

“OVER-LOAN” AND THE INVESTMENT BEHAVIOR OF FIRMS

HIROSHI KAWAGUCHI

I. INVESTMENTS AND “OVER-BORROWING” OF FIRMS

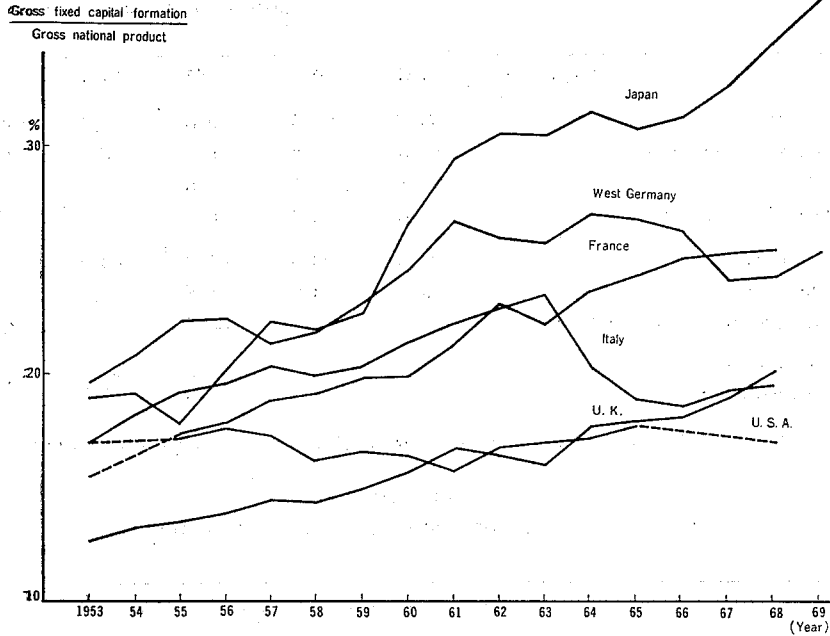
IN ITS RATIOS OF both the gross capital formation and the fixed capital formation to GNP, Japan in the 1950s, as is shown in Table I, was already one of the top capitalist countries, although at that time quite a few other countries showed as high a rate as Japan. In the 1960s, however, its ratio of fixed capital formation to GNP rose so rapidly that Japan was predominantly ahead of West Germany and ranked first in the world (Figure 1). This was due to the keen competition in investment between private firms, which was developed particularly in the first half of the 1960s. As a result, between 1961 and 1969, the real growth rate of GNP in Japan registered an average of 11.1 per cent.

TABLE I
THE RATIOS OF GROSS CAPITAL FORMATION TO GROSS NATIONAL PRODUCT
BY COUNTRIES IN THE 1950s

	Average Rate of Growth of Gross National Product (per year) (1950-59)	Ratio to Gross National Products	
		Fixed-Capital Formation	Gross Domestic Capital Formation
Japan	9.1	22.3	28.5
West Germany	7.5	21.3	23.9
Austria	5.7	21.2	21.8
Italy	5.7	20.0	20.8
Holland	4.6	22.2	24.3
Australia	4.3	25.8	28.4
Finland	4.2	25.6	—
France	4.0	16.9	18.6
Canada	3.9	23.1	24.5
Norway	3.4	28.4	29.7
U.S.A.	3.3	16.7	18.0
Sweden	3.3	20.2	21.1
New Zealand	3.1	21.1	23.2
Belgium	2.7	15.7	16.3
Denmark	2.7	17.7	18.9
U.K.	2.5	14.6	15.6

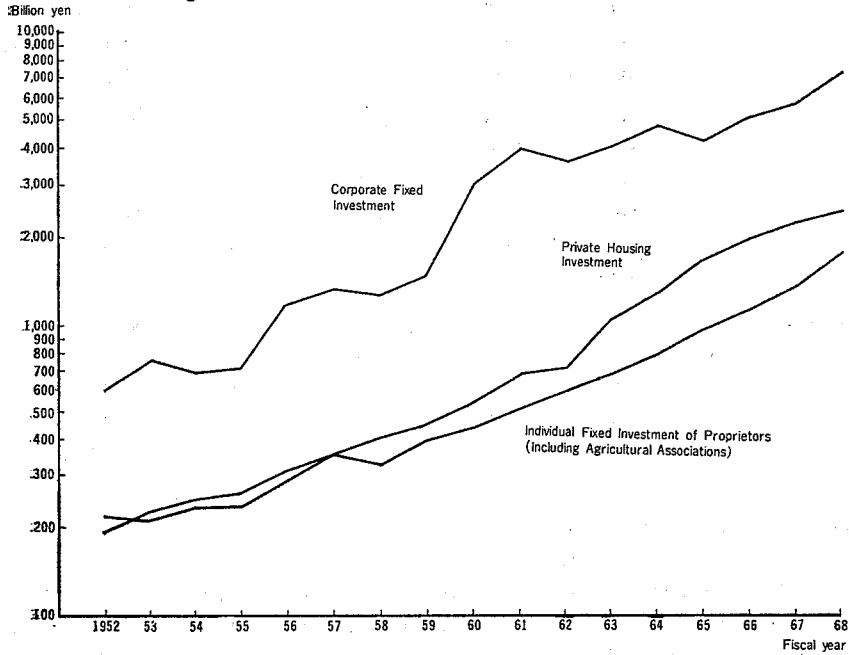
Source: United Nations, *World Economic Survey*, 1960.

Fig. 1. Ratios of Gross Fixed Capital Formation to GNP



Source: United Nations, *Yearbook of National Accounts Statistics*.

Fig. 2. Private Investment in Plant and Equipment



Source: Economic Planning Agency, "Annual Report on National Income Statistics, 1970."

TABLE
GROSS INVESTMENT AND SAVINGS

Fiscal Year	1956	1957	1958	1959	1960
Gross investment	100.0	100.0	100.0	100.0	100.0
Plant and equipments	68.0	70.8	86.2	78.3	80.4
Dwellings	2.4	2.5	3.6	3.1	3.6
Increase in inventories	29.6	26.7	10.1	18.6	16.0
Gross savings	100.0	100.0	100.0	100.0	100.0
Net savings	38.6	48.8	35.5	42.2	47.5
Capital consumption allowances	61.4	51.2	64.5	57.8	52.5
<u>Gross savings</u> <u>Gross investments</u>	51.0	57.1	64.0	61.2	61.3

Source: Bank of Japan, *Investments, Savings, and Financial Surplus or Deficits by*

TABLE III
RAISING OF FUNDS FOR THE CORPORATE FIRM SECTOR

	Year	Japan	U.S.A.	U.K.	W. Germany	France
Internal funds	1963	34.4	77.9	74.9	69.8	53.5
	1964	44.1	78.7	71.0	67.2	53.9
	1965	44.3	73.4	74.0	63.8	55.7
	1966	51.5	71.1	75.5	71.1	65.2
	1967	49.6	67.7	81.2	78.1	65.2
	1968	53.3	67.0	73.7	75.2	62.4
External funds	1963	65.6	22.1	25.1	30.2	46.5
	1964	55.9	21.3	29.0	32.8	46.1
	1965	55.7	26.6	26.0	36.2	44.3
	1966	48.5	28.9	24.5	28.9	34.8
	1967	50.4	32.4	18.8	21.9	34.8
	1968	46.7	32.9	26.3	24.8	37.6
Percentage of loans in external funds	1963	86.4	71.0	61.1	66.2	78.8
	1964	80.8	60.6	66.9	59.1	79.9
	1965	89.5	73.7	63.3	54.8	75.2
	1966	86.5	54.2	35.7	65.4	77.4
	1967	90.2	42.0	39.9	83.8	79.6
	1968	91.4	61.3	62.8	75.8	85.8

Source: Bank of Japan, *International Statistical Comparison*, 1970.

