CHANGE IN DEPOSIT COMPOSITION
AND SMALL BUSINESS FINANCE

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I. *How Has Deposit Composition Changed?*

When the latest trend of small business finance comes under discussion, it is usual for the repletion of those private financial institutions which specialize in small business finance to be taken up as one of the foremost factors. From a long-term point of view, however, what change has the loaning capacity of those private financial institutions which specialize in small business finance undergone? As an Index of such change in their loaning capacity, the change in the deposit composition of financial institutions is shown in Table 1. I have

TABLE 1. COMPOSITION RATIOS OF BALANCES OF DEPOSITS

End of Year	All Banks*	Agricultural Financial Institutions	Small Business Finance Institutions	Insurance Companies	Government-Affiliated Financial Institutions
	%	%	%	%	%
1953	60.4	7.3	11.0	3.1	15.2
1954	58.6	7.3	11.0	3.5	16.6
1955	58.6	7.4	10.5	3.7	15.7
1956	59.8	6.8	10.1	3.9	15.3
1957	59.2	6.3	10.5	4.3	16.0
1958	59.0	6.1	10.7	4.5	15.9
1959	58.2	6.1	11.2	4.7	15.4
1960	58.1	5.9	11.7	4.9	14.9
1961	57.4	5.8	12.6	5.0	14.3

Note: * include trust accounts.
Source: "Table of Principal Funds and Investments of Financial Institutions" in
Economic Statistics of Japan.

taken the ratios of deposit composition as classified by the categories of financial institutions from "Table of Principal Funds and Investments of Financial Institutions" carried by *The Bank of Japan, Economic Statistics Monthly.* Here, therefore, those private financial institutions which specialize in small business finance, consist only of the Central Bank for Commercial and Industrial Cooperatives, mutual loans and savings banks and credit associations. And the deposits are of the balances as of the end of each year and their aggregates are the total including their overlapping accounts.

As is clear from the ratios of deposit composition, those of all banks were rather of an upward tendency up to 1956, but during the period from 1956 to 1961, they distinctly witnessed

a downward movement. In sharp contrast to the above, the composition ratios of the balances of deposits of those private financial institutions which specialize in small business finance, while declining during the period from 1953 to 1956, reversed their course during the period from 1956 to 1961, registering a rise from 10.1% to 12.6%. In this way, there is seen a contrasting movement between the composition ratios of deposits balances of those two groups of financial institutions.

As those financial institutions which are moving in a different direction from the above two groups, may be mentioned (a) agricultural financial institutions and insurance companies and (b) government-affiliated financial institutions, so far as their deposit composition ratios are concerned. As for the deposit composition ratios of the agricultural financial institutions, generally speaking, they traced a gradually declining course while those of insurance companies, conversely, a gradually rising course. Though, next, the deposit composition ratios of government-affiliated financial institutions did not show any distinct trend, yet it may be said that they moved in a direction similar to that of those of all banks in that they rather tended to decline during the period from 1957 to 1961.

What should pose a question, as is seen from Table 1, is that the composition ratios of deposits balances of all banks downed from 59.8% in 1956 to 57.4% in 1961, on the one hand, and on the other, those of private financial institutions which specialize in small business finance upped from 10.1% in 1956 to 12.6% in 1961. Such a rise in the deposit composition ratios of private financial institutions which specialize in small business finance and such a decline of all banks as are mentioned above, may be regarded as a change in composition in small business finance worthy of special attention.

The following analysis aims at investigations into that above change in deposit composition which is favorable to small business finance.

II. *How Is the Change in the Deposit Composition Related to the Change in the Loan Composition?*

By what is it explained that the deposit composition ratio of those private financial institutions which specialize in small business finance has risen since 1956, as is shown in Table 1? Let us pursue this question from a general point of view.

In Column (A) of Table 2, the ratio of annual change of the total of balances of deposits, as is given in Table 1, is shown in percentage and in Column (B), the ratio of annual change of the total of loans and investments in negotiable securities, as is given in the " Table of Principle Funds and Investments of Financial Institutions" in *Economic Statisitics of Japan*, also in percentage. In the last column of Table 2, (A-B) is shown in percentage, but in (i) A—B>0, the ratio of annual change of the balances of deposits exceeds the ratio of annual change of the balances of loans and investments in negotiable securities and, therefore, either the ratio of the balance of cash held by financial institutions against the balance of loans and investments in negotiable securities will rise or the ratio of the balance of loans by the Bank of Japan to city banks against the balance of loans and investments in negotiable securities will decline. On the other hand, in (ii) A—B<0, conversely, the ratio of annual change of the balances of deposits falls short of the ratio of annual change of the balances of loans and investments in negotiable securities and, therefore, either the ratio of the balances

TABLE 2.   ANNUAL CHANGING RATIO OF DEPOSITS AND LOANS AND
INVESTMENTS IN NEGOTIABLE SECURITIES OF FINANCIAL
INSTITUTIONS AGAINST PRECEDING YEAR

(%)

End of Year	Annual Changing Ratio of Total* of Loans, etc. against Preceding Year (A)	Annual Changing Ratio of Total of Loans and Investments in Negotiable Securities against Preceding Year (B)	(C)= (A)−(B)
1953	126. 7	132. 1	−5
1954	116. 0	117. 1	−1
1955	123. 8	116. 1	8
1956	125. 2	124. 4	1
1957	· 118. 1	122. 4	−4
1958	119. 3	118. 6	0
1959	118. 2	120. 3	−2
1960	123. 3	124. 7	−2
1961	122. 8	123. 9	−1

Note :   * includes overlapping accounts.
Source :   " Table of Principle Funds and Investments of Financial Institutions " in
Economic Statistics of Japan.

of loans and investments in negotiable securities against the balances of cash held by financial institutions will rise or the ratio of the balances of loans by the Bank of Japan to city banks against the balances of loans and investments in negotiable securities will rise.   That is, there will be a positive attitude on the part of financial institutions for loaning and making investments in negotiable securities.

In Table 2, in the case of (i) A−B>0, the deposit composition ratio of those private financial institutions which specialize in small business finance, generally speaking, declines as compared with the preceding year while, in the case of (ii) A−B<0, it, generally speaking, rises as compared with the preceding year.   Our question here concerns the rise as compared with the preceding year of the deposit composition ratio of those private financial institutions which specialize in small business finance and so it is necessary for us to pursue the case of (ii) A−B<0.

In the case of (ii) A−B<0, that is, when the loans and investments in negotiable securities are positively accelerated, why does the deposit composition ratio of those private financial institutions which specialize in small finance business rise as compared with the preceding year ?   Let us examine more minutely into the cause and effect of the matter in question.

