over ¥1,000 million. Among the enterprises with a nominal capital of less than ¥10 million the proportion of trade credit which can be converted to bank credit is also low. It is true, however, that even among the enterprises with a nominal capital of more than ¥1,000 million the percentage occupied by trade credit is less than in the case of enterprises with a nominal capital of between ¥10 million and ¥1,000 million, but this may be taken to indicate the surplus financial resources of these enterprises.

What is shown by these indices is the high degree of dependence on outside funds by medium and smaller enterprises because their ability to obtain their own capital is weaker than that of the large enterprises. And for outside funds they are dependent to a great extent on short-term and unstable funds, in regard to which, again, their ability to convert trade credit to bank credit is weak while they are so strongly dependent on trade credit. Therefore they are apt to become subordinated to the large enterprises. Naturally among enterprises with a nominal capital of between ¥2 million and ¥10 million, but also in all groups of enterprises with the exception of the very largest enterprises having a nominal capital of more than ¥1,000 million, long-term funds are necessary not only for equipment but also for long-term working capital. If we take this into consideration it will be apparent that these enterprises must finance part of the required long-term funds out of short-term funds. In this way the medium and smaller enterprises must make the greatest of efforts to raise the turnover rates of their aggregate capital.

This disadvantageous method of financing in the medium and smaller enterprises has had particularly serious significance for these enterprises during the rapid development based principally on loans of business enterprises as a whole during Japan's period of rapid economic growth. Let us put forward Table 3 in order to show the component ratios by scale of enterprise of the funds obtained by incorporated enterprises in the period between the beginning of the first quarter of 1953 and the end of the first quarter of 1964. During this period, of course, there was a marked rise in the number of incorporated enterprises comprising the population of the group of enterprises. The rate of increase was greater in the larger enterprises as is shown in the table, which means that a fair number of enterprises in the smaller-scale groups had

moved into larger-scale groups. Consequently, the increases in capital and balances of liabilities by scale of enterprise at these two points in time do not accurately correspond with the cumulative totals of increase in capital and liabilities by scale of enterprise for each year. In this sense the figures in Table 2 are not strictly correct, and I should like to have them regarded as extremely rough indices.

Table 3 shows that during this period there was a tendency for enterprises to concentrate in the larger-scale groups while the component ratios of sales showed increases only among the large enterprises with a nominal capital of more than ¥100 million, but even so the proportion which these occupied within the total number of enterprises was only 2.9% of the number of enterprises and remained at around 59.5% in terms of sales also. However, the large enterprises which accounted for less than 60% of sales, accounted for 72.2% of the increase in capital funds used in this period, while the percentage represented by the increase in capital funds used of enterprises with a nominal capital of less than ¥10 million, which accounted for 24% of sales, amounted to no more than 13.3%. Furthermore, the percentage of the increase in loans from financial institutions accounted for by enterprises with a nominal capital of ¥100 million or more was an overwhelmingly high 76.9% of the total, 70.3% of short-term loans, and 84.7% of long-term loans. In contrast, the enterprises with a nominal capital of less than ¥10 million accounted for 11.5% of the total, 16.3% of short-term loans, and no more than 5.8% of long-term loans. Combining this with the fact that among the large enterprises the percentage of total corporate bonds, which under the present circumstances are said to be only a form of long-term bank loans, stood at 99.8% or almost the total, we may be able to perceive clearly the overwhelming predominance of large enterprises in obtaining the capital funds through financial institutions.

The increase in accounts payable in trade credit is greater than the increase in accounts receivable (including notes and bills receivable) in all enterprises except those with a nominal capital of ¥100 million or more. This excess may be thought to have been diverted to inventory investment, but this is not true. The excess, in reality, has been yielded by discounting at the banks a part of the bills received as a means of settlement of accounts receivable, and thus transferring the burden of trade credit to the banks. This can be seen from the fact that the percentage of outstanding accounts receivable plus outstanding bills discounted to outstanding accounts payable is over 100% in all enterprises. In this sense, no leeway in funds has resulted from the excess of trade credit; instead the laying out of funds was permitted in the long run by bank credit.

Now, in order to see how this disadvantageous position in obtaining capital funds for medium and smaller enterprises was related to actual formation of assets in these enterprises we have compiled Table 4 from the same data as used above. The table shows that not only did the absolute value of the percentage of fixed assets outstanding at the end of the first quarter of 1964

**Table 3. COMPONENT RATIOS OF FUNDS OBTAINED BY INCORPORATED**  
**Quarter of Fiscal 1953 to First Quarter of Fiscal 1964)**

Scale of Nominal Capital (million yen)	Number of Enterprises		Index of Number of Enterprises 1964 (1953=100)	Sales		Total Increase in Loans from Financial Institutions		
	First Quarter, 1953	First Quarter, 1964		First Quarter, 1953	First Quarter, 1964	Total	Short-term	Long-term
2-10	85.0	83.1	537	33.4	24.0	11.5	16.3	5.8
10-50	11.0	11.9	593	16.4	11.7	7.5	9.1	5.6
50-100	1.6	2.1	743	5.6	4.8	4.1	4.3	3.9
More than 100	2.4	2.9	1,011	44.6	59.5	76.9	70.3	84.7
Total	100.0	100.0	549	100.0	100.0	100.0	100.0	100.0

Source: *Hōjin-kigyō tōkei kihō.*

**Table 4. INVESTMENTS AND SOURCES OF FUNDS IN INCORPORATED**  
**of Fiscal 1964)**

Scale of Nominal Capital (million yen)	Increase in Fixed Assets	Outstanding Fixed Assets, End of First Quarter, 1964	Sales, First Quarter, 1964	Increase in Fixed Assets		
				Increase in Capital	Increase in Fixed Liabilities	Total
2-10	10.2	10.2	24.0	56.5	33.3	89.9
10-50	7.2	7.3	11.7	51.2	49.1	100.2
50-100	4.1	4.1	4.8	47.1	54.4	101.5
More than 100	78.5	78.4	59.5	48.9	57.8	106.7
Total	100.0	100.0	100.0	—	—	—

Notes: a) Net Surplus of Loans from Financial Institutions=(Increase in Short-term and Fixed Liabilities—Increase in Fixed Assets).

b) Other Short-term Assets="Other Loans" within Current Liabilities and

c) Period from Second Quarter, 1957 to First Quarter, 1964 for reasons of

Source: *Hōjin-kigyō tōkei kihō.*

remain overwhelmingly high among the large enterprises, but the relative degree of concentration in relation to the percentage of sales was higher too. However, this was because the enterprises with a nominal capital of between ¥2 million and ¥10 million made efforts to increase their fixed assets outstanding by as much as ten times in the 11 years from the first quarter of 1953. Since fixed assets outstanding among the enterprises with a nominal capital of ¥100 million or more increased by 9.7 times during the same period, this means that the enterprises with a nominal capital of less than ¥10 million had lessened the differential in their fixed assets outstanding, if only by a little. However, the difficulties they encountered in obtaining funds may well be inferred from the figures in the table. We may add that fixed assets outstanding during this period increased 7.9 times among the enterprises with

PORATED ENTERPRISES BY SCALE OF ENTERPRISE (From First

(%)