Figure 2 shows private fixed investment (nominal) between 1952 and 1968 in the vertical axis with logarithmic scale. Capital investment of private corporate firms grew remarkably from 1,400 billion yen in 1959 to over 3,000 billion in 1960, and to 4,000 billion in 1961. The growth was moderate in 1962, but it

II
IN CORPORATE FIRM SECTOR

									(%)
1961	1962	1963	1964	1965	1966	1967	1968	1969	
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
71.6	89.8	76.5	84.9	83.0	79.9	76.1	77.4	78.2	78.2
2.8	4.2	3.5	3.9	4.2	3.1	3.3	3.1	3.3	3.3
25.6	6.0	20.0	11.2	12.8	17.0	20.5	19.5	18.5	18.5
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42.8	34.9	33.5	28.9	25.7	34.3	38.6	43.5	42.0	42.0
57.2	65.1	66.5	71.1	74.3	65.7	61.4	56.5	58.0	58.0
50.1	64.0	60.6	66.8	77.8	77.4	70.7	76.7	70.9	70.9

Economic Sectors, (revised), 1956-1969, 1970.

TABLE IV
THE RATIOS OF THE GROSS INTERNAL FINANCE TO THE INCREASE OF THE
GROSS FIXED ASSETS OF FIRMS BY NOMINAL CAPITAL

												(%)
Nominal Capital (million yen)	Fiscal Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
2- 9.9		140.2	96.7	87.5	53.7	75.1	82.2	91.8	88.2	106.1	84.8	
10- 49.9		63.6	57.1	85.7	47.6	75.6	87.1	115.0	83.7	92.5	76.3	
50- 99.9		69.8	80.2	56.6	57.8	58.0	97.6	84.2	118.6	89.7	89.0	
100-999.9		74.7	50.6	47.2	55.3	47.9	63.4	108.8	76.1	69.2	65.3	
1,000-		39.4	37.2	39.9	43.1	46.4	50.9	53.7	59.6	49.2	58.4	

Source: Ministry of Finance, *Corporate Enterprise Quarterly Survey*.

rose in 1963 and 1964, and after a slight decrease in 1965, it again took an upward turn. In 1968, the amount exceeded 7,000 billion yen. During the period, the private business sector, including agriculture, showed an upward trend at almost constant rate, and after 1968, a high rate of private housing investment also was continued. Above all, the rapid increase in fixed investment by corporations is a noteworthy trend.

During the first half of the 1960s, as is shown in Table II, gross investment was made, to the extent of about 40 per cent, with external funds, mainly bank loans. Table III compares the raising of funds for the corporate firm sector in Japan, the United States, the United Kingdom, West Germany, and France. The period covered the years between 1964 and 1966 when, owing to firm recession, dependence upon external funds in Japan decreased considerably, but the rate of its dependence upon such funds continued to be higher than in the other countries. Of the external funds, loans occupied a higher rate than the other borrowings. During the period, the external funds ratio tended to be high everywhere, but in Japan it seemed to be the highest.

TABLE

RATIOS AND INDICES OF CORPORATE FIRMS IN ALL INDUSTRIES IN THEIR NUMBERS,

Fiscal Year, Quarter			Ratio				
			1951· III	1955· III	1959· III	1964· III	1969· III
Capital (in million yen)							
No. of Firms	(1)	2- 10	83.9%	84.2%	85.1%	83.0%	79.1%
	(2)	10- 50	11.3	11.4	11.3	11.9	16.5
	(3)	50- 100	4.8	1.8	1.4	2.2	2.1
	(4)	100-1,000		2.6	1.8	2.4	1.9
	(5)	1,000-		0.4	0.6	0.4	
		Total		100.0	100.0	100.0	100.0
Sales							
	(1)	2- 10	31.6	27.5	30.7	21.8	19.6
	(2)	10- 50	17.0	15.5	14.8	14.0	18.7
	(3)	50- 100	51.4	6.2	5.5	6.0	6.7
	(4)	100-1,000		50.8	17.0	16.4	16.1
	(5)	1,000-		31.0	41.9	38.9	
		Total		100.0	100.0	100.0	100.0
Gross (net) balance of gross (net) funds							
	(1)	2- 10	18.9	15.2	19.5	13.9	13.4
	(2)	10- 50	12.8	10.9	11.4	9.6	15.6
	(3)	50- 100	68.3	5.4	4.6	4.9	5.7
	(4)	100-1,000		68.5	17.8	16.0	15.9
	(5)	1,000-		46.6	55.4	49.3	
		Total		100.0	100.0	100.0	100.0
Balance of financial institution loans							
	(1)	2- 10	18.1	13.3	17.0	12.5	11.6
	(2)	10- 50	12.6	9.4	9.3	7.5	13.7
	(3)	50- 100	69.3	5.2	4.2	4.3	5.2
	(4)	100-1,000		72.1	18.4	14.9	15.3
	(5)	1,000-		51.1	62.3	54.2	
		Total		100.0	100.0	100.0	100.0
Balance of financial institution long-term loans							
	(1)	2- 10	8.5	5.4	7.3	5.5	7.6
	(2)	10- 50	11.8	4.8	6.4	5.2	12.3
	(3)	50- 100	79.7	3.6	3.2	4.0	4.3
	(4)	100-1,000		86.2	18.4	15.1	15.1
	(5)	1,000-		64.7	70.2	60.8	
		Total		100.0	100.0	100.0	100.0

Source: Ministry of Finance, *Corporate Enterprise Quarterly Survey*.