Now let us represents the balance of deposits of all banks as of the end of the preceding year by D_{b1}, the balance of deposits as of the end of this year by D_{b2}, the balance of loans and investments in negotiable securities as of the end of the preceding year by L_{b1}, the balance of loans and investments in negotiable securities as of the end of this year by L_{b2}, the balance of deposits of those private financial institutions which specialize in small business finance as of the end of the preceding year by D_{s1}, the balance of deposits as of the end of this year by D_{s2}, the balance of loans and investments in negotiable securities as of the end of the preceding year by L_{s1}, and the balance of loans and investment in negotiable securities as of the end of this year by L_{s2}.   In this case, in order that the deposit composition ratio

of deposits of all banks may decline as compared with the preceding year while, conversely, the ratio of deposit composition ratio of those private financial institutions which specialize in small business finance may rise, there should be the following relations, for the present ignoring the movement of the deposit composition ratio of other financial institutions: if it is $D_{b1}=\alpha_1 D_{s1}$ and $D_{b2}=\alpha_2 D_{s2}$, then it is $\alpha_1>\alpha_2$. If, then, we take G_{db} for the rate of expansion of the balance of deposits of all banks and G_{ds} for the rate of expansion of the balance of deposits of those private financial institutions which specialize in small business finance, then $G_{db}=D_{b2}/D_{b1}$ and $G_{ds}=D_{s2}/D_{s1}$.

If, therefore, it is $\alpha_1>\alpha_2$, the results is as follows:

$$G_{db}=\alpha_2 D_{s2}/\alpha_1 D_{s1}$$
$$=(\alpha_2/\alpha_1)\cdot(D_{s2}/D_{s1})$$
$$=(\alpha_2/\alpha_1)\cdot G_{ds}$$
$$\therefore \quad G_{db}/G_{ds}=\alpha_2/\alpha_1<1$$

That is, the rise of the deposit composition ratio of those private financial institutions which specialize in small business finance as compared with that of all banks means that G_{ds}, the rate of expansion of the balance of deposits of those private financial institutions which specialize in small business finance, exceeds G_{db}, the rate of expansion of the balance of deposits of all banks. Similar relations can apply to the change in the composition ratios of the balance of loans and investments in negotiable securities of these two groups of financial institutions. If, then, we take G_{bb} for the rate of expansion of the balance of loans and investments in negotiable securities of all banks and G_{bs} for the rate of expansion of the balance of loans and investments in negotiable securities of those private financial institutions which specialize in small business finance, it is $G_{bb}=L_{b2}/L_{b1}$ and $G_{bs}=L_{s2}/L_{s1}$.

Again here, we shall for the present ignore the movement of the composition ratios of loans and investments in negotiable securities of other financial institutions and only consider

TABLE 3.   COMPOSITION RATIO OF LOANS AND INVESTMENTS IN
NEGOTIABLE SECURITIES OF FINANCIAL INSTITUTIONS

(Unit: ¥1 Million)

End of Year	Total of Loans & Investment in Negotiable Securities of Financial Institutions (1)	Of Which		$\frac{(2)}{(1)}$	$\frac{(3)}{(1)}$
		All Banks (2)	Private Financial Institutions Specializing in Small Business Finance (3)		
				(%)	(%)
1953	5,171,376	3,171,162	515,532	61.3	9.9
1954	6,056,485	3,530,087	594,580	58.2	9.8
1955	7,304,315	4,005,580	695,255	56.9	9.8
1956	8,752,283	5,088,635	842,540	58.1	9.6
1957	10,717,557	6,289,409	1,015,749	58.6	9.4
1958	12,719,367	7,402,657	1,224,871	58.1	9.6
1959	15,305,962	8,870,438	1,611,501	57.9	10.5
1960	19,096,850	11,005,038	2,057,472	57.6	10.7
1961	23,663,478	13,694,575	2,682,543	57.8	11.3

Source: "Table of Principle Funds and Investments of Financial Institutions" in
Economic Statistics of Japan.

the change in the composition ratio of loans and investments in negotiable securities of all banks and that of those private financial institutions which specialize in small business finance. If it is $L_{b1}=\beta_1 L_{s1}$ and $L_{b2}=\beta_2 L_{s2}$, then it is $\beta_1 > \beta_2$.

As is seen from Table 3, the composition ratio of loans and investments in negotiable securities of all banks against those of financial institutions, has shown a declining tendency since 1957 while that of those private financial institutions which specialize in small business finance has witnessed a trend of rise. This is the reason why the relations of $\beta_1 > \beta_2$ should be thought to be possible. If so, the result should be as follows:

$$G_{bb}=\beta_2 L_{s2}/\beta_1 L_{s1}$$
$$=(\beta_2/\beta_1)\cdot(L_{s2}/L_{s1})$$
$$=(\beta_2/\beta_1)\cdot G_{bs}$$
$$\therefore \quad G_{bb}/G_{bs}=\beta_2/\beta_1 < 1$$

If there were no removal of net deposits among financial institutions as a result of the loans and investments in negotiable securities by them, it would be possible to regard the rate of expansion of the balance of their loans and investments in negotiable securities as that of the balance of their deposits. As a matter of fact, however, the size of the rate of expansion of the loans and investments in negotiable securities of financial institutions will give birth to the removal of their net deposits. Also here, limiting our observations to all banks and those private financial institutions which specialize in small business finance, and ignoring the interflux of the balance of depoits between the above-mentioned financial institutions and others, let us go on in our task. Of course, we do not intend to entirely ignore the effects of such interflux of deposits as is mentioned above, but we shall later examine them as a factor which exercises some effects upon the interflux of deposits between all banks and those private financial institutions which specialize in small business finance.

