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INTEREST RATE FLEXIBILITY AND THE BEHAVIOR OF COMMERCIAL BANKS' TIME AND SAVINGS DEPOSITS

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Interest Rate Flexibility and the Behavior of Commercial Banks' Time and Savings Deposits

The marked expansion in time and savings deposits at commercial banks and other financial institutions during this year has been commented on many times. This is readily understandable--especially in view of the sharply lower rates of increase experienced in 1966. However, beyond these easily recognizable year-to-year changes, several developments have occurred in the competition for savings which may have a lasting impact on the banking system in the long-run:

- A number of banks (particularly the larger ones) have demonstrated their ability to moderate or quicken the inflow of funds through reducing or raising interest rates paid on time deposits. It will be recalled that last winter and spring many observers (including a number of bankers) were urging bank supervisory authorities to reduce maximum rates payable on time deposits because banks and other depositary institutions could not reduce interest rates on their own initiative.
- Passbook savings, despite the recovery registered this year, remain vulnerable to higher yielding savings instruments. Nevertheless, while the 4 per cent interest rate ceiling on such deposits may appear somewhat out of line, in my personal opinion, it is still desirable to maintain the existing structure of rate ceilings on time and savings deposits.

- The competition for business-type time deposits has become even more sophisticated. A number of banks (even some large ones) which recently entered this market apparently became disenchanted after the severe attrition experienced in late 1966 and are now concentrating on somewhat more certain sources of funds. Still other banks with European branches are relying more heavily on Eurodollar deposits to supplement their domestic sources. In fact, for these banks, Eurodollar deposits have become a particularly close substitute for domestic CD's. This development also may carry a number of implications for monetary management in the long-run.

In the remarks which follow, I shall develop each of the above points further. The subsequent discussion would be helped, however, by a brief re-tracing of the path by which commercial banks arrived at their present stance with respect to competition for time and savings deposits.

<u>Revival of Commercial Bank Competition for Savings</u>

Many of us tend to forget just how recently banks were allowed to re-enter the competitive arena for deposits. The principal check on their ability to compete, of course, was the ceiling which the Federal Reserve Board and the FDIC imposed on the interest rates payable on time and savings deposits. It will be recalled that for

the maximum legal rate on
21 years (from January 1, 1936 until January 1, 1957) /savings deposits and time deposits with maturities of 6 months or more were frozen at 2-1/2 per cent. Time deposits of 90 days to 6 months had a maximum rate of 2 per cent, and those of 30 to 89 days had a ceiling of 1 per cent. In 1957, all of these rates were raised by 1/2 per cent--except for the 30-to-89-day time deposit rate which remained at 1 per cent. This new schedule remained intact for five years--until January 1, 1962. Since the latter date, the maximum rate on some form of time deposit has been raised each year. But the passbook rate has remained at 4 per cent on savings deposits since January 1962.

In contrast, the time
deposit ceiling was raised through several steps to reach 5-1/2 per cent in December, 1965, where it remains for deposits of $100,000 or more. In an effort to moderate rate competition among banks and other institutions for funds, the ceiling was set in September, 1966, at 5 per cent for time deposits of less than $100,000. Within this regulatory framework, the banks' ability to compete for deposits was obviously limited until well into the decade of the 1960's.

But as the scope for competition expanded, the banks responded vigorously. Their response was partly stimulated by the inroads being made by nonbank financial institutions and by the increasing efforts of corporate treasurers to reduce their nonearning liquid assets to a minimum. Many banks apparently decided to buy money--rather than continue to complain about their declining importance in the evolving financial mechanism. Just how successful the banks' efforts have been is known to all of us, but repetition will do no harm: Total demand deposits of banks still exceed their total time deposits by a small margin. However, since the end of 1964, the time deposits of consumers and businesses have been larger than the demand balances held by this group. Ten years ago, total time and savings deposits represented about one-fourth of the total deposits of banks; today they represent almost one-half. Moreover, in the process of restructuring deposit liabilities, time deposits have accounted for over 70 per cent of the growth of total deposits in the 1960's.

The Challenge to Deposit Growth

This vigorous re-entry of the commercial banks in the race for savings was checked abruptly about a year ago, as inflows of time and savings deposits in the aggregate virtually ceased. This sharp slowdown in inflows reflected a number of factors:

- The attractive level of market rates of interest in 1966 which tended to divert savings to other forms of financial assets.
- The unchanged Regulation Q ceiling on large CD's which--given rising market rates--led to a $3.2 billion CD attrition from August to December, and
- The September rollback in the maximum rates member banks could pay on smaller denomination time deposits.

