
FRBSF WEEKLY LETTER

June 14, 1985

The Big Switch

The introduction of the money market deposit account (MMDA) and the Super-NOW account had a major impact on the composition of the portfolios of banks and thrifts and of the public alike. Both accounts were free of interest ceilings and intended to be directly competitive with the money market funds (MMFs). Of the two, the limited checking MMDA, authorized on December 14, 1982, has been more popular. It attracted over \$300 billion in its first three months and is currently approaching the \$450 billion level nationally. The unlimited checking Super-NOW, authorized on January 5, 1983, gained far fewer deposits than the MMDA, but still climbed to nearly \$30 billion within three months of its authorization. Today, it has surpassed the \$50 billion level.

In this *Letter*, we analyze why these new accounts so dramatically altered both banks' and depositors' portfolios, where the staggering quantities of funds in these accounts came from, and the implications of these accounts for banks' costs of deposits. We focus on the MMDA because its impact on deposit holdings was so much greater than that of the Super-NOW.

When the MMDA was introduced, some observers thought that it would attract large quantities of dollars from the money funds, and there even was speculation about the long-term viability of the consumer-oriented money funds given that MMDAs were covered by federal deposit insurance (to \$100,000). Others thought that most MMDA deposits would come from other funds already on deposit at banks and thrifts. There also were fears that if large amounts of low-interest "core" deposits, such as checking accounts, passbook savings and some small denomination time accounts, were transferred into MMDAs, bank and thrift deposit costs would rise substantially.

Now that over two years of data on MMDAs and Super-NOWs are available, these questions can be answered. By analyzing the magnitude of the declines in other types of deposits and in money funds' assets that were contemporaneous with the MMDA's and Super-NOW's initial rapid growth, it is possible to infer approximately which types of

funds were the most important sources of the new accounts' deposits.

What we expected

Binding deposit rate ceilings on retail accounts had two major effects, both of which, in theory, led to higher deposit costs for banks and thrifts than direct "price," i.e., interest rate, competition. First, they caused depository institutions (hereafter referred to as banks) to compete for retail deposits that were subject to interest rate ceilings by paying implicit interest in the form of free or underpriced services in lieu of explicit interest. Second, they led banks to substitute more expensive ceiling-free wholesale deposits such as large (\$100,000 and over) certificates of deposit—or CDs—for the regulated retail deposits that had been moved out of the banking sector into higher paying investments such as the money funds.

Thus, when the two ceiling-free accounts were authorized, we expected that the lower total per dollar costs of deposits for banks and increased returns for depositors would act as strong incentives for banks to attract funds into those accounts and for depositors to shift funds into them.

Where would the funds for the new accounts come from? In general, we expected funds to come from other financial instruments that were close substitutes from both banks' and depositors' perspectives for regulated retail deposits. Since open-market interest rates had been above deposit-rate ceilings for a number of years when the new accounts were first introduced, depositors who did not value the implicit interest in terms of added services would already have moved their funds out of the low-paying retail accounts. Thus, it seemed unlikely there would be a further shift of funds out of low-interest retail deposits, such as passbook savings, into MMDAs or Super-NOWs.

Instead, we expected that the funds, particularly for MMDAs, which have limited value as transaction accounts, would come from those sources to which depositors had moved them in the first place to avoid the ceilings. We thus expected particularly large inflows into MMDAs from the money funds. Moreover, since banks had used

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large CDs to replace lost retail deposits, we expected declines in the balances of large CDs as well. Also, the ceilings had induced depositors to move short-term funds into longer term near-ceiling-free accounts, such as the six-month money market certificate. We therefore expected that the liquidity and ceiling-free nature of the MMDA would induce depositors to move funds from such accounts to the new MMDA.

For Super-NOWs (which have turned out to have average account balances over \$12,000), we expected funds to come from other large-balance transaction accounts, since individual holders of large accounts were affected most by the interest ceilings. Depositors with small transaction accounts would not be affected in the same way because they usually had to pay fees on accounts even with interest ceilings. Thus, on small accounts, the ceilings were not binding because banks were free to increase the net yield on those accounts by lowering the service fees they charged.

What we found

In Charts 1 and 2, MMDA and Super-NOW deposits are plotted against other deposits and money fund assets, to indicate qualitatively which types of balances fell as the new accounts grew. We infer that those balances that declined were likely sources of the new deposits. Also, monthly changes in various deposit types over the first six-month period following their introduction were analyzed statistically using a regression model to provide quantitative estimates of the sources of the deposit inflows. In all of our analysis, we are looking at the net, final effects of deposit shifts, and not necessarily direct shifts as often measured in surveys.