Let us take F_{b1} and F_{b2} for those amounts of deposits which flow out of all banks as an accompaniment to their loans and investments in negotiable securities during the preceding year and this respectively and F_{s1} and F_{s2} for those amounts of desposits which flow out of those private financial institutions which specialize in small business finance during the preceding year and this. In this case, to simplify our arguments, let us assume that those amounts of deposits which flew out of all banks and those private financial institutions which specialize in small business finance during the preceding year are equal, that is, $F_{b1}=F_{s1}$. And if we take G_{fb} and G_{fs} for the rates of annual increase of those amounts of deposits which flow out of all banks and those private financial institutions which specialize in small business finance respectively, then $G_{fb}=F_{b2}/F_{b1}$ and $G_{fs}=F_{s2}/F_{s1}$. If, then, we take ε_b and ε_s for the ratios of the rates of increase in those amounts of deposits which flow out of all banks and those private financial institutions which specialize in small business finance respectively against their balances of loans and investments in negotiable securities, then the result will be as follows:

$$\varepsilon_b=G_{fb}/G_{bb}=(F_{b2}/F_{b1})/(L_{b2}/L_{b1})$$
$$\varepsilon_s=G_{fs}/G_{bs}=(F_{s2}/F_{s1})/(L_{s2}/L_{s1})$$

and

$$G_{bb}\varepsilon_b=G_{bb}\cdot(G_{fb}/G_{bb})=G_{fb}=F_{b2}/F_{b1}$$
$$G_{bs}\varepsilon_s=G_{bs}\cdot(G_{fs}/G_{bs})=G_{fs}=F_{s2}/F_{s1}$$

The assumption is $F_{b1}=F_{s1}$ and, therefore, $F_{b2}\gtrless F_{s2}$, that is, that net removal of deposits between all banks and those private financial institutions which specialize in small business

finance which accompanies G_{bb} and G_{bs}, that is, the fixed rates of expansion of their respective loans and investments in negotiable securities, should be regulated by the following conditions:

$$\text{if} \quad \left. \begin{array}{l} G_{bb}\,\varepsilon_b \gtrless G_{bs}\,\varepsilon_s \text{ or} \\ G_{bb}/G_{bs} \gtrless \varepsilon_s/\varepsilon_b \end{array} \right\} \quad \text{then} \quad F_{b2} \gtrless F_{s2},$$

and

$$\text{if} \quad F_{b2} \gtrless F_{s2}, \text{ then } (G_{bb}/G_{bs}) \gtrless (G_{bd}/G_{bs}).$$

If G_{bb}/G_{bs} is fixed in value above $\varepsilon_s/\varepsilon_b$, that is, if G_{bb} relatively assumes a greater value than G_{bs} over that limit which is fixed by the value of $\varepsilon_s/\varepsilon_b$, then there will be given rise to $F_{b2} > F_{s2}$, that is, there will be an annual net flow of deposits from all banks to those private financial institutions which specialize in small business finance, and the result will be that the ratios of the rates of expansion of the balance of deposits between all banks and those private financial institutions which specialize in small business finance, will represent a more favorable change to the latter than the ratios of the rates of expansion of their respective loans and investments in negotiable securities, that is, there will be $(G_{bb}/G_{bs}) > (G_{db}/G_{ds})$.

In Table 3, the weight of all banks in the composition ratio of the balance of loans and investment in negotiable securities has almost uniformly declined since 1957 while that of those private financial institutions which specialize in small business finance has risen. The difference between the composition ratios of the two groups of financial institutions in 1957 stood at

$$58.6 - 9.4 = 49.2$$

and for 1961, at

$$57.8 - 11.3 = 46.5.$$

And the degree of favorableness to those private financial institutions which specialize in small business finance against all banks of the ratios of their respective balances of loans and investments in negotiable securities during the period 1957 to 1961, may be said to have stood at $49.2 - 46.5 = 2.7\%$.

On the other hand, if, in Table 1, we examine into the change in the composition ratios of their balances of deposits, as we have done in Table 3, we find that the difference between the ratios of the balances of deposits of both groups of financial institutions, stood at $59.2 - 10.5 = 48.7$ in 1957 and at $57.4 - 12.6 = 44.8$ in 1961 and the degree of favorableness to those private financial institutions which specialize in small business finance against all banks of the ratios of their balances of deposits may be said to have stood at $48.7 - 44.8 = 3.9\%$.

The comparison between Table 1 and Table 3, clearly shows that the composition ratio of those private financial institutions which specialize in small business finance against all banks during the period from 1957 to 1961, proved more favorable to the former in the case of their balances of deposits than in the case of their balances of loans and investments in negotiable securities. This means $(G_{db}/G_{ds}) < (G_{bb}/G_{bs}) < 1$. Furthermore, in order that there may be $(G_{db}/G_{ds}) < (G_{bb}/G_{bs}) < 1$, there should be $F_{b2} > F_{s2}$, and in order that it may be so, there should be fulfilled the conditions of $(\varepsilon_s/\varepsilon_b) < (G_{bb}/G_{bs}) < 1$.

After all, the rate of expansion of the balance of loans and investments in negotiable securities of those private financial institutions which specialize in small business finance that exceeded that of all banks during the period 1957 to 1961, caused the weight of the former in the composition ratio of their balances of deposits to rise above that of the latter. As, besides, the rate of increase in the annual outflow of deposits that accompanies the rate

of expansion of the balance of their loans and investments in negotiable securities, assumes a smaller value in the case of those private financial institutions which specialize in small business finance than in the case of all banks, it was possible for the former to make a greater rise in their rate of expansion of the balance of loans and investments in negotiable securities than they actually did against all banks.   Therefore there will be a net outflow of deposits from all banks to those private financial institutions and, in consequence, there will be a favorable change to the latter in the compositicn ratio of their balances of deposits.

Next, when the rate of expansion of the balance of loans and investments in negotiable securities of financial institutions as a whole goes over that of the balance of deposits of those institutions as a whole, (i) the rate of expansion of the balance of loans and investments in negotiable securities of those private financial institutions which specialize in small business finance, is relatively superior to that of all banks, but (ii) the ratio of the rate of increase in the amount of outflow of deposits as against the above-mentioned rate of expansion, is relatively lower in the case of those private financial institutions which specialize in small business finance than in the case of all banks, so much so that it more than offsets the above-mentioned superior position.

Why?   We must examine into that question.

III.   *What Is the Background of Favorableness of the Deposit Composition of Those Private Financial Institutions Which Specialize in Small Business Finance?*

In analyzing the period from 1957 to 1961, it may be appropriate to pay attention to the fact that the year 1957 was a special, exceptional year.   The year, as is well known, was the one in which tight monetary policies were adopted in its first half.   That the ratio of annual change of the balance of deposits of financial institutions as a whole in this year was lower than that of their balance of loans and investments in negotiable securities, was due rather to the aggravation of financial institutions, especially all banks, resulting from the adoption of tight monetary policies than to their positive attitude toward lending.