Increase in Corporate Bonds	Increase in Accounts Payable	Increase in Capital		Increase in Total Capital Funds	Depreciation, First Quarter, 1957 to First Quarter, 1964	Increase in Accounts Receivable to Increase in Accounts Payable	Outstanding Accounts Receivable + Bills Discounted to Outstanding Accounts Payable
		Total	Nominal Capital				
0.1	18.4	11.6	6.7	13.4	12.7	81.8	108.8
—	14.0	7.4	5.1	9.7	8.3	81.1	112.9
0.1	5.7	3.9	3.1	4.7	3.7	78.3	114.1
99.8	61.9	77.1	85.1	72.2	75.3	107.5	141.3
100.0	100.0	100.0	100.0	100.0	100.0	—	129.2

ENTERPRISES (From First Quarter of Fiscal 1953 to First Quarter

(%)

Increase in Inventories	Net Surplus of Loans from Financial Institutions <sup>a)</sup> to Increase in Inventories	Degree of Dependence of Inventories on Other Short-term Assets <sup>b)</sup>	Cumulative Total of Depreciation to Gross Increase in Fixed Assets <sup>c)</sup>	Cumulative Total of Depreciation <sup>c)</sup>
14.5	12.0	88.0	31.4	12.7
9.6	(-) 2.6	102.6	29.5	8.3
5.1	5.6	94.4	24.7	3.7
70.8	72.1	27.9	34.8	75.3
100.0	—	—	—	100.0

Loans from Financial Institutions--Increase in Cash and Deposits)+(Increase in Capital

"Others".

availability of figures.

a nominal capital of between ¥10 million and ¥50 million, and 9.8 times among those with a nominal capital of between ¥50 million and ¥100 million.

Table 4 shows that, whereas more than half of the increase in fixed assets among the medium and smaller enterprises with a nominal capital of less than ¥50 million had to be provided out of internal funds, among the medium-large enterprises, with a nominal capital of ¥50 million or more, and among the large enterprises, with a nominal capital of ¥100 million or more, it was possible for these enterprises to provide more than half of the increase out of long-term external funds. Furthermore, the small enterprises with a nominal capital of less than ¥10 million were able to provide only slightly less than 90% of their increases in fixed assets out of their own capital and fixed liabilities, and were obliged to rely on short-term funds for the remain-

der, while medium enterprises, with a nominal capital of between ¥ 10 million and ¥ 50 million, and the medium-large enterprises, with a nominal capital of between ¥50 million and ¥ 100 million, obtained no more long-term funds than were sufficient to provide for their increases in fixed assets. Thus for their long-term working capital they had to depend on the liquid short-term funds. Only the enterprises capitalized at ¥ 100 million or more, or perhaps only the large enterprises with a nominal capital of ¥ 1,000 million or more, showed some leeway on this point. However, even these large enterprises displayed a weakness in that the greater part of their long-term external funds were loans and not bond issues.

Next, inventory investment, that is to say, the component ratio of the increase in assets on inventory, also shows concentration in the large enterprises, although not to so great a degree as the increase in fixed assets. Furthermore, it is only the enterprises with a nominal capital of ¥ 100 million or more which provide the greater part out of loans from financial institutions, while the other enterprises rely on internal deposits, miscellaneous loans, etc., for all or most of their inventory investment. We have reason to believe that among these there may perhaps be a fair number of sources of funds which are qualitatively inferior. It may be that receipt in excess of expenditures in the form of trade credit would appear to be included in these sources, but in fact, as we have already noted, this excess of receipts among the medium and smaller enterprises is one which came into being due to the passing on to banks, in the form of bill discounting, a part of the credit received. Since it is already included in the sources of funds for increased inventory investment as loans from financial institutions it has no connexion with this item.

We may add that depreciation is of course an important source of funds when considering the capital formation in terms of gross formation. But in Japan, and within the large enterprises, it has been the practice to carry out investment to levels which greatly exceed depreciation. Component ratios of the cumulative totals of depreciation by scale of enterprise for the period between the second quarter of 1957 and the first quarter of 1964 (the only period for which the statistics are available) also show a concentration in the large enterprises which is as high as the loans from financial institutions as shown in Table 2.

## 2. *Differentials in Interest Rates and Credit Rationing*

However, credit rationing for medium and smaller enterprises was not carried out at the same level of interest rates as those imposed on loans to the large enterprises. It is a matter of common knowledge that, in addition to quantitative discrimination in the form of credit rationing, the medium and smaller enterprises were subject to qualitative discrimination in the form of differential rates of interest. Table 5 shows effective rates of interest paid by the large enterprises and by the medium and smaller enterprises, as reflected in *Financial Statements of Incorporated Business—Annual Report*.



**Table 5. INTEREST PAYMENTS AND DISCOUNT FEES AS PROPORTION OF INTEREST-BEARING LIABILITIES (Fiscal Year) (%)**

	1960	1961	1962	1963	1964
Large Enterprises (A)	8.3	8.4	8.9	8.9	9.2
Medium & Smaller Enterprises (B)	11.5	9.0	10.0	9.2	10.4
Indices of (B) (A=100)	139	107	112	103	113

Notes: A) Enterprises with a nominal capital of more than ¥50 million.  
 B) Incorporated enterprises with a nominal capital of less than ¥50 million.  
 Source: Ministry of Finance, *Hōjin-kigyō tōkei nempō* (Financial Statements of Incorporated Business—Annual Report).

**Table 6. ESTIMATED AVERAGE RATES OF INTEREST ON LOANS TO MEDIUM & SMALLER ENTERPRISES FROM THE CITY AND LOCAL BANKS (As of End of March, 1966) (%)**

	To Large Enterprises (Annual Interest) (A)	To Medium & Smaller Enterprises (Annual Interest) (B)	Indices of (B) (A=100)
City Banks	6.61	8.47	128
Local Banks	6.83	8.65	127
Mutual Loan & Savings Banks	—	8.79	—
Credit Associations	—	8.92	—

Notes: 1. Method of Estimation

- (1) Percentage of outstanding long-term funds plus funds directed to medium and smaller enterprises calculated to aggregate loans outstanding is as follows:
  - City banks: 36.5%
  - Local banks: 62.4%
- (2) If in the statistics for loans classified by rates of interest we take, from the top, the stratum which has a component ratio approximately equivalent to (1) above, the city and local banks both have interest rates of ¥0.21 per diem. The component ratio of these loans is:
  - City banks: 40.5%
  - Local banks: 64.5%
- (3) Weighted average interest rates for loans within this sphere were worked out and regarded as the interest rates for the medium and smaller enterprise, while the average rates of interest in the stratum with rates of interest lower than these were regarded as being that for the large enterprise.
- (4) Median values have been taken as average rates of interest for each stratum. The weights are those of the component ratio of loans. All those in the stratum with rates of interest under ¥0.15 per diem have been calculated at ¥0.14.

2. Medium and smaller enterprises means enterprises with a nominal capital of less than ¥50 million incorporated as private corporations and non-incorporated enterprises.

Sources: Bank of Japan, *Keizai tōkei geppō* (Monthly Report of Economic Statistics), and Zenkoku chihō-ginko kyōkai (Local Bankers' Association), *Kinyū ginkō sho-tōkei* (Statistics of Finance, Banks, Etc.).

If, now, we attempt to estimate rates of interest on loans to medium and smaller enterprises by city and local banks as of the end of March, 1966, we obtain Table 6. I should like to note, however, that some rates of interest on long-term loans to large enterprises have been included in the calculation of the average rates of interest to medium and smaller enterprises. These are, of course, extremely rough indices, but we can see that interest rates on loans to medium and smaller enterprises by the city and local banks are fairly high, and that they are not very different from those charged by the Mutual Loan & Savings Banks and Credit Associations.