Notes: 1. Figures by the firms scale in *Corporate Enterprise Quarterly Survey* are values for groups of firms obtained by multiplying the average value of sample firms by the value of the estimated number of firms by scale. Those with a capital less than 100 million yen have been taken for sample survey. The estimated number of firms in population, which the sample firms represent, is fixed in the first quarter of the whole year, and changes during the

V
SALES, BALANCES OF NET CAPITAL, AND LOANS FROM FINANCIAL INSTITUTIONS

Index					Index per Company				
1951·III	1955·III	1959·III	1964·III	1969·III	1951·III	1955·III	1959·III	1964·III	1969·III
13.8	49.6	100.0	176.6	331.2	—	—	—	—	—
13.9	50.4	100.0	190.6	521.5	—	—	—	—	—
	65.9	100.0	183.3	530.5	—	—	—	—	—
18.4	57.4	100.0	238.5	372.2	—	—	—	—	—
		100.0	235.6	319.5	—	—	—	—	—
14.0	50.0	100.0	181.0	355.9	—	—	—	—	—
23.0	42.0	100.0	161.5	351.9	166.7	84.7	100.0	91.4	106.3
25.7	49.0	100.0	215.3	700.0	184.9	97.2	100.0	113.0	128.4
	53.1	100.0	246.6	669.8		80.6	100.0	87.0	126.3
21.1	48.7	100.0	219.5	522.8	114.7	84.8	100.0	92.0	140.5
		100.0	299.1	673.4			100.0	127.0	210.8
22.4	46.8	100.0	227.7	552.0	160.0	93.6	100.0	125.8	155.1
18.6	35.1	100.0	196.3	409.8	134.8	83.6	100.0	111.2	123.7
21.7	43.2	100.0	230.6	815.5	156.1	85.7	100.0	121.0	156.4
	53.6	100.0	298.6	742.1		81.3	100.0	105.4	139.9
19.1	48.0	100.0	246.8	532.2	103.8	83.6	100.0	103.5	143.0
		100.0	326.8	629.2			100.0	138.7	196.9
19.3	45.2	100.0	274.7	595.3	137.9	90.4	100.0	151.8	167.3
17.0	31.4	100.0	195.5	410.0	123.2	63.3	100.0	110.7	123.8
21.8	40.8	100.0	217.0	891.7	156.8	81.0	100.0	113.9	171.0
	49.3	100.0	270.4	733.6		74.8	100.0	95.0	138.3
15.0	41.8	100.0	216.6	498.4	81.5	85.8	100.0	90.8	133.9
		100.0	324.6	635.9			100.0	137.8	199.0
16.0	40.3	100.0	266.2	599.9	114.3	80.6	100.0	147.1	168.6
13.9	29.3	100.0	212.1	717.5	100.7	59.1	100.0	120.1	216.6
22.0	30.1	100.0	230.1	1,325.7	158.3	59.7	100.0	120.7	254.2
	45.5	100.0	356.6	922.5		69.0	100.0	125.9	173.9
11.0	41.4	100.0	232.4	569.1	59.8	72.1	100.0	97.4	152.9
		100.0	307.4	649.8			100.0	130.5	203.4
11.9	39.9	100.0	283.2	691.8	85.0	79.8	100.0	156.5	194.4

year is not reflected on the quarterly numbers.

- The rate of replies to the sample survey has not been very high, and it is possible the average value includes more outstanding firms in the group of those in the same line.
- It should be noted that this table stands as of the end of December of each year and that loans are weighted heavier with medium and small firms.

The high dependence upon external funds was more conspicuous in large firms, and this was a special feature of Japan. In Table IV, ratios of gross internal finance to gross increase of fixed assets by nominal capital are calculated. It will be seen that the larger the firm scale is, the lower are these ratios, and that in the case of firms with a capital of over 1 billion yen, the ratios for 1965-67, when self-finance greatly increased during recession, were lower than 60 per cent.

The fixed investment boom in Japan during the first half of the 1960s was developed by external funds, especially by bank loans, mainly to large firms. Table V shows that, among the corporate firms in all industries with a capital of over 2 million yen, the numbers of large corporate firms with a capital over 1 billion yen were less than 0.6 per cent, at the end of 1964, but their sales between October and December 1964 reached 41.9 per cent. The balance of used net capital (net of depreciation reserves), however, was higher than the share in terms of the sales, and was 55.4 per cent. The balance of loans from financial institutions was 62.3 per cent, while that of long-term loans was as high as 70.2 per cent.

When compared with the figures for the end of 1959, the ratios were found to have risen to the above levels from 46.6 per cent in the balance of the used net funds, from 51.8 per cent in loans from financial institutions, and from 64.7 per cent in long-term loans. Thus, the rapid speed with which large firms increased their borrowings from financial institutions may well be understood. All the ratios declined between the end of 1964 and the end of 1969. On the contrary, firms at the 10 to 50 million level of capital showed noteworthy increases in sales—from 14 per cent to 18.7 per cent, in the used net funds from 9.6 per cent to 15.6 per cent, in the loans from financial institutions from 7.5 per cent to 13.7 per cent, and in the long-term credits of these loans from 5.2 per cent to 12.3 per cent. Partly, however, such results must have been due to an increase of over 2.7 times during the period in the number of the firms at this level. A calculation of figures per company shows that the rate of increase in the balance of net funds during the same period was 1.29 times for firms of the level of 10 to 50 million yen, while that for those of the 1 billion level was 1.42 times. The superiority of large firms in the matter of funds, therefore, did not change. As this increase depended rather heavily upon capital increases and gross internal reserves, long-term loans in particular grew by 1.6 times, while those for the firms of the 10 to 50 million class increased by 2.1 times. Nevertheless, if figures at the end of 1959 are taken as 100, indexes of both long and short loans will be 199 for large firms, which are in a somewhat better position, and 171 for the other category.

Next, attention will be called to Table VI, in which various items in the balance of net funds in the use of corporate firms of different scales at the end of 1959 are compared with those at the end of 1969. The rate of owned capital had declined, even in large firms with a capital of over 1 billion yen from 30 per cent in 1959 to as low as 19 per cent in 1969. Such a drop must be an unparalleled phenomenon in the world. The rate of loans, both long and short, from financial institutions is higher for large firms, that is, as high as over 34 per cent for the

TABLE VI
BALANCE OF GROSS CAPITAL IN FIRMS OF DIFFERENT SCALES IN ALL INDUSTRIES

	Scale (in Mil. Yen)												Average	
	2-10		10-50		50-100		100-1,000		More than 1,000		Average			
	At the End of 1959	1969	1959	1969	1959	1969	1959	1969	1959	1969	1959	1969	1959	1969
Account payable	42.6	37.8	36.7	36.9	34.1	36.7	24.6	32.7	13.5	23.4	24.8	29.7		
Short-term loans from financial institutions	22.3	18.5	17.9	15.5	19.9	17.2	18.4	15.4	15.7	15.5	17.9	16.0		
Others	11.6	12.0	14.4	13.0	14.2	10.9	15.1	12.6	14.0	13.1	13.8	12.7		
Total current liabilities	76.5	68.3	69.0	15.4	68.2	64.8	58.1	60.7	43.2	52.0	56.5	58.4		
Debtenture	—	—	—	—	—	0.1	0.3	0.1	5.5	4.4	2.7	2.2		
Long-term loans from financial institutions	5.0	8.8	7.5	12.2	9.4	11.6	13.8	14.7	18.6	19.2	13.4	15.6		
Others	2.8	4.6	5.3	6.8	5.5	8.3	4.8	8.1	2.6	5.0	1.2	5.8		
Total fixed debts	7.9	13.4	12.9	19.0	14.9	20.0	18.9	22.9	26.8	28.6	19.5	23.6		
Total debts	84.4	81.7	81.9	84.4	83.1	84.8	77.1	83.6	70.0	80.6	76.0	82.0		
Total capital	15.6	18.3	18.1	15.6	16.9	15.2	22.9	16.4	30.0	19.4	24.0	18.0		
Grand total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Total loans from financial institutions	27.3	24.3	25.4	27.7	29.3	28.8	32.2	30.1	34.3	34.7	31.3	31.6		
Fixed debts · Capital	100.6	103.8	114.0	119.5	100.5	114.7	107.3	114.8	107.1	114.1	106.7	113.5		
Fixed assets														
Cash · Deposits	26.3	33.2	29.1	37.0	28.4	35.9	31.4	39.7	24.3	34.3	27.1	35.5		
Sales														
Cash · Deposits														
Loans from financial institutions	62.3	67.1	60.6	60.5	47.9	55.4	38.5	50.2	19.7	29.5	35.4	42.6		
Account payable														
Credit account · Discount earned	129.7	133.2	127.2	120.2	116.9	116.7	112.3	116.4	75.7	85.7	111.2	104.7		
Discount earned														
Credit account · Discount earned	27.5	29.7	33.2	29.7	32.2	29.1	32.8	28.2	25.8	21.8	29.9	25.9		
Long-term loans from financial institutions														
Loans from financial institutions	18.3	32.2	29.5	44.0	32.1	40.3	42.9	48.8	54.2	55.3	42.8	49.4		