In this case, the fact that the composition ratio of the balance of those private financial institutions which specialize in small business finance rose while that of all banks declined, was, as has been explained above, not brought about by any excess of the rate of expansion of the balance of loans and investments in negotiable securities of those private financial institutions which specialize in small business finance over that of all banks.   So far as such rate of expansion as is mentioned above is concernd, the effects of tight monetary policies caused contrary relations to exist, as may be clear from the comparison between Table 1 and Table 3.   Nevertheless, in the composition ratio of their balances of deposits, the weight of those private financial institutions which specialize in small business finance increased while that of all banks decreased, and this phenomenon is attributed to the fact that there was a net flow of deposits out of all banks into those private financial institutions which specialize in small business finance.   That is, the ratio of the rate of increase in the annual outflow of deposits of financial institutions against the rate of expansion of their loans and investments in negotiable securities, was greater in the case of those private financial institutions which specialize in small business finance than in the case of all banks.   And the effects of raising

the ratio of the balance of deposits exercised by the above net removal of deposits upon those private financial institutions which specialize in small business finance, is thought to have exceeded the effects of lowering the composition ratio of the balance of deposits exercised by the comparatively inferior position of the rate of expansion of the balance of loans and investments in negotiable securities.

The higher degree of outflow of deposits that accompanied the loans and investments in negotiable securities in the year 1957 which witnessed tight monetary policies, may be attributed to such factors as that those large enterprises, which are chiefly the customers of all banks, economized in their liquidity on hand under the effects of monetary tightness, thereby bringing about the trend of a comparative smallness of deposits yielded by the loans by all banks, that, in the period which was turning from good trade to bad trade, banks suffered comparatively strongly the effects of withdrawal of deposits in consequence of the continuation of good trade of consumption which had been left behind by the depression, and that those sectors of commerce and services which found it easy to benefit from the good trade of consumption consisted largely of small enterprises.

However, the features of the period from 1958 to 1961, are different from the characteristics of the year 1956. The latter were of a monetary tightness period while the former was of a period during which there was a comparatively smooth finance. (Though it is well known that the latter half of 1961 witnessed the adoption of tight monetary policies, yet it was after the advent of 1962 that such policies began to assume their hard-pressing character.) It may be thought, therefore, that the analysis of the year 1967 should be regarded as an exception to that of the period 1958 to 1961.

The fact that, during the period from 1958 to 1961, the rate of expansion of the balance of loans and investments in negotiable securities exceeded that of the balance of deposits in the financial field, may be taken as meaning that the managing attitude of financial institutions, generally speaking, was to maintain the line of positive lending.

The basic tone of economy of this country that constituted the background of a positive attitude toward loans on the part of financial institutions as a whole, may be sought, partly, in that there was international good trade running on the rising tide of Kondratieff waves that accompanied the technological innovation universally being recognized in international economy and, partly, in that the enterprises of this country accelerated their investments in the rationalization and modernization of equipment in preparation for the international atmosphere of liberalization with the support of a favorable international balance of payments and the Government's bullish implementation of economic growth policies.   Indeed, the period under review was one enjoying a stabilized, high-level growth seldom experienced before.

How was it that the maintenance and achievement of a stabilized, high-level economic growth and the promotion of a positive managing attitude by financial institutions as a whole during the period from 1958 to 1961, brought about the comparatively superior position of those private financial institutions which specialize in small business finance to that of all banks in the rate of expansion of the balance of loans and investments in negotiable securities?

Whenever we have hitherto examined into the lending attitude of financial institutions as a whole, it has been usual for us to find a distinction between all banks which are intended to serve as financial institutions for large enterprises and those private financial institutions which specialize in small business finance.   That is, all banks assumed a bullish lending attitude for large enterprises while those private financial institutions which specialize in small

business finance were rather apt to remain at a bearish loaning attitude. As a result, the posi-tive lending attitude of financial institutions as a whole was nothing but a reflection of the positive lending attitude of all banks, and, in consequence, the bearish lending attitude of those private financial institutions specializing in small business finance which are of a smaller weight in the composition of financial institutions as a whole, tended to be submerged beneath the bullish one of all banks. Why was such division between the two groups of financial institutions in their lending attitude as is mentioned above liquidated during the period 1958 to 1961? Why was it that, during the period under question, the positive managing attitude of financial institutions as a whole, different from former periods, came to be reflected much more in the positive lending attitude of those private financial institutions which specialize in small business finance than in that of all banks?

(1) Whether it may be financial institutions as lenders or it may be enterprises as bor-rowers, some are apt to suffer very strongly from those failures which come from their mis-calculation of the future and others but slightly. To the former group belong small businesses and those private financial institutions which specialize in small business finance and to the latter big enterprises and all banks. Therefore, small businesses and those private financial institutions which specialize in small business finance, when there is a great possibility of failure in their forecasting of the future, tend to stress the importance of information and judgement concerning the past and present as a basis of deciding upon their managing activities and thereby try to avoid as much as possible the danger of depending upon the uncertain speculation about the future.