Moreover, during 1966, the composition of inflows changed rather dramatically. At all commercial banks, passbook savings accounts declined by $2.5 billion. At member banks of the Federal Reserve System, passbook savings declined by about $3 billion over the year. On the other hand, consumer-type time deposits accounted for essentially all of the growth in interest-bearing deposits at member banks. As a result, savings deposits (which had accounted for nearly nine-tenths of all IPC interest-bearing deposits at member banks a few years ago) dropped to about 53 per cent of the total in early 1967. The large denomination negotiable CD's had increased by over $2.3 billion by August, 1966, but the subsequent attrition led to an outflow of $600 million in such deposits over the year as a whole.

This composition of inflows in 1966 was very much a reflection of relative offering rates. Despite the fact that the proportion of member banks paying the 4 per cent maximum on savings deposits increased from less than one-half to about two-thirds, passbook savings accounts declined in relative attractiveness--not only because of rising market yields but also because of the increasing attractiveness of consumer-type time deposits. As the year progressed, banks began increasingly to offer a wide variety of time deposits to consumers--savings certificates, savings bonds, CD's, etc.--at rates considerably above those available on passbook savings deposits. By January, 1967, over one-half of member banks were paying the 5 per cent maximum on at least one form of IPC consumer time deposit, up from 17 per cent in May, 1966.

Not only were passbook savings being shifted out of banks, but the more interest sensitive depositors were shifting from passbook accounts to time deposits. Indeed, the decline in passbook savings accounts was greater at those banks with the largest gap between their savings and time deposit rates, and the depositor sensitivity to rate differentials was also greater at the larger banks.

This shifting pattern of inflows and outflows suggests that many banks were simply competing with themselves--gaining time deposits at the expense of savings deposits in their own bank. But this was not universally true. Had not many banks offered higher rates on time deposits, more passbook savings depositors would have shifted funds away from the banking system. Indeed, not only is there ample evidence that banks paying higher rates--other things being equal--had greater inflows, but some banks that did not raise rates actually had outflows. Moreover, especially at the larger banks, awareness of alternatives and interest-sensitivity was generally high among depositors. The larger member banks, for example, had the largest percentage increase in consumer-type time deposits--and the largest percentage decrease in passbook savings accounts. And, on balance, the larger banks had the smallest percentage increase in total consumer-type interest bearing deposits. Had they not offered higher rates on time deposits, their interest-bearing deposit inflows would probably have been negative.

Although market rates of interest began to decline late in 1966, banks continued, in general, aggressively to seek time and savings deposits through early 1967, in large part to help rebuild their liquidity positions. By early 1967, over one-half of all member banks were paying the 5 per cent maximum on at least one form of consumer-type time deposits, and the proportion of <u>all</u> such deposits in these banks was about four-fifths of the total. Since some individual banks were paying less than the maximum rate on some forms of consumer-type time deposits, the proportion of total consumer-type time deposits to which the 5 per cent maximum applied was about three-fourths.

In the passbook area, about two-thirds of all member banks (holding nine-tenths of all savings deposits) were paying the 4 per cent maximum in early 1967. Since the 360 largest member banks were generally the highest rate paying banks on all forms of IPC interest-bearing deposits, it is not surprising that in early 1967 they held about two-thirds of all consumer interest-bearing deposits (passbook and time). Moreover, these banks accounted for about two-thirds of the increase in consumer-type time deposits in 1966. But, as mentioned above, their larger passbook attrition kept their share of the total growth in member bank consumer-type time and savings deposits to about one-half.

Interest Rates and Deposit Trends in 1967

During the first half of 1967 (for the first time since banks generally became aggressive seekers of interest-bearing deposits in recent years) these institutions operated in a financial environment of easier monetary policy and fluctuating interest rates. Moreover, the saving rate of the public rose, loan demands were less frantic, and the considerably reduced level of market rates over the period--compared with 1966--increased the relative attractiveness of bank interest-bearing deposits.

- How did banks react to these developments in framing deposit strategy?
- How were inflows, in turn, influenced by bank policies?

In general, the degree of flexibility observed among banks in the interest rates they offered on deposits should tend to reinforce our belief in the efficacy and efficiency of the market mechanism.

From January through April, time and savings deposits at all member banks expanded at a seasonally adjusted annual rate of 14 per cent, nearly twice as rapidly as in all of 1966. This accelerated inflow reflected mainly the high personal saving rate and the increased relative attractiveness of bank deposits during a period of declining market yields. With inflows enlarged at times of reduced loan demands, some banks attempted to moderate their deposit inflows by reductions in offering rates and by other measures--such as limiting the amount they would accept from each depositor, restricting eligible purchasers, shortening maximum maturities on attractive rate instruments, and cutting down on advertising.