Since Tables 5 and 6 merely indicate differentials in ostensible interest-rates we must regard them as showing a smaller range than that of differentials in effective rates of interest when the compensating balances compelled to borrowers are taken into consideration. Hereupon we present Table 7,

**Table 7. INTEREST RATE DIFFERENTIALS BY SCALE OF ENTERPRISE**  
(Manufacturing Industry)

Fiscal Year	Ostensible Interest Rates			Effective Interest Rates			Ratio of Effective Rates to Ostensible Rates	
	Large Enterprise (A) (%)	Medium & Smaller Enterprise (B) (%)	Indices of (B) (A=100)	Large Enterprise (C) (%)	Medium & Smaller Enterprise (D) (%)	Indices of (D) (C=100)	Large Enterprise (Times)	Medium & Smaller Enterprise (Times)
1958	8.43	9.67	114.7	8.62	10.54	122.2	1.02	1.09
1959	8.24	9.62	116.7	8.44	10.59	125.5	1.02	1.10
1960	8.44	9.59	113.6	8.63	10.66	123.5	1.02	1.11
1961	8.48	9.26	109.2	8.73	10.22	117.1	1.03	1.10
1962	8.55	9.51	111.2	8.65	10.51	121.5	1.01	1.11
1962 (1958=100)	101.4	98.3	96.9	100.3	99.7	99.4	—	—

Notes: 1. Medium and smaller enterprise means enterprise with under 300 employees.  
2. Large enterprise means section first listed companies with a nominal capital of ¥100 million or more plus companies of less than ¥100 million nominal capital, or unlisted, which are particularly influential.

based on the results of calculations made by Mr. Kunio Yamashita, in an attempt to estimate the relationship between the differentials in effective and ostensible interest rates. The effective interest rates in this table have been calculated from the original sources of the Bank of Japan Survey of the Management of Medium and Smaller Enterprises and Survey of the Management of Principal Enterprises, using the following formula:

$$\text{Effective interest-rate (annual)} = \frac{\text{Interest paid and discount fees} - \text{Interest on fixed deposits received}}{\text{Loans} - \text{Fixed deposits}}$$

Where "Loans—Fixed deposits" are averages of balances at the beginnings and ends of periods, and "Interest on fixed deposits received" is assumed to be at the rate of 5.5% per annum.

Consequently, since fixed deposits of incorporated enterprises are assumed here to have occurred as compensating balances in association with the bank loans, the results show what may be called maximum values for effective interest rates. The actual effective interest rates must be somewhat lower than these. Be that as it may, between 1958 and 1962 the differentials in ostensible interest rates contracted by 3.1 points, but the differentials in effective interest rates remained practically unchanged. Again, the ratio of effective interest rates to ostensible interest rates is nearly 1 to 1 in the case of the large enterprises, but 1.1 to 1 in the case of the medium and smaller enterprises.

Thus the question of effective interest rates and the differentials among them cannot be separated from what is known as the question of compensating balances. Table 8 shows the trend of debtor's deposits and the proportion of compensating balances on the basis of figures published by the Ministry of Finance.

In 1953 the proportion of cash and deposits held by enterprises against short-term loans from financial institutions was slightly under 40% in the case of both the large enterprises and the medium and smaller enterprises, but in 1954 the large enterprises jumped into the 50-60% range and the medium and smaller enterprises into the 70-80% range. Thereafter the rising trend continued and, with some fluctuation, reached the 60-70% range for large enterprises in 1963, after which they stabilized. But for medium and smaller enterprises the 80-90% range was attained in 1960, and the 90-100% range in 1965. This change is related to the increase in liquidity accompanying the strengthening of the competitive power of the medium and smaller enterprises in the latter half of the period of the high economic growth rate, but a fair part of it may be considered to have been due to a rise in the proportion of compensating balances. This may also be perceived from the fact that in 1966, as an accompaniment to the development of the self-disciplinary measures in regard to excessive compensating balances, the proportion of cash and deposits for medium and smaller enterprises once again fell into the 80-90% range.

However, a more important factor in explaining interest rate differentials between enterprises of differing scales may be found in differences in lending costs depending on the amount lent, and secondarily to differences in deposit costs depending on the size of the deposits which in turn depended upon the scale of the borrowers. There is no general data available on lending costs as distinct from deposit costs, and none of the financial institutions calculate lending costs according to classes of borrowers, so that it is difficult to make an accurate estimation of lending costs. However, Levenson, for example, gives his estimates of percentage costs in loans to medium and smaller enterprises. These are 6.1%, as opposed to 2.3% for costs of loans to large enterprises.<sup>4</sup>

<sup>4</sup> A. M. Levenson, "Interest Rate and Cost Differentials in Bank Lending to Small and Large Business," *The Review of Economics and Statistics*, Vol. XLIV, No. 2 (May, 1962).

**Table 8.** CHANGES IN PROPORTIONS OF DEBTOR'S DEPOSITS AND

End of May	Debtor's Deposits					
	City Banks		Local Banks		Mutual Loan & Savings Banks	Credit Associations
	Medium & Smaller Enterprise	Large Enterprise	Medium & Smaller Enterprise	Large Enterprise		
1964	56.6	47.9	48.7	50.6	57.7	55.9
1965	53.8	46.4	45.7	48.3	55.2	51.5
1966	54.1	49.7	45.2	48.4	50.6	46.4

Notes: 1. Medium and smaller enterprise means corporations and non-incorporated industries under ¥10 million).

2. Proportion of debtor's deposits means deposits received from debtors (includ-

3. Proportion of deposits as compensating balances means deposits, etc., held at

Source: Statistics from a survey by Banking Bureau, Ministry of Finance.

Let us now suppose, as in Figure 1, that a certain bank's lending market is divided into two discriminated markets, the large enterprises' market (A), and the medium and smaller enterprises' market (B), and that we are given a deposit marginal costs curve  $K$  common to both markets, a demand curve  $D$  for funds in market (A), a marginal gross income curve  $M$  derived therefrom, a demand curve  $d$  for funds in market (B), and a marginal gross income curve  $m$  derived therefrom. Deduction from the marginal gross income curves of the risk costs and of direct lending costs in respect to individual loans gives the marginal net income curves  $M'$  and  $m'$  in the respective markets. The slope of the marginal gross income curves is determined by that of the demand curves, but since the slope of the marginal net income curves is influenced by the size of risk costs and direct lending costs and by the rate of the increase of these, it may be expected to be much steeper in the case of the medium and smaller enterprises, even when the demand curve for funds of medium and smaller enterprises is more elastic than that of large enterprises. When the level of marginal costs for deposits in respect to total volume of funds  $OS$  is  $OC$ , and when the volume of funds supplied is disposed so that marginal net income will be equal to marginal costs for deposits both in the large enterprises' market and in the medium and smaller enterprises' market, the total net profit accruing to the bank will reach their maximum. Furthermore, since the low rate of interest  $R$  is in force in the large enterprises' market and the high rate of interest  $r$  in the medium and smaller enterprises' market, a wide range of differentials in rates of interest between enterprises of differing scales may be expected to appear.