In view of the above, therefore, the fact that the Government formulated its "income doubling plan" and published their long-term view of the economy of this country and thereby introduced a certain degree of reliability into a prediction of the future, may be taken as having played an important role in turning bullish the bearish managing attitude of small businesses and those private financial institutions which specialize in small business finance.
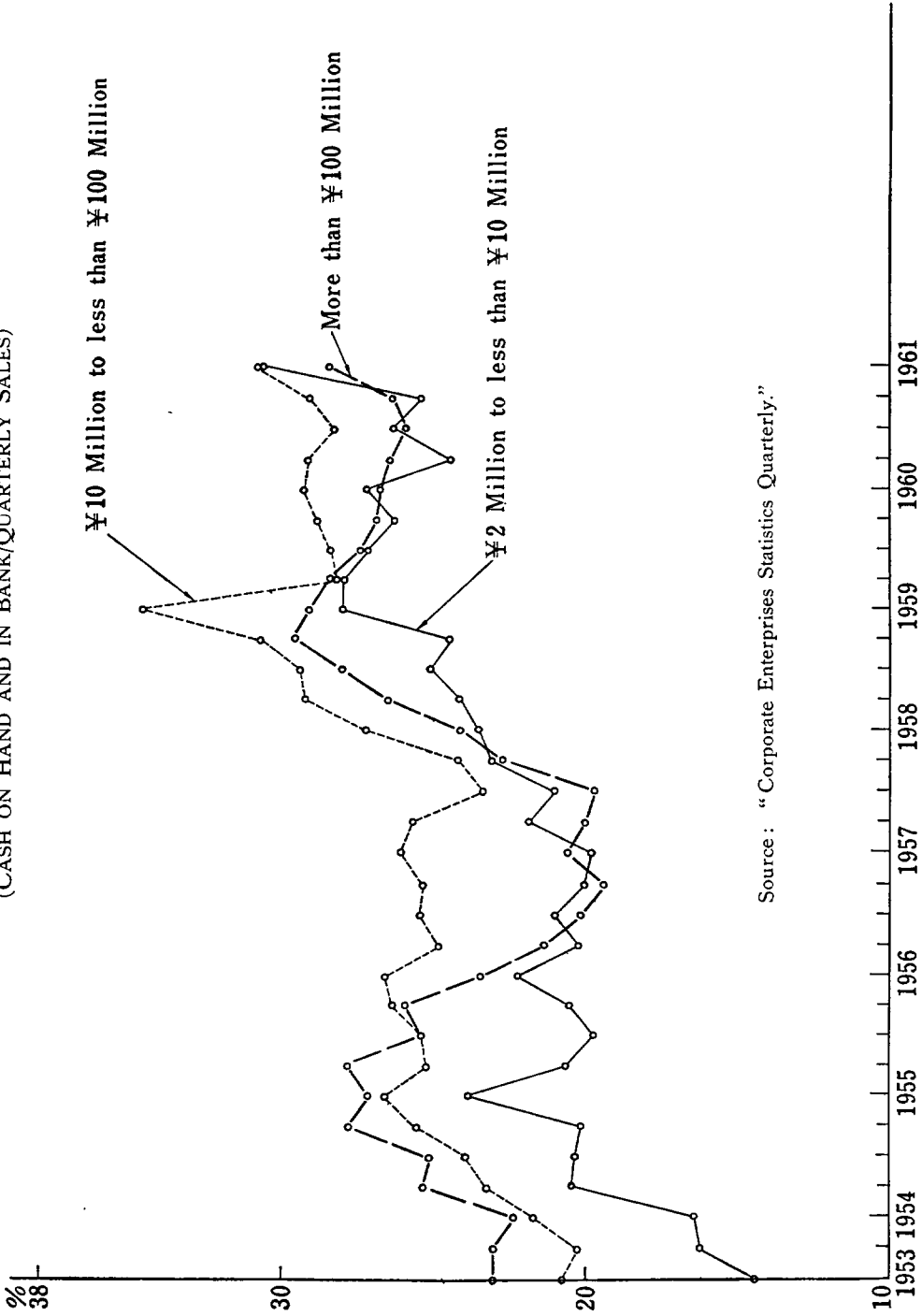
Furthermore, the speedy recovery from the depression in 1957 and the following continua-tion of a stabilized, high-level economic growth also contributed toward the decrease of unreliability of the foretelling of the future by small businesses and those private financial institutions which specialize in small business finance and thus resulted in making positive their managing attitude.

These factors thus constituted the basis of making positive the managing attitude of small businesses and those private financial institutions which specialize in small business finance.

(2) On the other hand, we may also mention the fact that, during the period under review, the financial power of small businesses and those private financial institutions which specialize in small business finance was reinforced as compared with the previous periods. Of course, the above fact may be said to have been the cause of those private financial institutions which specialize in small business finance having taken a more positive loaning attitude than all banks. But it is undeniable that these two matters alternatively served as cause and effect to each other.

(i) As for the financial power of small businesses, as is clear from Figure 1, showing the quarterly figures concerning the liquidity (cash+balances of deposits/quarterly sales) of enterprises classified by scale taken from "Corporate Enterprises' Statistics Quarterly" of the Ministry of Finance, their liquidity was very much improved during the period 1953 to 1961.

Fig. 1. LIQUIDITY OF FUNDS OF CORPORATE ENTERPRISES BY SCALE
(CASH ON HAND AND IN BANK/QUARTERLY SALES)

Source: "Corporate Enterprises Statistics Quarterly."

Classified by scale, the liquidity of those enterprises whose capital stood at ¥ 10 million to less than ¥ 100 million, was stabilized at a comparatively high level, and, therefore, what is worthy of comparison, is the liquidity of those small businesses whose capital stood at ¥ 2 million to less than ¥ 10 million. And the comparison thus made, clearly evidences the improvement of liquidity of small businesses.

(a) First, the enterprise liquidity of small businesses, as is clear from its own time series given in Figure 1, witnessed its value making a remarkable rise following the year 1957 as compared with before it.

(b) Second, though, even as compared with the enterprise liquidity of those big enterprises whose capital amounted to not less than ¥ 100 million, that of small business before 1957 was at a comparatively low level, it has since that year improved up to that which is about equal to that of liquidity of those big enterprises.

(ii) Not only small businesses have acquired a strong financial power, but also there are reasons for believing that small business finance institutions themselves duriug the period 1958 to 1961 cultivated their potentiality for making advances more positively than ever before. Table 4 gives the ratios between the balances of currency deposits and those of savings

TABLE 4. MOVEMENT OF DEPOSIT COMPOSITION BY FINANCIAL INSTITUTION

End of Year or Month	$\left(\begin{array}{c}\text{Balances of}\\\text{Currency Deposits}\end{array}\right) / \left(\begin{array}{c}\text{Balances of}\\\text{Savings Deposits}\end{array}\right)$			
	All Banks	Postal Saving	Others	Total
	%	%	%	%
1953	98.07	1.42	46.36	66.68
1954	84.04	1.24	38.45	56.11
1955	78.78	1.29	44.11	55.61
1956	76.16	0.84	36.32	51.92
1957	62.35	0.74	32.20	43.54
1958	51.19	0.72	30.21	40.73
1959	54.14	0.67	28.82	38.56
1960	54.10	0.69	26.17	37.23
Sept., 1961	51.81	0.64	21.45	33.67
Dec., 1961	53.01	0.60	25.04	35.53

Source: "Monetary Survey" in *Economic Statistics of Japan*.

deposits classified by financial institution under Monetary Survey. Here "others" includes those private financial institutions which specialize in small business finance and those which specialize in agricultural finance, and besides the trust accounts of all banks.

Though, due to the high weight of savings deposits in the deposit composition of those private financial institutions which specialize in agricultural finance, the deposit composition of "other" financial institutions have a somewhat higher weight of savings deposits than that of those private financial institutions which specialize in small business finance, yet the ratio of the balance of currency deposits against the balance of savings deposits of those private financial institutions which specialize in small business finance as of the end of 1961 stands at only 25%, even if the figures concerned are taken from those of the "others" (financial institutions). As for the ratio of financial institutions as a whole, it stands, as is shown in

Table 4, at 40% at the end of 1958 and at 35% at the end of 1961. What can be known from those ratios, is that, in this country, the deposit composition of financial institutions, especially those private financial institutions which specialize in small business finance, predominantly consists of savings deposits as its main element. Furthermore, even if financial institutions are classified by category or taken as a whole, the weight of savings deposits in their deposit composition, as may be seen from Table 4, independently registered a rise year by year during the period from 1953 to 1961.