As shown in Table 1, about 85 per cent of the 6,000-odd member banks did not change the maximum rate offered on consumer-type time deposits in the January-July period of 1967. But 850 banks did change such rates over this period, and they make by far the more interesting study. The fact that only a minority of banks changed rates is not the key point. In almost any market only the marginal sellers--those more sensitive to shifting pressure--are the price changers.

In the January-April period, about 5 per cent of the member banks issuing consumer-type time deposits reduced maximum rates. These reductions were four times as common among the larger banks as among the smaller institutions--a development that is readily understandable since more of the larger banks had been paying higher rates in 1966. About one-fourth of the reductions were by 25 basis points to 4-3/4 and most of the remaining decreases were by 50 basis points to 4-1/2 per cent.

These rate reductions were not the only rate movements; about 4 per cent of member banks raised rates on consumer-type time deposits. Most of these were smaller banks. More than one-half of them raised rates to 5 per cent and most of the remainder to 4-1/2 per cent. Another 1.5 per cent of member banks (again mainly smaller ones) introduced consumer-type time deposits for the first time. About

Table 1. Pattern of Changes in Maximum Interest Rates on Consumer-Type Time Deposits Among Member Banks, by Size of Bank, January-April and April-July, 1967

Size of Bank (total deposits in millions of dollars)	Total Number of Banks	Number of Banks Changing Rates	Banks that only Raised Rates			Banks that only Reduced Rates			Reduced Rates in 1st Qt.; Raised Rates in 2nd Qt.	Raised Rates in 1st Qt.; Reduced Rates in 2nd Qt.	No change in Rates
			1st. Qt.	2nd Qt.	Not Spec-ified	1st Qt.	2nd Qt.	Not Spec-ified			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	([illegible])
500 and over	94	19	-	-	-	2	1	-	16	-	75
100-500	291	64	7	1	1	9	7	1	36	2	227
50-100	274	44	3	5	1	7	10	-	18	-	230
10-50	2,014	266	54	47	1	44	48	4	58	10	1,748
under 10	3,351	457	167	77	9	48	66	4	65	21	2,894
Total: All Banks	6,024	850	231	130	12	110	132	9	193	33	5[illegible]74

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits.

one-third of these set their highest rate at 5 per cent, and most of the balance at 4-1/2 or 4 per cent.

These diverse movements lowered average consumer-type time deposit rates by about 5 or 6 basis points over the January-April months. The average of maximum rates declined to 4.82 per cent and the average of the most common rate to 4.77 per cent. With two-thirds of member banks already at 4 per cent, the average rate on passbook accounts remained unchanged at 3.91 per cent.

Despite the small decline in average consumer time deposit rates at all member banks in the January-April period, inflows of such deposits were rapid for all size groups of banks. Moreover, despite the larger declines in rates paid at the biggest institutions, inflows were somewhat more rapid at the latter banks.

After mid-February, savings deposits began to increase again, having declined in 1966--and the increase was more rapid among the less interest-sensitive small bank depositors. One category of particularly sharp growth (although from a relatively small base) was the small-denomination time deposit-open account, a category that includes the 90-day notice passbook type account which many additional banks began to introduce in early 1967. The creation, advertising, and success of this form of deposit is a clear example of competitive innovation. This deposit combines the passbook form (noted for its ease, convenience, and acceptance) with the time deposit form--the 90-day notice--and permits the issuance of a high rate, relatively liquid, and hence attractive savings instrument.

Over the spring and early summer--from April through July--the environment in which banks operated changed substantially, and in response bank attitudes toward time deposits also changed once more. With market interest rates rising, with business borrowing for tax payment purposes expanding, and with increasing bank expectations that loan demands and interest rates would be higher in future months, some banks became more aggressive in seeking time and savings deposit funds.

Reflecting this aggressiveness, not only did more banks advertise more vigorously, but offering rates also began to edge back up. While most member banks left unchanged their highest offering rates on consumer-type deposits, (in contrast to developments over the preceding three months) more banks increased the highest rates offered on smaller denomination time deposits than reduced it. About 5 per cent of member banks raised such rates, with increases three times as frequent among large banks as among smaller institutions. Most of these increases lifted their highest rates to the 5 per cent ceiling. As before, some banks--about 2.5 per cent of the total--lowered rates, and about 1 per cent introduced consumer-type time deposits for the first time. Also as before, there was little change in savings deposit rates.