In these cases, of course, it is because banks are able to wield selective monopolistic powers in relation to the market, in particular in relation to the medium and smaller enterprises' market, that these differentials in interest rates appear, but such differentials are composed of risk cost differentials and lending cost differentials, and at least from the short-term point of view include no differential factor which may be regarded as irrational. Consequently, in ostensible terms credit rationing appears to be in force, but we

COMPENSATING BALANCES (%)

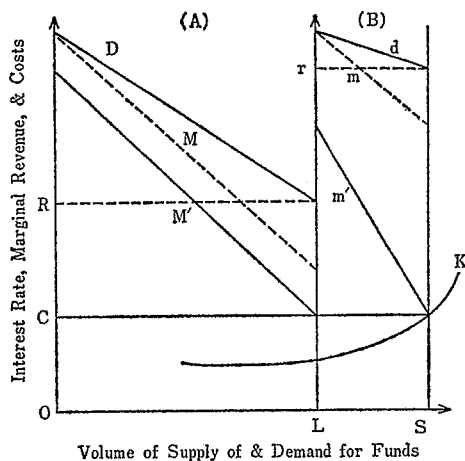
Compensating Balances					
City Banks		Local Banks		Mutual Loan & Savings Banks	Credit Associations
Medium & Smaller Enterprise	Large Enterprise	Medium & Smaller Enterprise	Large Enterprise		
30.5	6.2	31.7	14.1	42.3	43.2
23.4	4.4	24.5	8.0	36.1	38.8
22.0	4.2	21.6	6.4	27.1	31.9

enterprises with a nominal capital of less than ¥50 million (in case of wholesalers and service

ing instalments) as proportion of loans.

or bound by financial institutions as security for loans as proportion of loans.

Figure 1.

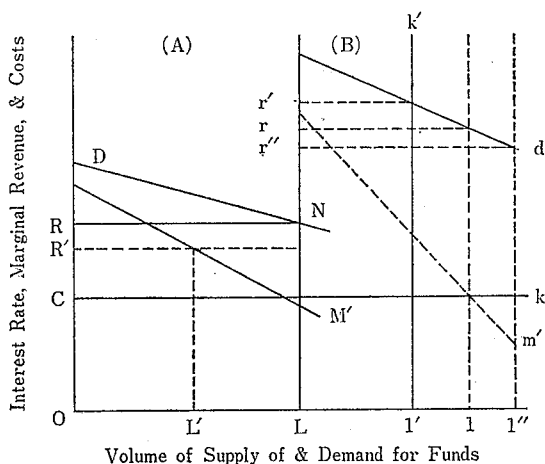


do not regard it as being “true” credit rationing.

However, credit rationing as actually practiced is not always the product of such “rational” behaviour on the part of the banks alone. In Figure 2, *D* is the demand curve for funds in the large enterprises’ market (A), *M'* is the marginal net income curve, *d* is the demand curve for funds in the medium and smaller enterprises’ market (B), *m'* is the marginal net income curve, and *k* is the deposits marginal costs curve common to both markets, which is assumed to be horizontal at the level *OC*. If the banks embark on rational behaviour of the kind described above, a volume of funds *OL* will be distributed to the large enterprises and a volume of funds *Ll* to the medium and smaller enterprises. The interest rates for the large enterprises will then be *R*, those for the medium and smaller enterprises *r*, and the differential (*r-R*).

Now let us suppose that for some reason there is a limit to the bank's ability to absorb deposits and that it is impossible for it to supply funds over the volume  $OL'$ . Let us take, for example, the case in which the supply curve of loans becomes vertical, like  $k'$ , because of just such a limit. In such a case the bank may behave in a variety of ways, but one possible course of rational behaviour is to supply the volume of funds  $OL$  to the large bank's market (for the individual banks this is a market which to some degree is characterized by strong competition), and to fix the rate of interest at  $R$ . If this is done the remaining volume of funds  $L'L$  will be rationed to the medium and smaller enterprises' market, and the rates of interest for the medium and smaller enterprises can be expected, in principle, to be raised to the level  $r'$ , reflecting the strength of the demand. However, there is a danger that under these circumstances the interest differential which will appear as  $(r'-R)$  will be too great and will invite public criticism, administrative pressure, and loss of clients in the medium and smaller enterprises' market. Hereupon the rate of interest will be fixed at  $r''$ , a figure lower than  $r'$  which will appear more reasonable in relation to  $R$ . The position of  $r''$  may be expected to be determined by the differential of interest rates as demand prices  $(r'-R)$  and by the strength of the various forces taken into consideration, but even in such a case a fair amount of surplus profit will arise in the medium and smaller enterprises' market, since marginal net income will exceed marginal costs on deposits by a large amount.

Figure. 2



Let us assume that in a case in which a bank is strongly influenced by close ties with large enterprises or by considerations of maximization of long-term profits, it is called upon, by some act of government policy such as lowering of the bank rate, to lower its interest rate to large enterprises to  $R'$ . Since in spite of this the bank will seek to secure the volume of funds  $OL$  for supply to the large enterprises it will as a result be unable to cover the

marginal risk costs and direct lending costs in respect to the volume of funds  $L'L$  within the volume of funds  $OL$ , and to this extent its total profits in the large enterprises' market will be lessened. If the bank endeavours to cover the marginal losses thus occasioned by raising its total profits from its lending to the medium and smaller enterprises it will become necessary to make a corresponding effective increase in  $R''$ , and may, for example, result in a rise in the compensating balance requirements.

When the demand curve for the large enterprises' market,  $D$ , rises, the volume of funds supplied to the large enterprises,  $OL$ , is enlarged, and the result is that the volume of funds supplied to the medium and smaller enterprises' market is correspondingly contracted and substantial interest rate differentials are enlarged.

Now, going back to the beginning, when the interest rate for medium and smaller enterprises is fixed at  $r''$ ,  $l''$  within the demand for funds by medium and smaller enterprises in relation to this, rate  $r''$  (not the interest rate for the large enterprises,  $R$ ), will remain unsupplied, and this may be considered to be close to the actual condition of credit rationing in the medium and smaller enterprises' market.

As we have seen above, medium and smaller enterprises are subject to the burden of disadvantageous effective interest rates in comparison with large enterprises, but as far as can be determined from the *Financial Statements of Incorporated Business* the proportion of sales cost represented by interest payments is lower than that of large enterprises. In enterprises with a nominal capital of less than ¥5 million this proportion is less than half that of enterprises with a nominal capital of more than ¥1,000 million. This, however, is due to the large enterprises' over-investing as a result of their dependence on excessive loans, and to the marked fall in the turnover rate of aggregate capital which results from it. Table 9 shows the results of the calculation from the *Financial Statements of Incorporated Business—Annual Report* of sales costs, the proportion of interest payments, and its constituent elements for

Table 9. BURDEN OF INTEREST PAYABLE ON SALES COST OF INCORPORATED ENTERPRISES (All Industries) BY SCALE OF ENTERPRISE (Fiscal 1964)

Nominal Capital (million yen)	Burden of Interest Payable on Sales Cost (%)	Turnover Rate of Aggregate Capital (Times)	Degree of Dependence on Loans (%)	Operating Profit Rate on Sales Cost (%)	Ostensible Rates of Interest (%)
Under 5	2.09	2.21	30.3	3.16	12.1
5-10	2.39	2.03	29.1	3.18	14.0
10-50	2.67	1.80	29.8	3.41	13.6
50-100	2.96	1.61	33.5	3.81	12.2
100-1,000	3.58	1.31	33.8	5.28	11.8
Over 1,000	4.42	1.01	40.1	6.28	9.5

Source: *Hōjin-kigyō tōkei nempō*.

incorporated enterprises in all industries, by scale of enterprise, for 1964. From the table we can see that, while being obliged to shoulder the burden of high effective interest rates, the medium and smaller enterprises have succeeded in keeping relatively low the proportion of interest payments in sales costs by dint of covering the low ratio of business profits to the sales cost by maintaining a high turnover rate of aggregate capital and depressing their dependence on loans, even though the latter may be said to have been forced upon them by their deficiency in borrowing power.