And in that they, as compared with currency deposits, are those deposits which have been absorbed by financial institutions from savings in their true sense, savings deposits may be said to be of a stabilized form of deposits to those financial institutions.

From the above standpoints, the greater increase in the potential lending capacity of those private financial institutions which specialize in small business finance than that of all banks, may be verified by comparison between the degrees of relative increase in the balances of savings deposits of those two groups of financial institutions.

Those funds which are required for the rate of investments in the current period are provided chiefly by the rate of savings in the preceding period. If, however, the rate of investments in this period exceeds the rate of savings in the preceding period, that is, the equivalent rate of investments in the preceding period, then that part which thus constitutes the excess must be financed by the creation of credit by financial institutions, including that by the Bank of Japan. The currency thus to be created should, in this case, provide that increase in demand for currency which has been brought into being by the excess of investments in this period.

The increase in demand for currency may be divided into two categories:

(a) The first category of increase is regulated by that increase in national income which corresponds to the increase in investments and also by that increase in demand for cash currency and currency deposits which has been brought about by the above increase in national income. This increase in demand for cash currency and currency deposits is usually called an increase in demand for active balance. In order that there may be a smooth increase in investments, this increase in demand for active balance should be satisfied by an increase in the supply of cash currency and currency deposits by financial institutions. And an increase in active balance for an increase in investments, as has been shown, is decided by (A) that marginal propensity to save which shows an investment multiplier and (B) the income velocity of money in cash currency and currency deposits. During a comparatively short period, the values of (A) and (B) are considered of stabilized character on the whole.

(b) What should pose a question here, is the second category of increase in demand for savings deposits. In case we try to increase investments, that is, real investments, it is all right for us to rely upon our own finance, but, as a matter of fact, we often depend upon direct or indirect finance. The large degree of direct or indirect finance means a large degree of institutional disruption of economy in that while, on the one hand, we direct but a small part of the increase in our savings toward an increase in real investments and the remainder of that increase toward deposits with financial institutions or investments in negotiable securities, thereby forming a " group of excess savings," we, on the other, increase our borrowings from financial institutions over the increase of our own savings or newly issue negotiable securities for the purpose of increasing real investments, thereby forming a " group of excess investments."

When, as is the case with the economy of this country, the speed of equipment invest-
ments of enterprises is great and the possibility of small profits of enterprises at the same
time is great due to their excessive competition, the degree of surplus investments of the
" excess investments group " is large while the degree of surplus savings per economic unit of
the " excess savings group " is but small with the result that the form of holdings is apt to be
of deposits with financial institutions and make it inevitable that, in keeping with the increase
of real investments, the increase of investments in financial assets through a formula of in-
direct finance, should become great.

If we call those investments in financial assets financial investments, the relations of an
increase in holdings of savings deposits to the increase of real investments may be said to
depend upon (A) the proportion of increase in financial assets to increase in real investments
and (B) the proportion of increase in holdings of savings deposits to increase in financial
assets.

In order to make actual investigations into the above relations, Table 5 has given the
figures representing ΔK, that is, domestic net capital formation, ΔA, that is, annual increase
in financial assets—the balance of financial assets here means the total of private cash cur-
rency, current deposits, short-term deposits, savings deposits and negotiable securities including
trust, insurance (based upon the unpublished Bank of Japan figures excluding non-life in-
surance) and investment trust in the column on aggregate assets in the table of financial
assets and liabilities in *the Bank of Japan, Money Flow Analysis*—and ΔS, that is, annual
increase in the balance of savings deposits (based on the figures in *the Bank of Japan,
Money Flow Analysis*).

$$\frac{\text{Increase in Savings Deposits } \Delta S}{\text{National Aggregate Investments } \Delta K} = \frac{\text{Increase in Financial Assets } \Delta A}{\text{National Aggregate Investments } \Delta K}$$
$$\cdot \frac{\text{Increase in Savings Deposits } \Delta S}{\text{Increase in Financial Assets } \Delta A}$$

In Table 5 are shown the ratios between the terms on the left and right sides of the
above identity. $\Delta A/\Delta K$, which shows what Goldsmith calls the " marginal value of a financial
interrelation ratio," vacillated at about 100% within the limits of 67% at the lowest and 169%
at the highest. $\Delta A/\Delta K$ is the ratio between the annual increases in private capital and financial
assets, that is, a marginal ratio. How can it be obtained through the ratio of balances, that
is, A/K?

The national domestic capital balance, K, has been obtained by year by year adding to
or deducting from ΔK, that is, the net amount of nationally formed capital on the basic
figures of total of " tangible fixed assets " plus " inventory assets " in the national wealth
survey in 1955. The ratio of A against such K, that is, financial interrelation ratio, rose
continuously from 35% in 1953 to 68% in 1960. The value of $\Delta A/\Delta K$ did not vacillate in
a fixed form in the course of a business cycle during this period. The rapid decline to 67%
of that value in 1957 was due to the extraordinary increase of inventory investments and may
be considered nothing but a reflexion of the temporary effects of tight monetary policies. If so,
$\Delta A/\Delta K$ may stand at about 84% at the lowest when 68%, which was the value of $\Delta A/\Delta K$ in
1957, is excluded, and may be expected to stand at not less than 100%, if we take into
consideration its trend of the latest several years. If we infer from its marginal value, the
financial interrelation ratio A/K will have much room for its further rise, even if it stands at
68% of 1960.