Chart 1 shows a substantial decline in the money market funds' assets that coincided with the growth in MMDAs. This suggests that the money funds were, as expected, substitutes for MMDAs and thus important sources of MMDA deposits. Similarly, our regression model shows a statistically significant decline of 24 cents in money fund assets associated with each dollar inflow into MMDAs. Although our analysis suggests that the money funds were an important source of MMDA deposits, the money attracted from MMFs did not lead to a comparable increase in the total deposits of the banking sector. As Chart 1 shows, there was at most only a slight increase in total deposits after December 14, 1982.

Since total deposits did not increase by anywhere near as much as the money funds' assets decline (see Chart 1), inflows into MMDAs from the money funds must have been mostly offset by outflows from other types of deposits. In particular, we would expect some of the funds invested in large CDs to leave the banking sector as MMDA deposits increased. In part, this would reflect the money funds liquidation of their holdings of CDs as they shrank in size.

In addition, as banks experienced rapid inflows into MMDAs, they reduced their purchases of relatively more expensive wholesale CDs by offering less attractive terms. This prompted some holders of CDs to transfer their funds elsewhere. As Chart 2 shows, there was a decline in large time deposits (CDs) of 42 cents for each \$1 increase in MMDAs. This decline in large CDs was, however, larger than the inflow from the money funds.

The rather massive substitution of retail MMDAs for wholesale CDs has important cost implications for banks. Since MMDAs, with the exception of the first few months after introduction, generally have been less costly than large CDs, this shift lowered banks' deposit costs—just as the theory predicted.

There are implications for the long-run viability of money funds as well. Although we estimate that MMDAs attracted nearly \$90 billion from the money funds, this appears to have been a one-time shift because the money funds have since grown in the face of continued competition from the MMDA. Indeed, MMF assets have rebounded and are now nearly at their pre-MMDA peak.

As MMDAs surged, there was also a dramatic decline of 52 cents for each dollar increase in MMDAs in small-denomination (less than \$100,000) time deposits, including retail repurchase agreements. After an actual decline of nearly \$150 billion over a six-month period, small time deposits resumed their trend growth rate as the growth in MMDAs tapered off, suggesting that a one-time shift of funds occurred (see Chart 2).

The largest decline in this small time category took place in the popular six-month money market certificate, which already paid a near open-market rate of interest but tied up funds for six months. The impact on the cost of funds of the switch from

small time accounts to MMDAs was probably not large for many institutions. Nearly all of the funds in the small-time category were already paying near open-market rates or were tied to these rates by the end of 1982. Still, even though this switch did not directly alter the cost of these funds substantially, it changed the overall composition of deposits and shortened the (stated) maturity distribution of retail deposits.

Both passbook savings (at the time, passbook accounts paid 5 1/4 percent at banks and 5 1/2 percent at thrifts) and transactions balances, such as demand deposits and NOW accounts, also appeared to fall slightly during the months following the authorization of the MMDA. However, there is no statistical evidence of a significant shift, perhaps because the decline just mirrored the build-ups in both savings (evident in Chart 2) and transactions balances in the weeks preceding the authorization of the MMDA. Knowing that banks would be allowed to offer these short-term market rate accounts as of December 14, many depositors with maturing investments probably held funds temporarily in transaction or savings accounts until the new accounts were available.

Although individual banks may have had different experiences, our analysis suggests no significant shift from low-interest passbook savings accounts to MMDAs. This confirms our hypothesis that the gradual erosion of deposits in these accounts had left mainly depositors that preferred having interest in implicit forms that, unlike explicit interest, escaped taxation.

As might be expected from their unlimited checking privileges, our analysis indicates that the only significant source of funds for Super-NOW accounts was other transaction accounts. Our statistical results indicate that Super-NOWs were close substitutes for pre-existing transaction accounts. Although this switch certainly increased banks' explicit interest costs, in the long run this increase will be offset by reductions in the cost of attracting checking and NOW deposits with underpriced services.

Conclusions

MMDA deposits came primarily from money funds, small time deposits and large CDs. Although MMDAs attracted about one fourth of their initial deposits—approximately \$90 billion—from the money funds, the money funds are now prospering despite their initial losses. The fact that the money funds only lost a fraction of their deposits to the MMDAs suggests that the money funds and MMDAs are substitutes, but not the close substitutes some had anticipated.