Looking at the proportion occupied by interest payments within business profits we find that in fact the large enterprises with a nominal capital of ¥1,000 million or more have the lowest figures, if we except the group capitalized at under ¥5 million which is influenced strongly by its industrial composition.

### *3. The Mechanisms for Shifting Financial Stringency*

Another manifestation of the "dual structure of borrowers" is the fact that the increase in loans by financial institutions, centred on the city banks, exhibits opposing swings between loans made to the large enterprises and loans made to the medium and smaller enterprises. In times of financial tightness, from the latter half of a period of good business on into the tightening of the money market, loans to the medium and smaller enterprises are strongly curtailed. Conversely, in times of slackness in the money market the increase in loans to the medium and smaller enterprises become relatively great. Using either *Financial Statements of Incorporated Business—Quarterly Report* or financial statistics, we find that typical swings in the cycle which had its peak in 1953 and the one which had its peak in 1957, but thereafter a change has occurred in the form of swing. However, as can be seen from Figure 3, the continued robust existence of such swings has once more been established in the present tightening of the money market. This is the so-called "mechanism for shifting financial stringency." There are several reasons for the form of the swing breaking in the cycle which centred on the tightening of the money market in 1962. At the 1961 stage the arrival on the scene of the open-end bond trust caused a sudden increase in issues of corporate bonds and produced some degree of change in the credit received by large enterprises. Attention may be drawn to the fact that as a result of this the point at which the banks began a tightening of their loans to the medium and smaller enterprises was displaced. Also the idea that the banks were becoming superannuated came into fashion because of the activity on the securities market, and the reduction of interest on deposits due to political pressure, and for a time at least the banks adopted a positive attitude towards loans to the medium and smaller enterprises and to consumer credit.

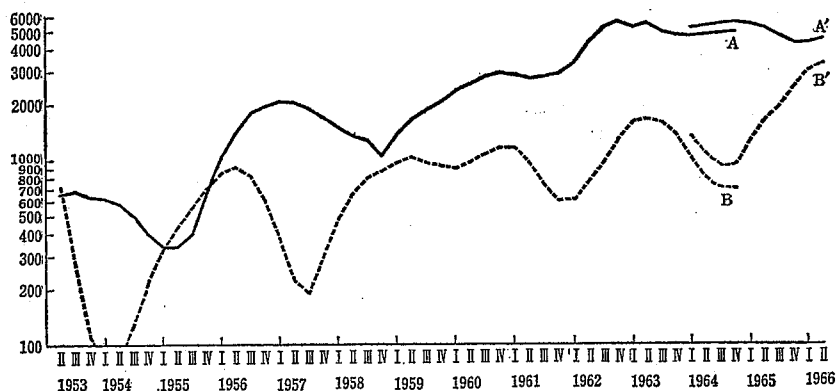
Next, abnormally swollen trade credit exercised an influence on the form of the swing in the period of the tightening of the money market in 1964 which followed the short-term improvement in the state of business in 1963. As the money market became tighter, however, the typical form of the strin-



gency-shifting swing was restored once again. What is more, we have reason for believing that the tendency for the Mutual Loan & Savings Banks and Trust Banks to increase their volume of funds, which had continued to rise consistently throughout the period of "high economic growth rate," at last began to fall off after reaching its peak in 1963, and thus the stringency-shifting swing may have been all the more severe for the medium and smaller enterprises.

Nevertheless, from the process of a depressed state of business and on into the early stages of the recovery period the medium and smaller enterprises had a relatively large supply of funds as a result of the dying down of demand from the large enterprises, but as soon as the upswing began and sanguine expectations began to be entertained they were immediately apt to have their finances restrained and to be pressured to economize on funds. For this reason it was difficult for them to embark confidently on equipment investment. Instead, they were apt to be driven into bankruptcy through anomalies arising in their finances because they had undertaken investment.

Figure. 3



We can follow the process of the operation of this stringency-shifting mechanism in simplified schematic form as follows: (1) When the level of interest rates is lowered by artificially low interest rate policies of the monetary authorities at a time when the marginal utility of capital is high, the demand for funds by the large enterprises increases because of the effect of the availability of funds on borrowers. (2) Since the city banks which are closely connected with the large enterprises proceed to concentrate their finance on the large enterprises, the supply of funds gradually becomes strained and it becomes necessary to limit the supply of funds to the medium and smaller enterprises. (3) Finance for large enterprises is attended with the disadvantages that not only is it carried out at low rates of interest practically equivalent to financing costs and thus provides a poor profit-margin, but also as a result of the excessive extension of credit there is, in times of financial stringency, an increase in costs accompanying the increase in external indebt-

edness. For these reasons banks take steps to maintain their business returns by maintaining at a certain minimum loans to the medium and smaller enterprises, which are given at relatively high rates of interest, and in particular by lending as much as they can to the medium and smaller enterprises once the demand from the large enterprises has died down. (4) As a result of the extension of credit by the city banks there is an efflux of cash currency and the banks find difficulty in supplying cash. To make up the deficiency they must either receive credit from the Bank of Japan or must get call-money, etc., which results in an abnormal rise in the call-rate and in a part of the surplus of funds in the financial institutions serving the medium and smaller enterprises being absorbed by the financial market for large enterprises. Consequently, the stringency-shifting mechanism may be expected to continue to operate in the future if either the marginal utility of capital rises by a large amount or if artificial interest rate policies are put into force.

## II. THE "DUAL STRUCTURE OF LENDERS"

Table 10 shows the outstanding sums of total loans to large enterprises and to medium and smaller enterprises by the principal financial institutions in Japan at the end of 1963, the outstanding loans for the equipment funds within the above, and the distribution of these loans among the different classes of financial institutions. The table shows that 96.3% of the loans for equipment investment of the large enterprises, or 86.5% of their total loans, were supplied by four classes of private financial institutions (the city banks, trust banks, long-term credit banks, and insurance companies), and two government institutions (the Development Bank and the Export-Import Bank). Conversely these four classes of private financial institutions accounted for only 19.9% of the funds for equipment investment borrowed by the medium

**Table 10. COMPONENT RATIO OF OUTSTANDING SUMS OF TOTAL TO LARGE ENTERPRISES AND MEDIUM & SMALLER**

		City Banks	Trust Banks	Long-term Credit Banks	Development Bank	Export-Import Bank	Insurance Companies
Large Enterprise	Equipment Funds	13.6	28.4	31.2	18.3	—	4.8
	Total Loan Outstanding	47.1	13.6	10.8	5.6	2.4	7.0
Medium & Smaller Enterprise	Equipment Funds	7.5	3.7	8.7	—	—	—
	Total Loan Outstanding	22.8	1.9	1.7	—	—	—

Notes: 1. Large enterprise is incorporated enterprise with a nominal capital over ¥50

2. Medium and smaller enterprise is incorporated or non-incorporated enterprise

Source: *Keizai tôkei geppô*.

and smaller enterprises, or 26.4% of their total loans. Consequently, we may say that these institutions have the same characteristics of financial institutions serving the large enterprises.

In contrast, the amount of loans by medium and smaller enterprises accounted for by three classes of private financial institutions (the local banks, the Mutual Loan & Savings Banks, and the Credit Associations) and three government institutions (the Central Bank for Commercial & Industrial Cooperatives, the Small Business Finance Corporation, and the People's Finance Corporation) totalled 80.1% of funds for equipment investment and 73.6% of all loans. Conversely, these institutions figured in the loans of the large enterprises only to the smallest extent, thus showing them to be financial institutions serving the medium and smaller enterprises.