TABLE 5. NATIONAL DOMESTIC CAPITAL, FINANCIAL ASSETS, SAVINGS DEPOSITS, AND THEIR RATIOS

End of Year (Unit: ¥100 Million)	(1) National Private Aggregate Capital Formation	(2) Government Aggregate Capital Formation	(3) Gross National Domestic Capital Formation	(4) Capital Consumption Allowance	(5) Net National Domestic Capital Formation $\Delta K=(3)-(4)$	(6)* National Domestic Capital Formation K	(7) Financial Assets Increase Balances ΔA	(7) A	(8) Savings Deposits Increase Balances ΔS	(8) S	(9) $\dfrac{\Delta S}{\Delta K}$ %	(10) $\dfrac{\Delta A}{\Delta K}$ %	(11) $\dfrac{\Delta S}{\Delta A}$ %	(12) $\dfrac{S}{K}$ %	(13) $\dfrac{A}{K}$ %	(14) $\dfrac{S}{A}$ %
1951	12,646	3,561	16,207	2,551	13,656	146,761	—	—	—	—	—	—	—	—	—	—
1952	11,387	4,584	15,971	3,475	12,496	159,257	—	—	—	—	—	—	—	—	—	—
1953	13,389	6,006	19,395	4,421	14,974	174,231	—	61,179	—	17,490	—	—	—	10.03	35.11	28.5
1954	12,439	5,708	18,147	5,391	12,756	186,987	10,739	61,918	4,376	21,866	34.30	84.18	40.74	11.69	38.46	30.4
1955	13,798	7,532	21,330	6,336	13,994	200,981	13,694	85,612	5,091	26,957	36.37	97.85	37.17	13.41	42.59	31.4
1956	19,040	7,712	21,752	7,558	14,194	215,175	19,402	105,014	6,760	33,717	33.62	136.69	34.84	15.66	48.80	32.1
1957	27,766	6,482	34,248	9,000	25,248	240,423	17,071	122,085	8,177	41,894	32.51	67.61	47.89	17.42	50.77	34.3
1958	16,391	8,306	24,697	10,059	14,638	255,061	24,809	146,894	9,602	51,496	65.59	169.48	38.70	20.18	57.59	35.0
1959	29,256	11,164	40,420	11,835	28,585	283,646	31,261	178,155	11,230	62,726	39.28	109.36	35.92	22.11	62.80	35.2
1960	38,613	13,178	51,791	14,483	37,308	320,954	40,716	218,871	12,656	75,382	33.92	109.13	31.08	23.48	68.19	34.4

* Estimated from Total of (Tangible Fixed Assets)+Inventory Assets: For Example, Column (6) of 1956
= Column (6) of 1955+Column (5) of 1965.

Source: From "Flow of Fund," "National Aggregate Expenditure," "National Wealth Survey" in *Economic Statistics of Japan*.

The reason why the marginal financial interrelation ratio $\Delta A/\Delta K$ goes over the financial interrelation ratio A/K, is that (a) as the speed of expansion of the equipment of enterprises is too great, the ratio of their net assets to total assets tend to decline, (b) real investments are apt comparatively to be accompanied with more fixed liabilities and stocks newly issued than floating debts due to the growing adoption of a detour production method, and (c) the rising level of real income per man and the increase of weight of long-term finance have increased demand for financial assets such as savings deposits and insurance on the one hand and, on the other, have given rise to the development of intermediary financial institutions for long-term funds raising purposes and the complicated inter-relations between various forms of finance.

Next, let us examine in Table 5 into the relations between the ratio of the balance of savings deposits against the balance of financial assets, that is, S/A and its marginal value, that is, $\Delta S/\Delta A$. S/A, which shows the degree to which financial assets are held in the form of savings deposits, continued to continuously rise from 28% in 1953 to 35% in 1959. Its value, however, reached 35% in 1958, thereby getting to a temporary ceiling, and in 1959 and 1960, generally speaking, traced a crablike course.

This evidences that though, so long as our level of savings remains low, that rise of a level of savings which has been brought about by the rise of a level of real income is held in the form of savings deposits, yet if lots of savings deposits acceleratingly become large, then other financial assets, especially investments in stocks, come to be preferred as a form of savings holdings. In this sense, if (balance of savings deposits)/(balance of financial deposits), that is, S/A comes to assume a value of around 35%, the trend of savings deposits being held in large lots may result in their positive removal to other financial assets such as bank debentures, insurance, investment trust, loan trust, corporate debentures, stocks, etc., thereby applying a brake to a rise in the ratio of S/A.

How about (annual increase in balance of savings deposits)/(annual increase in financial assets), that is, $\Delta S/\Delta A$? As is clear from Table 5, $\Delta S/\Delta A$ declined from 40% in 1954 to 34% in 1956, and again from 47%, a rapid rise, in 1957 to 31% in 1959, thus repeating its decline. This fact shows that $\Delta S/\Delta A$ is of the tendency of rising rapidly during a period of recession following tight monetary policies and declining with the recovery and rejuvenation of business activities.

On the basis of the above conception, the following inference may be drawn :

(a) If the tight monetary policies of this time, like those on the preceding two occasions, exercise their effects upon $\Delta S/\Delta A$, the possibility is that there will be a pretty big rise. If, then, that rise is big, then S/A will again turn for a rise and probably there will a pretty long time before there arises a crablike or downward course.

(b) As, however, it is thought not only that savings deposits will be held in larger lots than other financial assets, but also that their absolute value will rapidly become large, with the result that their influences will grow great, it is possible for the speed of decline of $\Delta S/\Delta A$ to be more rapid in the course of business recovery and rejuvenation than on the preceding two occasions and also for the minimum limit of that decline to be fixed at a lower level. In case, therefore, the rise of business activities hereafter spreads over a long period, then $\Delta S/\Delta A$ will possibly go lower than the lowest level of 31% in 1960. If so, as the marginal value $\Delta S/\Delta K$ goes pretty much lower than S/K, it is possible for the latter to decline as down as around 30%.

As for S/K, that is, the ratio of balances of savings deposits against national domestic capital, $S/K=(A/K)\cdot(S/A)$. Therefore, it is regulated by A/K, that is, the ratio of a balance

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of financial assets against a balance of domestic capital and S/A, that is, the ratio of balances of savings deposits against balances of financial assets.

In this case, A/K has heretofore risen and is expected to rise hereafter and so it will probably continue to push up S/K. On the other hand, S/A, though it has hitherto rise and now turned for a crablike course, it is expected to turn for a rise with the adoption of tight monetary policies and the aggravation of the stock market of this time as a turning point. However, we may well assume that S/A will turn for a decline, subject to the conditions of the recovery of business activities. If so, the expectation is that S/A will, in the near future, as has hitherto been the case, exercise its influences upon S/K and continue to play its part of raising it. In the case of turning for the better of the stock market and business activities, however, S/A will conversely act as a lever for bringing down S/K. But, judging from the combined influences of them both, S/K, which has up to now risen, is reasonably to be expected to continue to rise at least for the time being.

As a matter of fact, (balances of savings deposits) S/(balances of national domestic capital) K achieved a tendencious rise from 10% in 1953 to 23% in 1960. It is indeed an important question how financial institutions can ensure their own share of the balances of those savings deposits which are realizing a high rate of increasing, reflecting the high rate of growth of our economy.