Despite higher rates offered on consumer-type time deposits, the rate of inflow (while large) moderated somewhat from the earlier months. This may have reflected a moderation in the one-time shift from the securities markets earlier in the year, and perhaps it was also a reflection of the increasing pull of market yields. But total inflows of time and savings deposits to all member banks accelerated as the growth in passbook savings and business-type time deposits more than offset developments in the consumer time deposit market.

By the end of July, about one-half of all member banks were paying the 5 per cent ceiling on at least one form of consumer time deposit; among banks with deposits of $100 million and more, the ratio was four-fifths. Nearly two-thirds of all member banks were paying the 4 per cent ceiling on passbook accounts, and these banks held nine-tenths of such deposits.

In the April - July period, average rates for consumer-time deposits generally moved back to the January level: the highest rate on such deposits averaged 4.87 per cent, and the most common note was 4.83 per cent. These rates and the passbook average were about 1/8 below their respective ceilings. Small banks, of course, had lower average rates--as banks with deposits of less than $10 million were paying an average of nearly 30 basis points less on consumer type deposits than banks with deposits over $500 million.

No information is yet available for rate movements on bank time deposits since mid-summer. However, my expectation is that more banks have raised rates and increased promotions as market rates have continued to rise. Since July, the overall trend of time deposits at member banks has been dominated by movements in CD's. Inflows of consumer-type deposits have moderated somewhat--particularly in the passbook category.

Rate Flexibility and the Behavior of Consumer-type Deposits

This review of 1966-67 developments in time and savings deposit markets of member banks is indicative of a high level of interest rate flexibility. As mentioned above, many observers argued last spring that ceiling rates should be lowered because banks simply would not reduce rates on their own. The evidence simply does not support this assertion. In fact, not only did a sizable number of banks reduce rates--but the pattern of deposit flows strongly suggests that they were fully justified in making the move. About 4 per cent of member banks--a little less than one-third of banks changing rates--lowered rates on time deposits in the January - July period and did not raise them at all. What was their experience? For an answer we can focus on Tables 2 and 3. Most of these banks--about 85 per cent of those that lowered rates--were small banks with deposits of less than $50 million. In general, the pace of deposit flows paralleled rate movements: those banks that lowered rates on consumer-type time deposits and did not raise them again had rates of inflows below the average. Their consumer-type time deposits expanded by roughly 10 per cent, about one-half that recorded for all member banks. These banks were evidently trying to slow inflows because of the reduced need for funds or because other deposit inflows were large.

Indeed, among most of these banks that reduced rates and kept them at the lower levels, the rate of growth of passbook accounts was considerably above the average for all member banks. This was particularly true for those few banks that lowered their time deposit rates in both quarters. A very few of the banks that lowered rates also had rates of consumer-type time deposit inflows considerably above average and were probably cutting rates to moderate the pace.

On the other hand, despite the higher than average passbook savings inflows, most of the banks that cut time deposit rates in the first quarter and did not raise them again had below average growth

Table 2: Member Banks That Only Reduced Maximum Interest Rates, January - April 1967 (No change, April - July 1967) by Size of Bank and Percentage Change in Consumer-Type Time and Savings Deposits (Amounts in millions of dollars)

Size of Bank (total deposits in millions of dollars)	Number of Banks	Per cent of total	Cons.-type time Outst., 1-31-67		Per Cent Change in Amt. Outst., Jan. 31 - July 31					
					Cons.-type Time		Savings		Cons.-type & Savgs.	
			Amount	Per cent of total	Banks reducing rate	All member banks	Banks reducing rate	All member banks	Banks reducing rate	All member banks
Total	110	1.8	353	1.4	8.8	19.2	3.7	3.4	4.5	7.5
500 and over	2	2.1	81	0.9	14.5	23.3	1.3	3.2	2.9	7.8
100 - 500	9	3.1	112	2.5	10.7	17.8	4.2	3.4	5.3	6.6
50 - 100	7	2.6	43	2.0	6.8	19.5	6.3	3.5	6.4	7.9
10 - 50	44	2.2	84	1.4	12.0	16.4	5.1	3.5	6.4	7.7
Under 10	48	1.4	34	1.1	-16.8	13.9	6.7	3.5	-0.3	7.8

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits.