Source: Ministry of Finance, *Corporate Enterprise Quarterly Survey*.

1 billion category. The item of "others" in current debts is likely to consist mainly of borrowings from "internal deposits" of the employees, from individuals or firm connections, and the like. Dependence upon borrowed money may be regarded, therefore, as attaining from 40 to 50 per cent in all the classes of firms. It is worthy of note in this connection that the rate of cash and deposits of medium and small firms to loans from financial institutions is as high as 50 to 67 per cent. This does not mean that the funds liquidity of these firms is always high, but it reflects the fact that a large part of their cash and deposits is the so-called "bounden deposits," that is, they are cash and deposits that the firms are obliged by financial institutions, explicitly or implicitly, to hold as counterpart funds. In fact, such loans in some cases may be inevitable for lending to medium and small firms, which are likely to be short of security, and this system is actually utilized by financial institutions as a means of raising the real interest rates. It may be more appropriate, therefore, first to deduct from the amount of loans to medium and small firms the amount corresponding to the part of cash and deposits beyond those of the large firm category, and to regard the balance as the actual loans to medium and other firms.

For these firms the rate of their accounts payable to their credit accounts is usually high and is over 100 per cent. This is the result, however, of about 30 per cent of their credit accounts having been loaned to them by banks through discounting their bills receivable. It cannot always be said, therefore, that medium and small firms in general secure greater credit directly with their customers and connections. In spite of the discounting of bills for over 20 per cent of their credit accounts, the rate of the account payable of large firms to their credit accounts is only 75 to 85 per cent. This shows that large firms as a whole are receiving more trade credit than their due from the Government, individuals, and from abroad. In the case of firms whose power of transaction greatly differs, it is well known that trade credit is apt to serve as a means for large firms to control smaller ones. A high degree of dependence upon this source of funds, therefore, cannot be favorable to medium and small firms.

Dependence upon financial institutions for loans is heavier on the part of large firms, and the rate of long-term loans is higher than that of other loans for firms of the 1 billion class, the highest rate reaching 55 per cent. Between the end of 1959 and the end of 1969, the degree of dependence upon bank loans by medium and small firms was greatly improved, but not to the same degree as for large firms. Moreover, the improvement in the rate of long-term loans to medium and small firms was partly due to the change in the loan policy of financial institutions stimulated by discussions on the reorganization of the financial system by the Financial System Investigation Board in the Ministry of Finance, and which adopted the new manner of supplying long-term loans to medium and small firms. The institutions had supplied them by continually renewing short-term loans to them. It cannot be said that the apparent innovations were always substantial ones.

How were large increases in loans, which were favorable to large firms,

developed, especially during the first half of the 1960s, and how were fixed investments promoted?

II. "OVER-LOAN" OF CITY BANKS

Financial institutions will now be considered. Table VII shows the shares of various financial institutions after 1955 in loans to large firms, and Table VIII gives loans during the same period to medium and small firms. A capital of 10 million yen was made the demarcation line between large and medium and small firms for 1955 and 1959, and 50 million for 1964 onwards. Moreover, loans by the three "financial institutions specialized in financing private medium and small firms," that is, mutual loans and savings banks, credit banking associations, and credit associations, are dealt with as being extended solely to medium and small firms. Care should be taken of Note 1 to Table VIII in which it is stated that the distinction between large and smaller firms cannot be absolute.

It may be evident from Table VII that about 47 per cent of loans to large firms were supplied by city banks (which were thirteen banks during the first half of the 1960s, and fifteen at present). On the other hand, as a result of increases in personal income, the individual choice of funds has changed, and therefore, the shares of insurance firms and trust and banking companies in such loans have become conspicuous.

As for loans to medium and small firms, local banks (sixty-two banks during the first half of the 1960s, while sixty-one at present) were leading other banks. But their share had been declining, and was 21.9 per cent at the end of 1969. Rapid progress was made, on the contrary, by credit banking associations, their share being 20 per cent, and coming near that of local banks. The growth of the share of credit associations, which was 5.8 per cent at the end of 1969, was quite rapid. Mutual loan and savings banks during the first half of the 1960s enjoyed a share higher than that of credit banking associations. As a result of the Japan Mutual Loan and Savings Bank, which ranked first among similar banks, having been changed into a city bank, the share of mutual loan and

TABLE VII
SHARE OF FINANCIAL INSTITUTIONS IN LOANS TO LARGE FIRMS

At Year-End	City Banks	Local Banks	Bank Account of Trust & Banking Company	Long-Term Credit Banks	Trust Account of All Banks	Life & Non-Life Insurance	Export-Import & Development Bnaks	Total
1955	46.1	13.8	0.6	11.3	7.5	3.8	14.9	100.0
1959	47.2	13.7	0.5	11.8	8.6	6.4	9.6	100.0
1964	46.7	15.0	0.8	10.6	10.3	7.2	7.4	100.0
1969	42.8	13.3	0.8	10.6	12.3	9.5	8.6	100.0

Source: Bank of Japan, *Monthly Economic Statistics*. See, note to Table VIII.

TABLE VIII
SHARE OF FINANCIAL INSTITUTIONS IN LOANS TO MEDIUM AND SMALL FIRMS (%)

At Year-End	City Banks	Local Banks	Bank Accounts of Trust & Banking Companies	Long-Term Credit Banks	Trust Accounts of All Banks	Mutual Loan and Savings Banks	Credit Association Banks	Credit Associations	Government Organs	Total
1955	29.7	27.3	0.8	0.6	1.1	19.1	11.1	2.1	8.2	100.0
1959	26.8	25.2	0.8	1.0	1.2	18.6	14.3	2.8	9.3	100.0
1964	20.5	23.4	0.6	1.7	1.1	20.3	19.6	4.5	8.3	100.0
1965	20.0	23.0	0.6	1.9	1.0	20.8	18.9	4.9	9.0	100.0
1966	20.1	23.2	0.6	2.2	1.1	20.0	18.8	5.0	8.9	100.0
1967	19.3	23.1	0.6	2.5	1.3	19.7	19.4	5.3	8.9	100.0
1968	19.5	23.1	0.6	2.5	1.4	17.3	20.7	5.6	9.3	100.0
1969	19.3	21.9	0.6	2.6	1.4	17.1	20.0	5.8	11.3	100.0

Source: Bank of Japan, *Annual Report of Economic Statistics*.