Next, Table 11 shows the proportions of total loans of the institutions appertaining to the Japanese banks (including trust account) supplied to the large enterprises and to medium and smaller enterprises. Apart from the local banks the proportion supplied to large enterprises is overwhelmingly greater, so that from this point of view, too, these would seem to be worthy of being called financial institutions serving the large enterprises. Again, Table 12 shows the proportion of large-sum credit supplied in the loans of the Mutual Loan & Savings Banks and Credit Associations. Although recently this proportion has been as high as 20% of the total loans of the Mutual Loan & Savings Banks, the proportion of small-sum lendings is still overwhelmingly high. Again, the proportion of large-sum credit provision in the loans of the Credit Associations amounts to no more than 3%, and the small-sum credit provision is even higher a proportion in comparison with that of Mutual Loan & Savings Banks. From this point of view, too, we may say that these institutions are financial institutions serving the medium and smaller enterprises. From the first the Mutual Loan & Savings Banks, Credit

LOANS & EQUIPMENT FUND LOANS BY FINANCIAL INSTITUTIONS  
ENTERPRISES (As of End of Fiscal 1963) (%)

Local Banks	Mutual Loan & Savings Banks	Credit Associations	Central Bank for Commercial & Industrial Cooperatives	Small Business Finance Corporation	People's Finance Corporation	Total	All Banks
3.7	—	—	—	—	—	100.0	76.9
13.5	—	—	—	—	—	100.0	85.0
11.9	27.2	18.7	5.1	13.0	4.2	100.0	31.8
26.0	21.4	17.9	3.7	2.6	2.0	100.0	52.4

million.  
with less than this.

**Table 11. COMPONENT RATIO OF LOANS OF ALL BANKS BY SCALE OF BORROWER (%)**

At End of September, Fiscal Year	Nominal Capital of Incorporated Enterprise (million yen)	Long-term Credit Banks	Trust Banks and Trust Account	City Banks	Local Banks	Total
1963	Under 10	5.8	6.2	20.4	49.5	24.8
	10-50	4.0	3.4	4.8	7.9	5.3
	Over 50	90.2	90.4	74.8	42.6	69.9
	Total	100.0	100.0	100.0	100.0	100.0
1965	Under 10	7.2	5.0	18.1	45.4	22.1
	10-50	3.4	2.4	5.1	7.8	5.2
	Over 50	89.4	92.6	76.8	46.8	72.7
	Total	100.0	100.0	100.0	100.0	100.0
1966	Under 50	11.8	7.6	25.0	54.2	28.9
	Over 50	88.2	92.4	75.0	45.8	71.1
	Total	100.0	100.0	100.0	100.0	100.0

Source: *Keizai tôkei geppô*.**Table 12. LARGE-SUM CREDIT SUPPLIED BY MUTUAL LOAN & SAVINGS BANKS AND CREDIT ASSOCIATIONS AS PROPORTION OF TOTAL CREDIT SUPPLIED (%)**

	Mutual Loan & Savings Banks	Credit Associations
Credit Supplied at More than ¥30 Million Per Client	12.7 (Maximum 54.7)	3.1 (Maximum 23.8)
End of March, Fiscal 1962		
Credit Supplied to Enterprises with a Nominal Capital of Less than ¥5 Million or with Less than 150 Employees	75.9 (Minimum 40.4)	83.7 (Minimum 60.7)
Credit Supplied to Enterprises with a Nominal Capital of More than ¥10 Million, or with More than 300 Employees	11.5 (Maximum 42.2)	—
Credit Supplied at More than ¥50 Million Per Client		
End of March, Fiscal 1964	13.1	1.7
End of March, Fiscal 1965	16.9	2.1
End of March, Fiscal 1966	21.3	3.0

Source: Banking Bureau, Ministry of Finance, *Kinyû nenbô* (Annual Report of Finance).

Associations, and Credit Cooperatives were set up as financial institutions for the benefit of the medium and smaller enterprises. And in spite of their striking development during Japan's rapid economic growth and their assimilation into the groups of the ordinary banks, it is apparent that they have not lost their characteristics as specialized institutions providing finance for medium and smaller enterprises.

However, these financial institutions serving the medium and smaller

enterprises are not merely characterized by their specializing in the field of medium and smaller enterprises, but are on a much smaller scale than the financial institutions serving the enterprises, and for this reason they were inferior in many aspects of management efficiency. Table 13 shows the percentages of expenses for personnel and supplies, two items which can be influenced to some degree by efforts in management, in respect to the local banks, the Mutual Loan & Savings Banks, and the Credit Associations, together with their return of interest on loans, the principal return of interest from the manipulation of funds. The table compares them with the corresponding figures for the city banks, and from this we can see in particular the high cost of the Mutual Loan & Savings Banks and Credit Associations, the consequently high rates of interest charged on their loans, and the relative unprofitability in cost relations in spite of this.

**Table 13. INDICES OF COSTS AND YIELD OF INTEREST ON LOANS**  
(City Banks=100)

	Local Banks	Mutual Loan & Savings Banks	Credit Associations
Personnel Expenses Rate	118	171	172
Supplies Expenses Rate	81	114	95
Total (A)	105	142	134
Yield of Interest on Loans (B)	109	123	123
B/A	104	86	92

Source: *Kinyū ginko sho-tōkei*.

These institutions are the products of the above conditions, under which the medium and smaller enterprises have been subject to credit rationing due to financial concentration. At first, the Mutual Loan & Savings Banks' instalment business and the Credit Associations' instalment savings business presupposed low-wage labour and depended on a labour-intensive method of conducting business which may be described as 'collecting deposits going from door to door.' These institutions therefore correspond with the medium and smaller enterprises within the dual structure of industry. In this sense we may say that a dual structure of lenders reflecting the dual structure of borrowers came into being.

Of course, in the process of the high economic growth the more the mechanisms for the concentration of finance operated, the greater was the development of the financial institutions serving the medium and smaller enterprises. The business of these institutions was rapidly expanded, modernization and rationalization of their management also developed, and sweeping improvements were brought about in costs, while at the Mutual Loan & Savings Banks the importance of the instalment business declined greatly. In the process differentials among these institutions themselves were enlarged, and among the upper-ranked institutions some had grown so much that they rivalled the large-scale local banks. But in spite of this we must state that, as a whole, they clearly retained the special characteristics of insti-

tutions serving the medium and smaller enterprises when compared with the city banks.

As the principal factors bringing about these disadvantages in efficiency of management we may be able to cite the smallness of the sums lent to individual clients and the smallness of individual deposits received. This is due to the fact that, even when there is no difference in the number of items of deposits and loans dealt with per employee, this condition of business makes the balances of deposits and loans per employee too small and to this extent raises personnel expenses. As we see in Table 14, whereas the Credit Associations are not inferior to the ordinary banks at least in regard to numbers of deposits per employee, the fact that this is not associated with an enlargement of the balance on deposit per employee is due to the smallness of these deposits. But since the characteristic smallness of these deposits and loans is a condition of the financial institutions serving the medium and smaller enterprises, we must say that high costs, in so far as they are derived from the smallness of the sums handled, are inevitable as far as these institutions are concerned.

**Table 14.** NUMBER OF DEPOSITS PER EMPLOYEE (At End of March, Fiscal 1966)

City Banks	311
Local Banks	390
Credit Associations	346

Sources: 1. Local Banks: *Ginkō gyōmu tōkei* (Statistics of Banking Business).  
2. Credit Associations: *Zenkoku shinyō-kinko tōkei* (Statistics of All Credit Association).