Table 3. Member Banks That Only Reduced Maximum Interest Rates, April - July 1967 (No Change, January - April 1967) by Size of Bank and Percentage Change in Consumer-Type Time and Savings Deposits (Amounts in Millions of Dollars)

Size of Bank (total deposits in millions of dollars)	Number of Banks	Per Cent of Total	Cons.-Type time Outst., 1-31-67		Per Cent Change in Amt. Outst., Jan. 31 - July 31					
					Cons.-type Time		Savings		Cons.-type & Svgs.	
			Amount	Per Cent of Total	Banks reducing rate	All member banks	Banks reducing rate	All member banks	Banks reducing rate	All member banks
Total	132	2.2	345	1.4	11.7	19.2	4.3	3.4	6.0	7.5
500 and over	1	1.1	15	0.2	68.3	23.3	4.6	3.2	8.9	7.8
100 - 500	7	2.4	76	1.7	6.2	17.8	4.1	3.4	4.5	6.6
50 - 100	10	3.6	74	3.5	0.1	19.5	3.3	3.5	2.4	7.9
10 - 50	48	2.4	123	2.1	14.5	16.4	4.4	3.5	7.2	7.7
Under 10	66	2.0	57	1.9	13.8	13.9	5.3	3.5	8.5	7.8

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits of total consumer time and savings deposits. Banks that lowered rates in the second quarter, and those that lowered rates in both quarters had below average growth in total consumer deposits. These banks were probably cutting rates in reaction to inflows higher than they desired.

About 6 per cent of member banks--45 per cent of those banks changing rates--raised their offering rate on consumer-type deposits between January and July. (See Tables 4 and 5.) Almost twice as many of these banks raised their rates in the January-April period as in the April-July period. Most of the banks raising rates in these early months (95 per cent of them) were small banks, with deposits of less than $50 million and holding less than 2 per cent of all member bank consumer-type time deposits.

Generally, these small banks had been paying lower rates. And despite the declining level of market yields over most of this period, they chose to bid more aggressively for funds. As a result, their inflows of consumer-type time deposits expanded quite rapidly: for those banks raising rates earlier in the year, growth in consumer-type time deposits was over twice as large as for all member banks. At the very few banks--about 10--that raised rates twice, inflows doubled their holdings of consumer-type time deposits in the January-July period. Banks that raised rates only in the April-July period had inflows of time deposits over the first half below the all-bank pace. This pattern suggests that their rates had been out of line

Table 4. Member Banks That Only Raised Maximum Interest Rates, January - April 1967 (No Change April - July 1967) by Size of Bank and Percentage Change in Consumer-Type Time and Savings Deposits (Amounts in millions of dollars)

Size of Bank (total deposits in millions of dollars)	Number of Banks	Per Cent of Total	Cons.-type time Outst., 1-31-67		Per Cent Change in Amt. Outst., Jan. 31 - July 31					
					Cons.-type Time		Savings		Cons.-type & Savgs.	
			Amount	Per Cent of Total	Banks raising rate	All member banks	Banks raising rate	All member banks	Banks raising rate	All member banks
Total	231	3.8	218	0.9	44.7	19.2	2.6	3.4	9.6	7.5
500 and over	--	--	--	--	--	23.3	--	3.2	--	7.8
100 - 500	7	2.4	15	0.3	96.6	17.8	1.3	3.4	4.5	6.6
50 - 100	3	1.1	8	0.4	- 4.0	19.5	9.9	3.5	8.9	7.9
10 - 50	54	2.7	107	1.8	47.4	16.4	2.3	3.5	12.0	7.7
Under 10	167	5.0	89	3.0	37.0	13.9	2.5	3.5	13.4	7.8

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits.

Table 5: Member Banks That Only Raised Maximum Interest Rates, April - July 1967 (No Change January - April, 1967) by Size of Bank and Percentage.
Change in Consumer-Type Time and Savings Deposits (Amounts in Millions of Dollars)

Size of Bank (total deposits in millions of dollars)	Number of Banks	Per Cent of Total	Cons.-Type time Outst., 1-31-67		Per Cent Change in Amt. Outst., Jan. 31 - July 31					
					Cons.-type Time		Savings		Cons.-type & Svgs.	
			Amount	Per Cent of Total	Banks raising rate	All member banks	Banks raising rate	All member banks	Banks raising rate	All member banks
Total	130	2.2	295	1.2	12.9	19.2	2.0	3.4	6.0	7.5
500 and over	--	--	--	--	--	23.3	--	3.2	--	7.8
100 - 500	1	0.3	1	1/	30.8	17.8	3.2	3.5	4.1	6.6
50 - 100	5	1.8	28	1.3	21.9	19.5	0.7	3.5	5.1	7.9
10 - 50	47	2.3	205	3.4	11.7	16.4	2.1	3.5	6.3	7.7
Under 10	77	2.3	60	2.0	12.6	13.9	2.6	3.5	6.4	7.8

1/ Less than 0.05 per cent

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits and that their increases in rates were defensive--or that the rate change came late in the period and had not had time to affect inflows appreciably.