- Notes: 1. Loans to medium and small firms under the above items up to "Trust Accounts of All Banks" mean (a) at the end of 1955 and 1959, loans for corporations and individuals with a capital up to ¥10 million, and (b) since the end of 1964, loans for corporation and individuals with a capital up to ¥50 million. All the loans under "Mutual Loan and Savings Banks" and the items following it were for medium and small firms, including some firms with a capital exceeding ¥50 million. Since 1968, especially, the Mutual Loan and Savings Banks have been authorized to loan firms with a capital up to ¥200 million, and the Credit Associations those with a capital of ¥100 million. As certain extra financing also is recognized, the share of the financing of firms with a capital up to ¥50 million must be somewhat larger than it ought to be.
2. Figures for City Banks since the end of 1968 include those for the Japan Mutual Loan and Savings Banks and at the end of 1969, figures for the Saitama Bank which had been made a city bank.

savings banks at the end of 1969 declined to 17.1 per cent. City banks ranked first in this field until the end of 1959, but subsequently, their share dropped rapidly, and the banks were overtaken by local banks in 1964 and thereafter, and by credit banking associations at the end of 1967. Only a very low share in loans to medium and small firms falls to long-term credit banks, trust and banking companies, and the like.

Table IX gives the share of financial institutions in loans for funds to medium and small firms. It will be clearly understood from the table that the three private institutions (that is, trust and banking companies, long-term credit banks, and insurance companies), specialized in long-term financing, closely cooperated with city banks for short-term funds, and supplied large firms with equipment funds.

As the main consumers of the financial bonds issued by the three types of long-term credit banks, city banks supplied these banks with funds, so that city banks' short-term funds would be converted into long-term funds for large firms.

TABLE IX
FINANCIAL INSTITUTIONS' LOANS FOR EQUIPMENT FUNDS TO LARGE AND
MEDIUM AND SMALL FIRMS AT THE END OF 1963

(%)

	Large Firms (Capital: over ¥50 Mil.)		Medium & Small Firms	
	Equipment Funds	Total Loan	Equipment Funds	Total Loan
City banks	13.6	47.1	7.5	22.8
Local banks	3.7	13.5	11.9	26.0
Trust & banking companies	28.4	13.6	3.7	1.9
Long-term credit banks	31.2	10.8	8.7	1.7
Insurance companies	4.8	7.0		
Development banks	18.3	5.6		
Export & import banks	—	2.2		
Mutual loan & savings banks			27.2	21.4
Credit banking associations			18.7	17.9
Central cooperative banks for commerce & industry			5.1	3.7
Small firm finance corporations			13.0	2.6
People's finance corporations			4.2	2.0
Total	100.0	100.0	100.0	100.0

Source: Bank of Japan, *Monthly Report of Economic Statistics*.

As a matter of fact, however, the bank debentures which had been digested by city banks, together with the debentures of public enterprises, became almost to the total face value, security for loans or objects of the buying operations of the Bank of Japan. In this way, long-term loans by the Central Bank were created.

The main organs for loans to large firms, therefore, were city banks, and according to Table X, 31.1 per cent of the banks' total loans at the end of 1955 were extended to medium and small firms with a capital of up to 10 million yen.

TABLE X
PERCENTAGE OF LOANS TO MEDIUM AND SMALL FIRMS IN
THE BALANCES OF ALL BANKS

(%)

Year-End	City Banks	Local Banks	Bank Accounts in Trust & Banking Co.	Long- Credit Banks	Trust Accounts in All Banks
1955	31.1	58.2	20.8	3.8	10.1
1959	27.9	55.7	19.3	5.7	9.2
1964	19.0	47.6	11.2	6.8	4.7
1969	26.2	56.5	15.9	19.3	9.0

Source: Bank of Japan, *Annual Report of Economic Statistics*.

This percentage showed a rapid decline by the end of 1964, when only 19 per cent of the total amount of loans were supplied to firms with a capital of up to 50 million yen. (Attention should be paid to the low rate in spite of the higher upper limit of the capital.) The percentage of loans by trust and banking companies, in both short-term financing in bank accounts and in long-term loans in trust accounts, dropped sharply during the period. The increase in the shares of loans by various financial institutions to medium and small firms between the year-ends of 1964 and 1969 was due to the temporary decrease in large firm demands for funds and to the influence of the discussions at the Financial System Research Committee. In the case of city banks, a fairly large part of this figure reflected increases in housing loans, and the like, mainly for salaried employees of large firms, and it is a mistake to understand that the growing rate showed loans to medium and small firms alone.

Thus, between the second half of the 1950s and the first half of the 1960s, a huge sum of loans was concentrated mostly on large firms. In the course of this, however, the question of the so-called "over-loans" by city banks became worthy of attention.

In May 1963, over-loan was defined by the Financial System Research Committee, the Finance Minister's advisory organ, in its reply to the Minister as 'a phenomenon of banks' extension of more credit than usual, mainly covered by borrowings from the Bank of Japan, and suggested as the quantitative standard of "over-loan" that it was the minus situation of the "net reserve" of a bank.

This quantitative standard was defined in two ways: A—cash deposits in a bank and deposits in the Bank of Japan minus loans from the Bank of Japan, and B—cash and deposits (including deposit with other city banks) minus external debts (including borrowings from other city banks). Under the present condition in Japan, figures concerning cash balance at the end of a month or a term contain a large amount of checks and bills which may have been received by banks but not yet cleared. In the view of the offering banks, bills and the like which should have been honored have actually remained in the balance, and the amount of the cash is swollen correspondingly. With tacit understanding, banks at the end of a month or a term, can increase their holdings of checks and bills beyond the actuality. Partly due to the postwar practice of the Bank of Japan to use the cash balance as a standard for the assessment of a firm for loans, this artificial dilation of the balance of deposits has become customary. For the calculation of net reserves, naturally, such checks and bills should be deducted from the balances of both cash and deposits. Table XI shows changes in the net reserves of city and local banks.

During the rehabilitation period after the Second World War, the Reconstruction Finance Bank was prohibited by the Dodge Line to make loans, and under the disinflationary policy, a large amount of funds was supplied by the Bank of Japan to city banks. This was the start of the phenomenon of over-loans to banks, including local ones. Thanks to an excess of exports and Government disbursements through the Special Account for Food Control for a bumper crop of rice, over-loans were almost liquidated at one time at the end of 1955.