To the extent that banks' primary comparative advantage is in providing intermediation services at the retail level, the MMDAs (and to a lesser extent, Super-NOWs), have enabled banks in the aggregate to strengthen greatly their competitive position by providing them with a more stable and lower cost source of deposits. Depositors too have benefitted by being offered a more valuable combination of explicit interest, liquidity and implicit services than had existed previously.

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Chart 1

MMDAs, Money Market Funds, and Total Deposits (Combined Bank and Thrift Total)

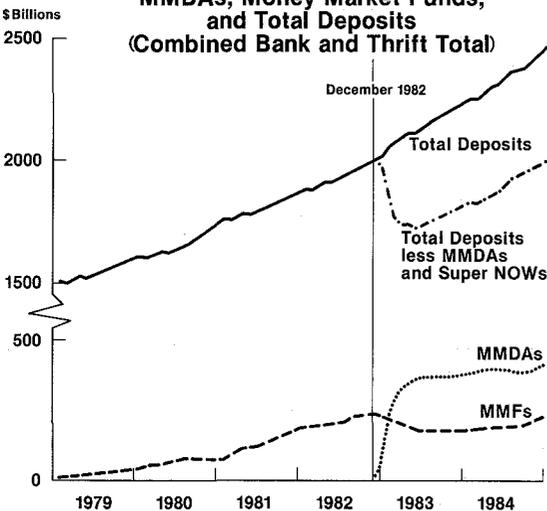
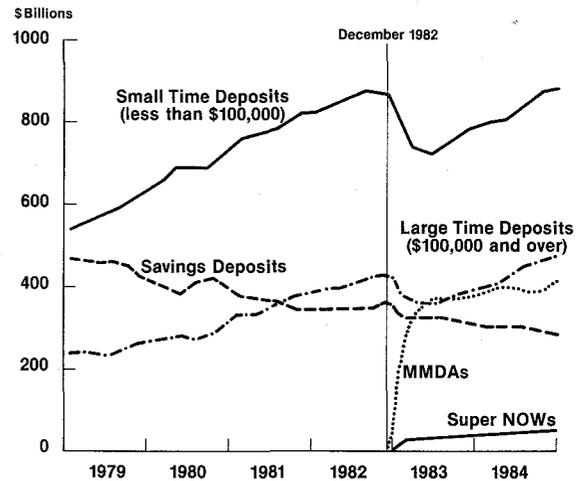


Chart 2

Selected Components of Total Deposits (Combined Bank and Thrift Total)



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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount	Change	Change from 5/30/84	
	Outstanding 5/29/85	from 5/22/85	Dollar	Percent ⁷
Loans, Leases and Investments ^{1 2}	191,043	- 734	11,495	6.4
Loans and Leases ^{1 6}	172,667	- 583	12,353	7.7
Commercial and Industrial	52,128	- 153	3,092	6.3
Real estate	62,990	- 28	2,792	4.6
Loans to Individuals	34,140	99	6,134	21.9
Leases	5,362	2	377	7.5
U.S. Treasury and Agency Securities ²	11,398	- 151	- 556	- 4.6
Other Securities ²	6,978	2	- 301	- 4.1
Total Deposits	194,519	2,066	6,859	3.6
Demand Deposits	45,543	1,894	1,024	2.3
Demand Deposits Adjusted ³	-28,772	- 42	1,047	3.7
Other Transaction Balances ⁴	13,086	- 15	970	8.0
Total Non-Transaction Balances ⁶	135,889	186	4,862	3.7
Money Market Deposit Accounts—Total	43,540	163	4,167	10.5
Time Deposits in Amounts of \$100,000 or more	38,462	107	- 945	- 2.3
Other Liabilities for Borrowed Money ⁵	22,163	-2,009	2,319	11.6
Two Week Averages of Daily Figures	Period ended 5/20/85	Period ended 5/06/85		
Reserve Position, All Reporting Banks				
Excess Reserves (+)/Deficiency (-)	65	6		
Borrowings	52	49		
Net free reserves (+)/Net borrowed(-)	13	- 42		

¹ Includes loss reserves, unearned income, excludes interbank loans

² Excludes trading account securities

³ Excludes U.S. government and depository institution deposits and cash items

⁴ ATS, NOW, Super NOW and savings accounts with telephone transfers

⁵ Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

⁶ Includes items not shown separately

⁷ Annualized percent change