Significantly, those banks that raised rates on time deposits in this period had passbook savings inflows below the average and were evidently selecting time deposits as the vehicle for increasing total inflows. Some of these banks were already at the ceiling rate on passbook accounts; others apparently chose to offer higher rates to only interest-sensitive customers in order not to increase the cost of their larger total passbook deposits. Even with their passbook inflows below normal, those small banks that raised rates on time deposits earlier in the year, or raised them once in each quarter, had rates of growth of <u>total</u> consumer interest-bearing deposits above the average. Those that raised rates defensively in the second quarter had total inflows below the average pace.

The very few large banks that only raised rates on consumer-type time deposits in the first half also increased their inflows of such deposits relatively rapidly. However, they had been paying lower than average rates and had very small amounts of deposits to begin with. Their total consumer deposit inflows were generally below average.

The foregoing analysis demonstrates that banks which either raised rates only or lowered rates only in 1967 generally had the expected reaction in their growth rates of deposits. They also generally had other deposit inflows that might be expected to lead them to the actions taken. All other characteristics of banks being equal, however, the expected rate actions (in light of developments in market rates and loan demands) would have been rate reductions in the first months of the year and rate increases in the late spring and early summer.

To what extent did this pattern hold true? A little over 3 per cent of banks did in fact change rates that way--ranging from 17 per cent of member banks with deposits of $500 million and over to about 2 per cent of those with deposits below $10 million. (See Table 6.) Since many of the rate increases probably occurred around mid-year, late in the period under review, the effect of rate increases on deposit flows probably was not large in the time period covered. Consequently, in the January-July period these banks had growth rates of consumer-type time deposits below the all-bank average. For example, these banks had inflows less than one-half as rapid as those recorded for banks that did not change rates. Among the largest banks, inflows were less than one-third as rapid as for the banks of that size that did not change rates.

No information is yet available for rate movements on bank time deposits since mid-summer. However, my guess is that more banks have raised rates and increased promotions as market rates have continued to rise.

Rate Flexibility and the Behavior of Business-type Deposits

Up to this point, the discussion has centered on bank policies toward consumer deposits. Developments in the business-type deposit market have shown an even higher degree of interest rate flexibility on

Table 6. Member Banks that Reduced Maximum Interest Rates, January- April 1967, and then Raised Maximum Interest Rates, April-July, 1967, by size of Bank and Percentage Change in Consumer-Type Time and Savings Deposits
(amounts in millions of dollars)

Size of bank (total deposits in millions of dollars)	Number of banks	Per cent of total	Cons.-type time Outst., 1-31-67		Per cent change in amount outst., Jan. 31 - July 31					
					Cons.-type time		Savings		Cons.-type & Savs.	
			Amount	Per cent of total	Banks changing rate	All member banks	Banks changing rate	All member banks	Banks changing rate	All member banks
Total	193	3.2	2,531	10.1	8.8	19.2	3.8	3.4	5.1	7.5
500 and over	16	17.0	1,606	17.1	8.6	23.3	3.9	3.2	5.2	7.8
100-500	36	12.4	628	13.9	9.0	17.8	3.9	3.4	5.2	6.6
50-100	18	6.6	111	5.3	12.0	19.5	2.4	3.5	4.6	7.9
10-50	58	2.9	134	2.2	5.5	16.4	4.3	3.5	4.6	7.7
Under 50	65	1.9	52	1.8	14.0	13.9	3.1	3.5	7.0	7.8

Source: Federal Reserve Board, Quarterly Surveys of Time and Savings Deposits.

the part of member banks. This is especially true of the 265 or so large banks that are active in the negotiable CD market.

While over 1,200 banks issue negotiable CD's in denominations above $100,000--of which between 800 and 900 are member banks--about 265 large banks account for about 90 per cent of the total. This part of the analysis is based on the behavior of these 265 banks.

In the first half of 1966, with market yields rising and banks extremely aggressive in their efforts to obtain CD's, offering rates on negotiable CD's rose a 100 basis points to the Regulation Q ceiling of 5-1/2 per cent. You will recall that negotiable CD's are substitutes in the portfolio of investors for other money market instruments, and the relationship between CD and other rates is extremely important in determining the ability of large banks to sell CD's. For example, it appears that CD's require a 20 to 30 basis point premium over the investment basis yield on the more liquid Treasury bills; about a 5 to 10 basis point over finance company paper yield, but can yield 10 to 20 basis points less than commercial paper. In the summer and fall of 1966, however, the Regulation Q restrained offering yields on CD's while all money market instruments rose to record levels above CD rates. As a result, from August to December, banks suffered a $3.2 billion CD attrition.