TABLE XI
NET RESERVES OF CITY AND LOCAL BANKS

(billion yen)

The End of Fiscal Year	City Banks				Local Banks			
	A	B	A Deposits	B Deposits	A	B	A Deposits	B Deposits
1955	19.0	△ 98.7	0.7%	△ 3.9%	43.0	75.9	3.6%	6.4%
1956	△ 196.1	△ 333.6	△ 5.9	△10.1	34.9	75.8	2.4	5.2
1957	△ 495.3	△ 621.0	△13.2	△16.6	46.2	96.8	2.7	5.6
1958	△ 304.9	△ 475.1	△ 7.0	△10.9	53.4	110.9	2.6	5.4
1959	△ 283.9	△ 586.3	△ 5.8	△12.0	72.0	149.3	3.0	6.1
1960	△ 449.4	△ 663.4	△ 7.6	△11.2	76.9	151.1	2.6	5.1
1961	△1,010.8	△1,241.2	△15.8	△19.4	97.8	188.3	2.8	5.3
1962	△1,005.2	△1,399.8	△12.2	△17.0	101.9	259.4	2.3	5.8
1963	△ 749.0	△1,450.3	△ 7.6	△14.7	174.2	333.8	3.2	6.2
1964	△ 641.9	△2,000.2	△ 5.7	△17.7	190.6	436.3	3.1	7.0
1965	△ 716.7	△1,833.5	△ 5.4	△13.9	172.8	446.8	2.4	6.2
1966	△ 936.5	△1,919.7	△ 6.4	△13.2	176.5	475.3	2.1	5.7
1967	△ 759.3	△2,063.9	△ 4.8	△13.1	202.8	614.0	2.1	6.3
1968	△ 881.4	△2,121.4	△ 5.3	△12.8	292.2	758.4	2.7	7.1
1969	△1,230.7	△2,779.9	△ 6.2	△14.0	334.3	936.1	2.8	7.9

Source: The figures for fiscal 1955-1967 have been taken from Table VIII in the *Data of the Financial System Research Committee*, Vol. 4, 1970, p. 35, and those for fiscal 1968 and 1969 have been calculated from *Statistics of Banking* of the National Association of Local Banks, 1970.

Note: Cash in Net Reserves B includes call-loans, and external debts include call-money. △ shows minus figures.

In 1966, however, expanded lending by banks with surplus funds was the result of demand from firms, and investments were rapidly increased, thus causing over-loans again to be made, exclusively by city banks. Over-loans thereafter may be regarded as different in their nature from those made before 1955.

As is seen in Table XI, the net reserves of city banks continue to show deficits in both A and B, while local banks always maintain their net reserves in surplus. In particular, the rates of net reserves B to the balance of deposits may be compared for different years, and the deficits of city banks will be found to have been 19.4 per cent in 1961, when the fixed investment boom was at its peak, and at the end of fiscal 1969, after a slight decrease, it was still as high as 14 per cent. The net reserves of local banks, on the contrary, have gradually increased to reach at the end of 1969 the highest figure of 7.9 per cent. Financial institutions other than local banks, such as mutual loan and savings banks and credit banking associations, are required, by the legal system as well as by administrative guidance, to reserve more liquid funds, and no question of over-loan arises. In spite of the change in the supply of credit by the Bank of Japan from 1962 and the practice of a "new mode of adjusting finance" mainly by

the operation (closed) of bonds in the place of loans by the Bank, it is worthy of note that no improvement in the over-loans of city banks was realized.

The contents of the external debts which supported the over-loans of city banks are given in Table XII.

Loans from the Bank of Japan, which appeared to decrease at the end of 1964, tended to increase and the amount of call-money also fluctuated. As lending by the Bank of Japan shrank in a period for tight money, call-money would increase, so that external debts continued to increase. During the fiscal years between 1961 and 1968, the total excess of purchases through bond operations reached the large amount of 1,563.7 billion yen. If the 917.6 billion, which was the balance of loans from the Bank between the end of fiscal 1960 and the end of fiscal 1968, is added to the above sum, the credit of the Bank of Japan was expanded in eight years to 2,481.3 billion, i.e., this was the quantity of the

TABLE XII
EXTERNAL DEBTS OF CITY BANKS

(billion yen)

Fiscal Year	Loans from Bank of Japan	Loans from Financial Institutions	Other Loans	Total Loans	Call-Money	Total of External Debts
1955	25.2 (17.3)	—	62.9 (43.3)	88.1 (60.6)	57.2 (39.4)	145.3 (100.0)
1956	239.1 (66.4)	—	29.0 (8.1)	268.1 (74.5)	92.0 (25.5)	360.1 (100.0)
1957	556.1 (81.0)	—	13.1 (1.9)	569.2 (82.9)	117.6 (17.1)	686.8 (100.0)
1958	370.5 (67.6)	—	36.8 (6.7)	407.3 (74.3)	140.9 (25.7)	548.2 (100.0)
1959	371.9 (54.2)	110.8 (16.2)	7.9 (1.2)	490.6 (71.5)	195.2 (28.5)	685.8 (100.0)
1960	573.0 (71.1)	89.8 (11.1)	6.2 (0.8)	669.0 (83.0)	137.1 (17.0)	806.1 (100.0)
1961	1,230.6 (82.4)	79.1 (5.3)	8.6 (0.6)	1,318.3 (88.2)	175.7 (11.8)	1,494.0 (100.0)
1962	1,228.4 (73.0)	140.8 (8.4)	11.0 (0.6)	1,380.2 (82.0)	302.0 (18.0)	1,682.2 (100.0)
1963	1,105.3 (58.3)	227.7 (12.0)	9.1 (0.5)	1,342.1 (70.8)	552.3 (29.2)	1,894.4 (100.0)
1964	975.5 (40.1)	417.4 (17.1)	11.5 (0.5)	1,404.4 (57.7)	1,031.2 (42.3)	2,435.6 (100.0)
1965	1,124.1 (48.1)	352.5 (15.1)	21.2 (0.9)	1,497.8 (64.1)	839.5 (35.9)	2,337.3 (100.0)
1966	1,305.2 (54.4)	242.0 (10.1)	25.2 (1.1)	1,572.4 (65.5)	826.9 (34.5)	2,399.3 (100.0)
1967	1,194.0 (45.7)	319.0 (12.2)	43.1 (1.6)	1,556.2 (59.5)	1,057.1 (40.5)	2,613.3 (100.0)
1968	1,332.1 (47.9)	337.2 (12.1)	47.0 (1.7)	1,651.5 (59.4)	1,126.8 (40.6)	2,778.3 (100.0)
1969	1,757.8 (46.8)	365.3 (9.7)	80.3 (2.1)	2,184.5 (58.2)	1,569.2 (41.8)	3,753.7 (100.0)

Source: The same as Table XI. The figures in the parentheses are the percentages.