**Table 15.** INDICES OF BALANCES ON DEPOSIT PER UNIT OF PERSONNEL EXPENSES (At End of First Half of Fiscal Year)

	Rate of Increase of Balances on Deposit per Employee	Index of Balances on Deposit per Employee (City Banks=100)		Index of Personnel Expenses per Employee (City Banks=100)		Index of Balances on Deposit per Yen of Personnel Expenses (City Banks=100)	
	1960-1964 (%)	1960	1964	1960	1964	1960	1964
City Banks	53.7	100	100	100	100	100	100
Local Banks	68.2	65.6	71.9	72.4	82.2	90.4	81.4
Mutual Loan & Savings Banks	122.0	35.8	51.8	65.3	75.5	48.6	55.3
Credit Associations	100.0	36.3	47.4	59.3	70.0	57.0	59.6

Sources: An analysis of financial statements of all banks and Mutual Loan & Savings Banks, balance sheets of Credit Associations, etc.

Looking at Table 15, we see that in spite of having carried forward the enlargement of the sums on deposit per employee at a speed which far outstripped the city and local banks, the Mutual Loan & Savings Banks' and

Credit Associations' deposits per employee remained about half of the corresponding figures for the city banks. Partly due to the influence of the contraction of wage differentials during the process they were only able to reduce slightly their differentials in relation to the city banks in terms of balance on deposit per yen of personnel expenses.

These institutions enlarged their volume of funds with astonishing speed every year up to about 1962. Furthermore, this process was at the same time an improvement of managerial efficiency by means of increasing the size of individual deposits and loans. However, we have reason to believe that institutional restraints operating against the enlargement of the size of individual deposits and loans brought about fairly clearly marked differences between the results attained by the Mutual Loan & Savings Banks and the Credit Associations, for while the Mutual Loan & Savings Banks were subject to administrative restrictions only in regard to the amount to be loaned to each client, the Credit Associations were subject in addition to membership qualifications and the prohibition of loans to non-members. From Table 16 we see that if loans per client are taken to be 100 at the end of March, 1957 they increased by more than 10 times by the end of March, 1963 (to 1,053) at the Mutual Loan & Savings Banks, which far exceeds the index of 442 for the Credit Associations. In light of the fact that over the same period the index of loans per manufacturing company among the medium and smaller enterprises rose by only 2.2 times, from 100 to 223, we may be able to gauge how great the concentration of finance was which was provided by the Mutual Loan & Savings Banks in the upper range of the medium and smaller enterprises and in the medium-large enterprises. We can say the same in the light of the index of the size of individual deposits by private corporations in general. The index for the Mutual Loan & Savings Banks with the end of March, 1957 as 100 was 631 at the end of March, 1966, which is much higher than the figure of 369 for the Credit Associations and the 239 of the index for balance on deposits held per enterprise among the medium and smaller enterprises. (It should be noted, however, that since the base figures of the end of March, 1957 are for cash and deposits this index represents somewhat under-estimated values.) In the index for individual deposits by private persons the Mutual Loan & Savings Banks show a figure of 260, which is lower than the Credit Associations' 284. Furthermore, if we compare this with the extremely small differences between these two institutions and the city and local banks the enlargement of the size of individual savings deposits by private corporations at the Mutual Loan & Savings Banks is all the more indicative.

Of course these developments are the products of matching business policy with the direction of the development of the Japanese economy as a whole, and with reference to the period in question these policies may be said to have been natural choices on the part of the financial institutions. Under a high economic growth rate, the Mutual Loan & Savings Banks have rapidly increased their supply of finance to the manufacturing industry, especially to

**Table 16. INDICES OF OUTSTANDING LOAN PER CLIENT AND INDEX OF BALANCES ON DEPOSIT PER CLIENT (March, 1957=100)**

March of Fiscal Year		City Banks	Local Banks	Mutual Loan & Savings Banks	Credit Associations	Average per Medium & Smaller Enterprise*
Index of Outstanding Loan per Employee	1966	228	273	1,053	442	223
Balance per Deposit Made by Private Corporations in General	1966	191	272	631	369	239
Balance per Deposit Made by Individual Persons	1966	202	242	260	284	

Note: \* Manufacturing industry.

Sources: *Keizai tōkei geppō*; *Kinyū ginkō tō sho tōkei*; Mutual Loan & Savings Banks Associations, *Sōgo ginkō tōkei nenpō* (Annual Statistical Report of Mutual Loan & Savings Banks); All Credit Associations, *Zenkoku shinyō kinko kessan shori jōkyō* (Financial Statements of All Credit Associations); Bank of Japan, *Chūshō kigyō keiei bunseki* (Survey of the Management of Medium & Smaller Enterprises).

the heavy and chemical industries in this sector. Thus the importance of the finance supplied to their former priority sectors in finance, such as the wholesale, retail and service industries, has decreased. This means that the financing by these banks has become similar to that by the ordinary banks.

This pursuit of the enlargement of the sums deposited and loaned by the Mutual Loan & Savings Banks possesses another characteristic in that it was carried out to the accompaniment of a decrease in the number of loans made. As we see from Table 17, while up to the end of September, 1964, other institutions had been increasing the number of their loans up to about 90% at roughly the same pace, the Mutual Loan & Savings Banks alone decreased theirs to about half. Although there were special circumstances in the form of the transition from instalment payments to loans we have reason to believe that much of it was due to a direction of development leading to the increased importance of the heavy and chemical industries among the branches of industry to which loans were made and to a tendency to supply finance to the larger-scale enterprises.

**Table 17. TREND OF NUMBER OF LOANS (in thousand)**

	End of September, Fiscal 1954	End of September, Fiscal 1964
City Banks	289 (100)	533 (184)
Local Banks	573 (100)	1,073 (187)
Mutual Loan & Savings Banks	1,757 (100)	971 (55)
Credit Associations	656 (100)	1,237 (189)

Source: *Keizai tōkei geppō*.

One aspect of this development on the part of the Mutual Loan & Savings Banks was the efforts made to reduce costs by enlarging the size of



individual deposits and loans. Now as regards the lending costs of financial institutions it seems to be no mistake that the most important determining factor is the average balance on deposit per employee. If we calculate the personnel and supplies expenses ratios for the local banks, the Mutual Loan & Savings Banks and the Credit Associations, classifying these according to average balances on deposit per employee, the inverse relationship is clearly apparent, particularly as regards personnel expenses.

In general it is believed that the two most important ways—other things being equal—by which an enlargement of the scale of operation may lead to a reduction in costs are the rationalizing effect on business brought about when a financial institution attains that scale of volume of funds which is necessary for the mechanization of its business, and the enlargement of the size of individual deposits and loans which results from increasing the scale of the businesses catered to. We must note that the latter comprises aspects which are essentially in contradiction with the tasks of these financial institutions for the medium and smaller enterprises.