Most of the attrition--almost 90 per cent--was centered at 19 very large banks whose CD's apparently are issued almost completely as money market instruments. Almost all of the remainder was accounted for by the 18 other banks with deposits over $1 billion. This does not mean that individual banks with deposits of less than $1 billion were able to avoid CD losses. One-half of them did suffer losses of CD's, but the amount of CD's they had outstanding was small relative to the total and to their own deposits. Many of these smaller banks were able to increase their outstanding CD's during this period when CD rates could not be competitive. This ability of some smaller banks evidently reflects the greater importance of customer relationships and regional markets in their CD issuance.

As money market yields began to recede in late 1966, general CD issuance was again possible. With rates on CD's remaining at the ceiling until mid-January of 1967, and declining less rapidly than market yields throughout most of the first quarter, outstanding CD's increased about $200 million in late 1966 and $3.7 billion in the first quarter of 1967. Most all of this increase occurred at the largest banks.

After about February, however, outstandings increased little and essentially fluctuated in a narrow range until mid-year. This development reflected two main factors. First, the very large corporate tax payments and still reduced liquidity of corporations limited the ability of banks to sell CD's to their corporate customers. Thus, in the second quarter, CD's held by individuals, partnerships, and corporations declined by about $500 million. With this market limited, banks increasingly turned to other buyers--mainly State and local Governments and foreign accounts. Indeed, CD's issued to the non-IPC group accounted for slightly over one-half of the increase in total outstandings in the first half of the year.

The second factor tending to moderate CD growth in the second quarter was that banks did not aggressively bid for CD's. In April and May, offering rates on such instruments at the largest banks dropped to 4 per cent on the short-end and to 4.25 per cent on the longest maturities. Relative to competing instruments, the spread against CD's dropped to levels equal to or greater than the enforced disadvantage of CD's in the fall of 1966. This abvious lack of bank interest in CD's reflected, in turn, several factors. Other inflows of time and savings deposits, as we have seen, were very large. In addition, by early spring, many banks had succeeded in rebuilding their portfolio liquidity and were less anxious to obtain funds for that purpose. Finally, loan demands in this period--and bank projections of such demands--did not suggest to banks that an aggressive stance in the CD market was desirable.

After mid-year 1967, however, there was a complete turnaround in developments in the CD market. Along with the general rise in market yields, CD offering rates rose sharply. By the end of September, a few banks were back at the 5-1/2 per cent ceiling on longer maturities, and in the 90-180 day range rates of 5 to 5-1/4 per cent were offered. During the third quarter, CD rates rose more rapidly than market yields, providing record margins above competing instruments--e.g., 10 to 25 basis points above finance company paper and 50 to over 100 basis points above Treasury bills. Outstanding CD's increased sharply--by about $1 billion in the quarter. This increase reflected not only yields but the increased ability of corporations to buy CD's after most of their accelerated tax payments were past.

This increased aggressiveness of banks in the CD market, was partly a reflection of their growing expectations of increased loan demands and rising yields. Banks in the third quarter were particularly interested in obtaining longer maturity CD money in order to lock away funds which many thought would subsequently appear cheap.

While outstanding CD's in the aggregate have more than recovered the attrition of last year, not all issuing banks have regained their previous peaks. A careful look at groups of issuing banks is instructive for interpreting bank flexibility in the negotiable CD market. About 60 per cent of the 265 issuing banks covered in this review lost CD's from August to December of 1966. These included almost three-fourths of banks with deposits over $1 billion and over one-half of issuing banks with deposits under $1 billion. Of the banks losing CD's from August to December, over one-third had not regained their year earlier level of outstandings by August of 1967. This group included 40 per cent of the large banks that had attrition and over one-fifth of the smaller banks that had lost CD's in the fall of 1966. A very few other banks--about 3 per cent of the total issuing banks--did not suffer attrition during the rate squeeze last year, but did lose CD's subsequently.

What kind of bank has not regained its previous peak in 1967 in a market in which they had the rate freedom to do so? What kind of bank lost CD's last fall?

No easy generalization can be made in answering either of these questions. More big banks lost CD's in last years rate squeeze, which was to be expected--given the fact that their certificates tend to be closer to pure money market instruments. Relatively fewer small banks lost CD's, and most of these had particularly small amounts of CD's relative to their deposits--that is, CD's were a relatively insignificant source of funds at most of the small banks losing CD's last year. Given the fact that so many small banks were able to avoid attrition in the fall of 1966, it is likely that those banks that lost CD's either did not consider it important enough to urge their customers to maintain their certificates or perhaps had been issuing CD's in a broader market type environment. Unhappily these are suppositions only.