TABLE XIII
AVERAGE BALANCE OF CALL MARKET MONEY BY LENDERS
(Percentage Composition)

Calendar Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
City banks	4.8	6.3	0.3	0.3	0.1	0.1	0.2	0.1	0.0	0.2
Local banks	24.6	18.1	17.5	17.1	12.5	12.4	13.5	13.8	16.1	16.3
Trust banks	25.7	30.9	33.1	28.2	23.7	24.1	26.2	25.5	21.3	18.9
Long-term credit banks	1.7	2.4	2.7	2.6	2.4	3.9	8.4	8.4	6.1	3.0
Foreign banks	0.7	1.1	2.1	1.8	1.7	1.1	0.7	1.3	1.4	0.5
Loan and savings banks	2.6	3.3	6.3	3.2	3.3	3.4	2.9	2.7	3.7	4.0
National federations of credit associations and credit associations	17.2	17.2	18.1	19.8	18.4	18.1	15.7	11.3	11.3	17.7
The central cooperative bank of agriculture and forestry and credit federations of agricultural cooperatives	11.5	9.5	10.7	16.7	23.4	25.4	16.3	19.9	22.7	21.9
Securities companies	5.4	3.3	2.8	1.6	4.5	2.1	2.7	3.1	4.7	5.1
Life and non-life insurance companies	4.9	4.6	4.5	3.9	5.0	4.6	8.8	9.0	7.8	8.0
Others	1.0	3.2	1.9	4.7	4.9	4.9	5.1	4.9	4.8	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The Bank of Japan, *Annual Report of Economic Statistics 1969*.

TABLE XIV
INDEXES TO YIELDS OF CITY BANKS' EXTERNAL DEBTS

Second Half of Fiscal Year	Cost for Deposits	Loans from Bank of Japan	Loans from Financial Institutions	Call-Money	Total of Loans and Call-Money
1955	100.0		86.4	112.5	98.6
1956	100.0		117.2	143.6	132.5
1957	100.0		132.9	181.4	144.5
1958	100.0		108.8	134.6	118.5
1959	100.0		114.9	144.4	126.3
1960	100.0		113.0	145.5	124.7
1961	100.0	123.2	223.6	210.8	149.8
1962	100.0	107.1	196.6	174.5	133.8
1963	100.0	94.0	173.1	164.4	128.9
1964	100.0	97.6	194.8	187.7	153.3
1965	100.0	81.1	110.5	110.2	98.9
1966	100.0	81.0	110.2	110.7	97.6
1967	100.0	85.0	135.6	133.4	113.5
1968	100.0	80.9	144.9	142.4	116.2
1969	100.0	101.3	—	149.1	—

Source: *Data of the Financial System Research Committee*, Vol. 4, 1970, p. 39.

Bank notes issued and distributed through city banks.

The weight of the loans from the Bank of Japan in the external debts of city banks showed a decrease from 82.4 per cent in the 1961 peak to lower than 50 per cent. But this did not mean less dependence of those banks upon the Bank of Japan. How is the call fund, which is another support to the over-borrowing of city banks, supplied? Table XIII shows the composition of the suppliers of call market money. Its main lenders are trust banks, the Central Cooperative Bank of Agriculture and institutions in its system, credit banking associations, and local banks. A reason for the importance of trust banks among them lies in that many loans are obtained from the accounts of trust investment operations.

In the case of city banks, as Table XIV shows it, the interest they pay on external debts, apart from their loans from the Bank of Japan, is very heavy. In a stringent money market, therefore, it may not be necessary to remark that if the weight of such debts grows, they will raise the cost of funds and create difficulties for management.

III. OVER-LOANS AND INVESTMENT BOOM

The necessity for city banks to go beyond the principle of sound banking and resort to chronic over-borrowings has been explained in several ways. There seem to be two basic reasons. One is the policy strongly promoted by the Government to encourage investment, and the artificial low-interest policy which was the financial side of the investment encouragement. Such policies stirred up the will of the firms to invest. Another reason is that (1) city banks, in particular the important ones, used to be subsidiaries of the former *Zaibatsu*, and (2) long-term credit banks, which are important banks complementary to groups of city banks, in particular, the Industrial Bank of Japan, were linked up in affiliation with large specific firms or groups of firms. In such a situation, if firms wished to borrow, banks would be unable, even though in the short-term a disadvantage was to be foreseen, to resist an extension of loans. Once such a tie-up was formed, banks would find it necessary, in view of the competition with each other, to concentrate financing to the firms in their lines, and in times of tight money, they might finance, even at the expense of loans to firms outside their lines, such firms as are affiliated with them. The fate of the banks is closely bound with the group of affiliated firms, in which a large part of the funds of the banks were absorbed. Table XV gives percentages of investments by main financial affiliations at the end of September 1963.

The adhesion of city banks to the groups of their affiliated firms may be the main reason why at times of tight money they suppress increased lending to medium and small firms. Figure 3 clearly indicates such behavior by the city banks. As a reason for the formation of groups of affiliated firms, Mr. Giichi Miyazaki suggests a hypothesis on the "one set policy" of financial affiliation.¹

¹ Giichi Miyazaki, "Logic and Practice of Excessive Competition," Special Issue of *Ekonomisuto*, Autumn 1962.

TABLE XV
FINANCING IN MAIN FINANCIAL AFFILIATIONS BY BANK IN CENTRAL POSITION
(End of September 1963)

Affiliation	Bank in Central Position	Number of Firms Listed in Part I*	Number of Firms Listed in Part II	% of Loans to Affiliated Firms in Total Lending by Banks in the Same Affiliation
Mitsui	Mitsui Bank	79	46	27.09
Mitsubishi	Mitsubishi Bank	85	53	32.64
Sumitomo	Sumitomo Bank	80	36	34.38
Fuji	Fuji Bank	78	68	29.70
Daiichi	Daiichi Bank	41	27	21.16
Sanwa	Sanwa Bank	53	23	29.40
Tōkai	Tōkai Bank	14	14	31.71
Daiwa	Daiwa Bank	15	14	41.04
Nippon Kangyō	Nippon Kangyō Bank	25	21	33.99
Kyōwa	Kyōwa Bank	6	9	24.82
Kōbe	Kōbe Bank	5	4	40.00
Hokkaidō Takushoku	Hokkaidō Takushoku Bank	2	1	20.51
Bank of Tokyo	Bank of Tokyo	4	1	50.48
Industrial Bank	Industrial Bank	72	22	16.25
Long-Term Credit Bank	Long-Term Credit Bank	12	8	31.00
Nippon Fudōsan Bank	Nippon Fudōsan Bank	1	21	32.01

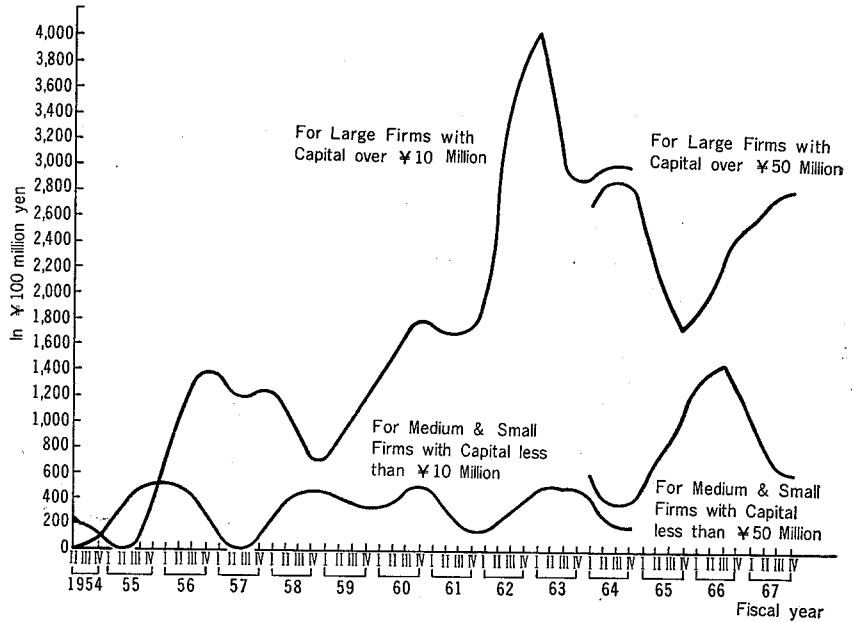
Source: The Economic Research Council, *The Main Financial Institutions and Their Financial Analysis*, 1964.