During the period of a high economic growth rate the demand for investment funds by large enterprises was apt to swell to such proportions that it frequently exceeded the flow of normal savings. The formula of first supplying the demand for funds from the large enterprises and rationing the remaining funds among the medium and smaller enterprises was in continuous operation in the finance-concentrating mechanisms centred on the city banks. The fluctuations which arose in this rationing were due to expansions and contractions occurring in response to conditions of activity or slackness in the business world. It was natural that the levels of interest rates for medium and smaller enterprises determined by this rationing should be a good deal higher than those determined by cost differentials. On the other hand, since a compulsory lowering of the levels of interest rates for large enterprises was carried out the ostensible rates of interest for the medium and smaller enterprises had to be lowered to a certain extent, and consequently efforts were made to maintain the levels of effective interest rates by raising the compensating balance requirements. However, it appears that as a result of public criticism of this point and administrative direction stimulated by it, levels of effective interest rates were set at positions which were low in comparison to demand. As a result, credit rationing came into being and the medium and smaller enterprises were driven by a constant feeling of a quantitative deficiency of funds, which created a tendency for them to be willing to borrow even at usurious rates of interest in order to obtain the supplementary funds they required. The fact that in spite of the relatively high deposit costs of the financial institutions serving the medium and smaller enterprises they were able to develop rapidly while levying higher effective rates of interest on their loans is also due to this cause. In particular this tendency was conspicuous in the case of regional Credit Cooperatives.

But how are we to understand the decline in the city banks' share of the market which occurred along with the development of the financial institu-

Table 18. CHANGES IN SHARES OF FUNDS ABSORBED AND

		City Banks	Local Banks	Trust Banks' Banking Account and Long-term Credit Banks	Trust Account
Deposits, Etc.	End of March, Fiscal 1956	35.9	16.6	2.2	4.9
		56.5	26.1	3.6	7.7
	End of March, Fiscal 1965	28.3	15.7	2.5	8.4
		46.9	26.0	4.2	13.9
Loans	End of March, Fiscal 1956	30.3	14.9	6.8	4.0
		52.5	25.8	11.8	6.9
	End of March, Fiscal 1965	27.5	13.6	7.0	5.3
		48.3	23.1	12.3	9.3

Source: *Keizai tōkei geppō*.

tions serving the medium and smaller enterprises? As is shown in Table 18, in terms of shares of funds absorbed by the financial institutions between the end of March, 1956 and the end of March, 1965, the city banks' share declined from 35.6% to 28.3% and the local banks' share from 16.6% to 15.7%, but the share of the Mutual Loan & Savings Banks and Credit Associations rose from 10.3% to 14.0%. In terms of shares lent, in contrast to the decline of the city banks' share from 30.3% to 27.5% and the local banks' share from 14.9% to 13.6%, the share of the Mutual Loan & Savings Banks and Credit Associations rose from 9.6% to 12.7%. Viewing this alone one might be led to think that the finance-concentrating mechanisms had relaxed during this period, but if we call all the banks, together with the trust banks and the insurance companies, financial institutions serving large enterprises, the changes in their share over a nine-year period can practically be ignored. Their share of funds absorbed went from 63.5% to 60.3%, and on their shares of loans from 57.7% to 56.9%. Consequently, the decline in the share of the ordinary banks is in fact a reflection of changes in choice of assets represented by increasing preferences for long-term high returns or assets in insurance or service industries accompanying the rise in levels of individual incomes and the assets which they hold, while we would interpret the increase in the share of the Mutual Loan & Savings Banks and Credit Associations which cannot be explained by the small decline in the share of the financial institutions serving the large enterprises as corresponding to a decline of the share of such financial institutions as Agricultural Cooperatives and Postal Savings.

Furthermore, as we see in Tables 19-21, during this period all the financial institutions serving large enterprises decreased their loans to the medium and smaller enterprises further and further, and tended to lend more and more to large enterprises. As a result of this, the decline in the share of the city and local banks as a whole was practically entirely derived from a decline in their share of the medium and smaller enterprises' market, while in the large enterprises' market the decline in the share of the city banks was extremely small and the share of the local banks even rose.

LOANS MADE BY FINANCIAL INSTITUTIONS							(%)
Insurance	Total of Financial Institutions for Large Enterprises	Mutual Loan & Savings Banks	Credit Associations	Total	Others	Grand Total	
3.9	63.5	6.0	4.3	10.3	26.2	100.0	
6.1	100.0						
5.4	60.3	7.2	6.8	14.0	25.7	100.0	
9.0	100.0						
1.7	57.7	6.0	3.6	9.6	9.6	100.0	
3.0	100.0						
3.5	56.9	6.5	6.2	12.7	12.7	100.0	
6.2	100.0						

Table 19. CHANGES IN SHARES IN LOANS TO LARGE ENTERPRISES\* AMONG FINANCIAL INSTITUTIONS (At Fiscal Year-End) (%)

	City Banks	Local Banks	Trust Banks' Banking Account and Long-term Credit Banks	Trust Account	Insurance	Development Bank and Export-Import Bank	Total
1956	48.8	12.9	18.7	7.8	3.6	13.1	100.0
1964	46.8	13.6	13.7	10.7	7.2	7.9	100.0

Note: \*Incorporated enterprises with a nominal capital over ¥10 million.  
Source: *Keizai tôkei geppô*.

Table 20. CHANGES IN SHARES IN LOANS TO MEDIUM & SMALLER ENTERPRISES\* AMONG FINANCIAL INSTITUTIONS (At Fiscal Year-End) (%)

	City Banks	Local Banks	Trust Banks' Banking Account and Long-term Credit Banks	Trust Account	Total	Mutual Loan & Savings Banks	Credit Associations	Three Government Financial Institutions**	Total
1956	31.3	27.6	1.4	1.6	61.9	17.2	10.9	7.8	100.0
1964	17.7	22.1	1.7	0.8	42.3	22.2	21.5	8.4	100.0

Note: \* Incorporated and non-incorporated enterprises with a nominal capital of less than ¥10 million.  
\*\* Central Bank for Commercial & Industrial Cooperatives, Small Business Finance Corporation, and People's Finance Corporation.  
Source: *Keizai tôkei geppô*.

The relations of complementarity among the financial institutions serving the large enterprises may be seen from Table 22, which shows financing ratios (the percentages of the loans of the enterprises which come from *keiretsu* financial institutions) in five big financial *keiretsu* centred on the principal city banks.

**Table 21.** CHANGES IN IMPORTANCE OF PROPORTIONS OF LOANS FOR MEDIUM & SMALLER ENTERPRISES\* IN TOTAL LOANS SUPPLIED BY ALL BANKS (At Fiscal Year-End) (%)

	City Banks	Local Banks	Trust Banks' Banking Account	Long-term Credit Banks	Trust Account	Total
1956	32.6	61.7	16.9	4.3	13.2	100.0
1964	19.0	47.6	10.1	6.4	4.5	100.0

Note: \* Incorporated or non-incorporated enterprises with a nominal capital of less than ¥10 million.

Source: *Keizai tōkei geppō*.

**Table 22.** PROPORTIONS OF FINANCE SUPPLIED IN THE MAJOR FINANCIAL *KEIRETSU*

<i>Keiretsu</i>	Section First Listed Companies		Proportion of Finance from Principal Banks Only (%)
	Number of Enterprises	Proportion of Finance Supplied (%)	
Mitsui (Banks, Trust, Life Insurance, Ordinary Insurance)	79	24.18	14.31
Mitsubishi (Banks, Trust, Life Insurance, Ordinary Insurance)	85	34.89	20.71
Sumitomo (Banks, Trust, Life Insurance, Ordinary Insurance)	80	34.37	19.87
Fuji (Banks, Trust, Life Insurance, Ordinary Insurance)	78	26.28	18.81
Dai-Ichi (Banks, Trust, Life Insurance)	41	20.63	18.03
Sanwa (Banks, Trust, Life Insurance)	53	28.93	21.88

Source: Negotiable securities reports.