Most of the banks that did not regain their previous peaks of CD's outstanding--that is, who chose not to push the instrument--were small banks; two-thirds of the banks not regaining their past peak have deposits of less than $500 million. My guess is that most of these banks have developed doubts about the advantage of competing in a market which can produce an outflow of funds at a difficult time since most of them had suffered attrition in the 1966 rate squeeze. Many of these banks might have decided to look for interest-bearing funds in the more stable consumer market. It must be recalled, however, that the majority of issuing banks in this size class have surpassed their previous peak of outstanding CD's, showing a larger growth rate in outstandings than the large banks. Most all of these small banks had very small CD losses in the fall of 1966 or even increased outstandings during that period. Having been discomforted very little they have aggressively remained in the market.

What about the large banks to whom CD's are a more important source of funds? One-third of these banks now have outstandings below this past peak. All but one of these banks had suffered relatively sizable CD run-offs in the past, and they too might have decided not to place themselves in an exposed position again.

Bank Behavior in the Euro-dollar Market

During last year's CD attrition, the dozen or so banks with foreign branches relied heavily on Euro-dollar borrowing to counter their CD losses. In a market not restricted by ceiling rates, bank bidding for funds pushed the Euro-dollar rate as high as 130 basis points above the Regulation Q ceiling on time deposits. For the banks using Euro-dollars, foreign branch borrowing did not offset all CD losses, and as soon as CD's could again be issued in early 1967, Euro-dollar borrowing declined.

Having moved heavily into the Euro-dollar market, these banks have continued to be attracted to it. Even though CD's have been available all year, the CD share of the total of CD and Euro-dollar funds used by these dozen banks has declined all year. Even if the few dominant Euro-dollar borrowers are removed from the group, CD's still account for a smaller share of the funds from these two sources than in early 1966. In the third quarter of this year, Euro-dollar borrowing was particularly large as the spread between such borrowing and CD's narrowed sharply - reflecting the rising trend of interest rates in the United States.The increased use of Euro-dollars has clearly been a factor tending to moderate CD issuance of the largest banks, representing for them a viable substitute for CD's.

Concluding Observations

This review of member bank behavior in the market for time and savings deposits demonstrates clearly that the degree of interest rate flexibility is considerably higher than many observers have assumed to exist. It has demonstrated further that the flow of funds--even the time and savings deposits of consumers--to these institutions also responds in a rational way to changes in interest rates offered. Thus, I think this body of evidence lends additional support to the view expressed last spring(and which I shared) that banks themselves are capable of setting offering rates--rather than relying on supervisory authorities to fix them.

I come away from this review with still another conviction. The increased reliance by banks (especially by smaller institutions) on interest sensitive time deposits as a major source of funds exposes them to developments with which many of them will find it difficult to cope. Clearly, a great deal of market research and a carefully thought-out long-run strategy is required for a bank to operate successfully in this market. Undoubtedly, the use of these funds exposes banks to the risks of reduced inflows or deposit attrition to a greater degree than before. Moreover, efforts to obtain--and keep--time and savings deposits are costly. Thus, there is more need than ever to weigh these higher costs against the expected rate of return on the funds attracted.

This review of banks' experience with time and savings deposits leaves me with mixed feelings with respect to the scale of interest rates which they can offer to depositors. Within the current structure of rate ceilings on all depositary claims, one's attention is immediately attracted to the passbook ceiling rate at commercial banks. As it now stands, this ceiling rate is 100 basis points below what banks can pay on smaller time deposits and what savings banks can pay on their passbook accounts, and 75 basis points lower than the regular savings and loan share account ceiling. One cannot deny that this gap places the commercial bank passbook account at a competitive disadvantage.

On the other hand, the rate differential may have advantages for both the bank and its customers. Those depositors that require or desire maximum liquidity can obtain it via passbook accounts. Those that are willing to take somewhat less liquidity have the option of the higher yielding time deposits. From the bank's point of view, it has a greater ability to hold on to the deposits of its more interest-sensitive customers via time deposits--but without increasing the cost of maintaining or expanding the deposits of those customers who attach more weight to liquidity than to the rate of return. The differential rate also has a more favorable impact on bank profits.

Nevertheless, in order to protect themselves from withdrawals from somewhat more sophisticated investors, banks make available time deposits at higher rates. On the whole, price differentials of this sort seem desirable, since they allow greater bank flexibility in meeting the needs of different types of customers. But, I think we must also bear in mind the adverse effects which could flow from it. In order to maintain and increase inflows, some banks in marketing time deposits may expose other institutions to excessive risks. For this reason, I think the supervisory authorities are fully justified in maintaining--under present circumstances--the existing structure of rate ceilings on time and savings deposits.