* The Tokyo Stock Exchange lists firms in two separate categories.

According to him, once the policy of war indemnities was given up immediately after the Second World War, the onus of the blocking deposits in the banks and the discontinuation of war indemnities fell mostly on the shareholders of munitions industries, and the burden on the creditor-banks was relatively alleviated. City banks were excepted from the liquidation of Zaibatsu, and the democratization of securities was upset by the Dodge deflationary policy when the debts of the banks had fully been satisfied by the increase of their capital, and the subsequent accumulation of capital depended upon loans from the banks. At the same time, the taxation system, which began to treat interest on loans as cost, contributed to borrowing from the banks. Thus, funds were supplied in this system of indirect financing through the channel of the large banks of the former Zaibatsu, placing firms affiliated with the former Zaibatsu in a very favorable position. This created the necessity for the formation of financial affiliations between banks and industrial firms.

The reconstruction and expansion of firms belonging to the former Zaibatsu included not only the reconstruction of firms existing at that time, but also active entry into new fields which before the war were not covered by the Zaibatsu.

Fig. 3. Quarterly Changes in City Banks Lendings (Seasonally Adjusted)



Source: Bank of Japan, *Monthly Report of Economic Statistics*.

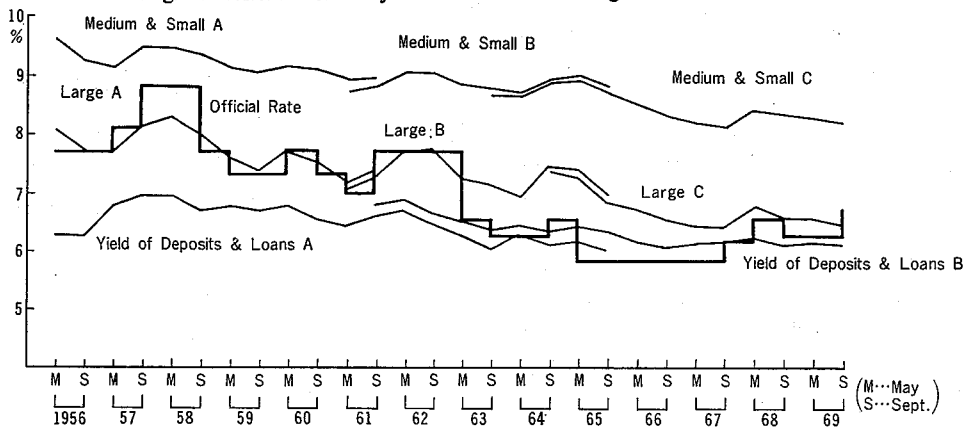
A new feature in this connection was that, unlike the concentrated investments in particular fields over which the Zaibatsu established their monopolistic control, the new investment behavior was to aim at "controlling one set of new industries established under the influence of each affiliation along the policy of having all kinds of industries in each group of affiliation." The reason for such a behavior was the collapse of the former power of stabilizing the market, as a result of the Law for the Elimination of the Excessive Concentrations of Economic Power. In addition, there was the necessity for the stronger, multilateral, and synthetic ties between industries so that the chances of technical innovations might not be missed; and the necessity in today's heavy and chemical industries, where technologies are intensively renewed, for many-sided and large-scale production, for large funds, and for the adhesion to an influential financial line of affiliation.

As a result, affiliated groups of large firms in any line of industry vie keenly with each other for an expansion of their market shares, developing naturally a competition in fixed investments. The necessary funds will be supplied mainly by city banks which enjoy the credit of the Bank of Japan, and this results in a further expansion of financial affiliation.

In Figure 4 the writer of this article has estimated changes in city bank rates of interest on loans. Without mentioning the detailed method of estimation, the writer has clarified that interest on loans to large firms was much lower than that charged on loans to medium and small firms;² that in 1961 the official rate

² By making deposits due to the tie-up financial relations in reference above, the interest actually charged on loans to medium and small firms was higher.

Fig. 4. Interest on City Bank Loans for Large and Small Firms



was made lower than the average interest rate on loans to large firms, and from 1963 it was lowered below the cost of deposits and loans. In 1960, the standard interest system on loans was adopted, under which a standard rate of interest at equal to the official rate would be applied to ultra-large firms, while interest rate for other firms would be made more flexible. As a result, the average interest rate on loans to large firms differed from the official rate, and therefore the standard interest rate on ultra-large firms. Moreover, in 1961, against the banks' opposition, the Government enforced a lower rate on deposits, so that the lowering of the standard interest rate might not affect the cost of funds. The high-handed policy of a lower interest rate was understood by large firms as an increase in the availability of funds. On the other hand, the wide talks of the so-called income-doubling plan were effective in raising the marginal utility of capital, and the natural result was a boom for private business investment centering around large firms.

Thus, the "high rate of growth" of the economy was promoted by a competition in investment carried on by borrowing, and strongly supported by the artificial low interest rate policy. The sense of interest on money, therefore, was lost on the part of firms, and the inflation-mindedness in business circles that, once funds were available, investment would be easily expanded appeared to have been built in to the Japanese economy. According to the results of an inquiry made by the Ministry of Finance in June 1968, 62.2 per cent of firms replied that no increase in interest rates had caused any alteration in their plans to order the equipment; 14.2 per cent replied that they had even extended their orders. Replies about inventories were: no change for 72.2 per cent, and an increase for 4.1 per cent. About 76 per cent of the replies about the fixed investment and inventories, therefore, showed insensitivity to interest rates.

It may not be necessary to say that in a period when the judgment of firms on the marginal efficiency of capital usually worsens, their attitude toward investment will temporarily waver. In the spring of 1963, when the Bank rate was drastically lowered and banking loans were greatly extended, large firms foresaw that, in view of Japan's deficit balance in foreign payments, money would soon

be tightened again, and they heavily borrowed funds for the future without investing them in plant and equipments. The machine industry, in particular, extended credit to medium and small firms through sales by monthly installments. This promoted fixed investment by those firms and expanded trade credit. On the other hand, a reaction set in during the first half of the 1960s, and between 1964 and 1966, fixed investment was brought to a standstill, increased financial outlay was made by the issuance of bonds in order successfully to cope with depression. As a result, the liquidity of firms was temporarily increased, and the ratio of owned funds in fixed investment was raised. Since 1966, however, investment has again been stimulated, and plant and equipment have been expanded by reliance upon loans. The investment mechanism based upon the above close connections between city banks and groups of large firms may not be dissolved for some time to come.