Table 6 shows the composition ratios of balances of savings deposits by financial institutions in "Monetary Survey" in *Economic Statistics of Japan* by the Bank of Japan. In it,

TABLE 6. COMPOSITION RATIO OF SAVINGS DEPOSITS

(Unit: ¥100 Million)

End of Year	All Banks	Postal Savings System	Others	Total
1953	(52.93) 10,674	(15.71) 3,168	(31.34) 6,321	20,163
1954	(52.16) 13,271	(16.42) 4,179	(31.41) 7,992	25,442
1955	(53.14) 16,293	(16.17) 4,985	(30.67) 9,405	30,656
1956	(53.19) 20,428	(15.75) 6,050	(31.05) 11,925	38,403
1957	(53.24) 25,379	(14.97) 7,137	(31.78) 15,151	47,667
1958	(53.87) 31,620	(13.61) 7,992	(32.51) 19,084	58,696
1959	(52.90) 38,283	(12.97) 9,388	(34.11) 24,687	72,358
1960	(50.74) 45,320	(12.16) 10,872	(37.12) 33,174	89,366
1961	(47.31) 52,495	(11.23) 12,463	(41.45) 45,992	110,950

Note: Figures in parenthesis ( ) represent composition ratios (%).
"Others" (Financial institutions) include mutual loans and savings banks, credit associations, Central Bank for Commercial and Industrial Cooperatives, Central Cooperative Bank of Agriculture and Forestry, prefectural credit federations of agricultural cooperatives, agricultural cooperatives, and trust accounts of all banks.
Source: "Monetary Survey" in *Economic Statistics of Japan*.

" others " (financial institutions) include those private financial institutions which specialize in small business finance, agricultural financial institutions and the trust accounts of all banks. Of them, the trust accounts of all banks are of a remarkable increase, but agricultural financial institutions are expected to undergo a decrease and, therefore, " others " (financial institutions) may be regarded as representing the activities of those private financial institutions which specialize in small business finance. And, the composition ratio of those private financial institutions which specialize in small business finance in the balance of savings deposits rose from 30% in 1955 to 46% in 1961 while that of all banks and that of the postal system continuously declined from 53% in 1958 to 47% in 1960 and from 16% in 1954 to 11% in 1961 respectively.

As has been mentioned above, the increase of savings deposits is remarkable as compared with that of investments. Therefore, the expansion of share of those private financial institutions in the composition ratio of savings deposits in the process of economic growth may be taken to mean the relative expansion of the power of those private financial institutions in the field of potential lending ability of financial institutions.

Here arise the question as to the reason for the advance of those private financial institutions which specialize in small business finance in the composition of savings deposits. As I have minutely examined into this question in my article entitled " The Financial Phase of Our Economy " in *The Economic Review*, July, 1962, I shall now touch upon it only briefly.

(1) Firstly, there is the reason to believe that, as compared with big enterprises, small businesses enjoy a larger increase in the balance of their savings deposits in keeping with their expansion of equipment. In the case of small businesses, the utilization of savings funds through the issue of securities is almost entirely limited and so the procurement of long-term funds must depend upon self-finance or borrowings from financial institutions. In consequence, the reserving of their net assets as savings deposits or of savings deposits as against long-term borrowings may be thought to be greater than their investments in equipment in the case of small businesses as compared with big enterprises. This tendency will be so much the greater if the expansion of investments in equipment by small businesses gets greater. And those tied deposits which come from the influential relations between enterprises and their financial institutions will reinforce the above tendency. Secondly, in case small business, coming out of their petty scale, expand their equipment, the tendency is both to reinforce the necessity of modernization and rationalization of enterprises and to promote the implementation of long-term plans. Thus small businesses come to be confronted with the atmosphere and necessity of speedily improving their contents of assets in keeping with their expansion of equipment. In this way, the reserving of that increased amount of savings deposits which accompanies the improvement of liquidity of enterprises has the tendency of being accelerated among small businesses, and, therefore, in those private financial institutions which specialize in small business finance.

(2) The increase of individual savings deposits is thought to be greater than that of corporate savings deposits due to that speedy increase of wages and salaries which arises in the course of stabilized, high-level growth, and those private financial institutions which specialize in small business finance are expected to be in a more favorable position to absorb it than other financial institutions. (a) Secondly, they are also superior to others in services to

individual depositors, such as collection and withdrawal ; distribution of various kinds of gifts and familiarity of offices ; and lending facilities. (c) Due to their interest rates, those private financial institutions which specialize in small business finance find it possible to absorb individual savings by going round on foot for them at high cost. (d) As a result of the thorough-going policies of the Ministry of Finance for the protection of depositors and the comparative youth of individual depositors, which have heightened the degree of confidence in those private financial institutions which specialize in small business finance, and the preferential treatment given them by the Ministry of Finance in the fields of advertisement and administration, the relations between the class of individual depositors and local financial institutions have been improved very much. (e) Thanks to the administrative policies of the Ministry of Finance concerning the offices of financial institutions, the expansion of those of the private financial institutions specializing in small business finance are, comparatively speaking, big, and, in consequence, they have been able to expand their share of individual savings depositors in speedily coping with the tendency of those depositors scattering about toward the suburbs of big cities or to their satellite towns.

(3) The stabilized, high-level economic growth has brought about such an external economy as that the savings deposits of individual depositors have become of large lots, and those private financial institutions have, it seems, been in a very favorable position to change such external economy as is mentioned above into an internal economy. Though they were in competitive relations with the postal savings system and the agricultural financial institutions, yet the change into large lots of savings deposits have resulted in the removal of savings depositors from such financial institutions to those private financial institutions specializing in small business finance which are in an advantageous position in services and other fields. On the other hand, those savings deposits of customers of all banks which were originally of comparatively large lots, are under the great probability of being directed toward investments in stocks as a result of their relations with the stock market. In contrast to the above situation, the large lots of savings deposits of individual depositors of those private financial institutions which specialize in small business finance, are still at a lower level as compared with those of all banks and, therefore, on the average, are in such a position as that they are not enough to be directed toward investments in securities. Thus, it may be said that those private financial institutions which specialize in small business finance, have been able to enjoy the advantages of the tendency of savings deposits becoming of large lots.

As, however, this process of savings deposits becoming of large lots makes a further advance, there is the possibility of investments in securities of the depositors of those private financial institutions which specialize in small business finance rapidly being expanded. If, in this case, those savings deposits which have been withdrawn are used in investments in securities through the security market, the sellers of those securities are expected chiefly to consist of the customers of all banks, and thus the probability is great that they will change into savings deposits with all banks. If the savings deposits withdrawn are invested on the security-issuing market——this case is the most important——, then they are expected to be absorbed by all banks as the proceeds of sales of those securities which have been issued by big enterprises. If the change of savings deposits into large lots advances to such a point as is mentioned above, then there will conversely be a worsening of the position of those private financial institutions which specialize in small business finance.