FRBSF Weekly Letter

July 27, 1990

Interest Rate Competition

Since late 1982, commercial banks and thrifts have offered the money market deposit account (MMDA), a savings account with features similar to and competitive with those of money market mutual funds. Until 1987, banks and thrifts offered rates on MMDAs that were closely tied to the rates on money market funds. Since then, however, MMDA rates have become less sensitive to money fund rates. In this *Letter,* we study this change in MMDA pricing, and find that changes in the structure of banking markets caused by changes in the intensity of thrift competition may be partly responsible.

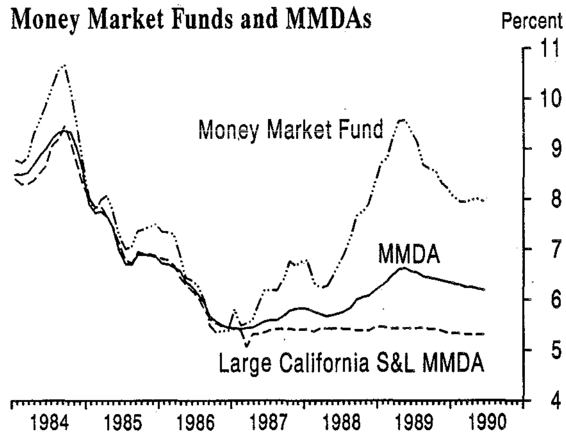
The MMDA market is born

Money market deposit accounts were authorized for banks and thrifts in December 1982 as a combination savings/limited transaction account that would make them competitive with money market mutual funds. Today, banks and thrifts in the U.S. hold nearly $490 billion in MMDAs, versus about $430 billion in money funds.

Money market funds pay a rate that is determined by the yields on the money market assets (such as Treasury securities, commercial paper, and large bank CDs) they hold. In contrast, depository institutions establish their own rates on MMDAs. Through the mid-1980s, the rates on money market funds and MMDAs were tightly linked, with MMDA rates only slightly below those on money funds (see chart). Data from the *Bank Rate Monitor* indicate that bank and thrift MMDA rates averaged 94 percent of the national average money market fund rate from 1984 to 1986. Moreover, changes in these two rates were highly correlated, with MMDA rates moving an average of 60 basis points for every 100 basis point change in money fund rates.

At the same time, MMDA rates tended to be less sensitive to rises than to declines in the rate on money market funds. This tendency for the MMDA rate to respond less strongly to changes in the money fund rate in a rising rate environment is confirmed by research at the Federal Reserve Bank of San Francisco. When interest rates have risen, banks and thrifts have been able to limit the rise in their MMDA rates without too much risk of losing deposits. Instead, they have tended to raise interest rates on certificates of deposit (CDs). Changes in CD rates affect only *new* accounts, and are therefore less costly than are changes in the MMDA rate, which would apply to both new and old accounts.

Interest Rates on Money Market Funds and MMDAs



Source: Bank Rate Monitor

Looser link

According to the chart, the close relationship between money market fund and MMDA rates appears to have broken down after 1986. The average differential between rates paid on money market funds and MMDAs has widened significantly. Whereas MMDA rates in the 1984–86 period were five to ten percent below the money fund rate, after 1986 they have been more than 20 percent below the money fund rate on average. The average difference between MMDA rates and the money market fund rate climbed from under 100 basis points from 1984 to 1986 to over 200 basis points after 1986.

WESTERN BANKING *Western Banking* is a quarterly review of banking developments in the Twelfth Federal Reserve District. It is published in the *Weekly Letter* on the fourth Friday of January, April, July, and October.

In the current period, changes in MMDA rates also respond less to changes in money fund rates. For every 100 basis point change in the average money market fund rate since early 1987, MMDA rates have moved on average only 20 basis points. This is one-third of the response of MMDA rates in the prior period.

Interest sensitivity of MMDAs

The apparent uncoupling of MMDA and money market fund rates may have occurred for a number of reasons. First, it may be a response to the rise in the money fund rate that occurred during most of the later period. As noted above, MMDA rates have tended to be less responsive to money fund rates when rates have been rising than when they have been falling. Thus, it should not be a surprise that money fund and MMDA rates would appear to have become uncoupled as interest rates rose after 1986.

However, a rising money fund rate cannot fully explain the apparent uncoupling of rates in the current period. The spread between the two rates is too large to be consistent with the earlier period. Moreover, as money fund rates have fallen over the past year, MMDA rates have not been as responsive to this decline as they were previously. Money fund rates have fallen about 160 basis points since early 1989, but MMDA rates have fallen only 40 basis points or so; this is roughly the same average response that we observe during the post-1986 period as a whole.

The thrift crisis

Thus, a structural shift in the market for MMDAs appears to have occurred around 1987. This shift has altered the relationship between rates on MMDAs and those on money funds. It is difficult to identify a unique cause for this. Nevertheless, the uncoupling of MMDA rates from money fund rates coincides with the deterioration in the financial condition of FSLIC-insured thrift institutions. Such a deterioration in financial condition may have limited thrift competition in the MMDA market, and diminished banks' incentives to compete aggressively as well.

As early as the second half of 1985, the S&L industry began reporting net outflows of new retail savings deposits. Earnings deteriorated dramatically thereafter, with the industry as a whole reporting virtually zero earnings in 1986 and progressively larger multi-billion dollar losses in subsequent years. The industry's return on assets (ROA) followed a similar pattern of deterioration.

Another sign of the deteriorating health of the industry has been the declining number of insured thrifts. A small drop in 1986 was followed by much larger declines in subsequent years. With the funding to close insolvent thrifts that was provided by the passage of the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) in August 1989, the number of thrift institutions has declined even further.

As the financial prospects and performance of thrifts have deteriorated, the industry has attempted to minimize its cost of funds, bolster earnings, and raise capital. As a result of these efforts, the ability of thrifts to compete in the MMDA market may have declined. FIRREA also has limited the ability of ailing thrifts to offer above-market deposit rates.

Consequently, the premium thrifts have been paying over bank MMDA rates has declined in recent years. The behavior of MMDA rates at a group of large California S&Ls is especially striking. As shown in the chart, these S&Ls have paid an almost constant rate on MMDAs since 1986, despite strong movements in money fund rates. In contrast, MMDA rates at large California banks are now higher than rates at large California S&Ls for the first time in years.

Impact on depositors

Competition for depositors' funds can take many forms. In California, for example, banks have escalated efforts to provide "better" banking services, such as 24-hour telephone service, longer branch hours, and Saturday banking. Nevertheless, developments in the thrift industry appear to have diminished competition in the market for MMDAs and contributed to an uncoupling of MMDA and money market fund rates. Thus, it is not surprising that MMDA balances have fallen \$24 billion nationwide since 1987 while higher yielding money market funds have gained \$116 billion.

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REGIONAL BANK DATA

MARCH 31, 1990

(Not Seasonally Adjusted, Preliminary Data)

	DISTRICT	ALASKA	ARIZ.	CALIF.	HAWAII	IDAHO	NEVADA	OREGON	UTAH	WASH.
ASSETS AND LIABILITIES -- $ MILLION (ALL COMMERCIAL BANKS)										
ASSETS TOTAL	468,779	4,238	27,138	325,149	16,313	8,078	15,958	22,334	11,383	38,188
FOREIGN	40,570	1	N/A	38,204	1,912	N/A	N/A	N/A	81	371
DOMESTIC	428,209	4,237	27,138	286,945	14,401	8,078	15,958	22,334	11,301	37,817
LOANS TOTAL	336,042	1,846	17,995	238,820	9,257	5,256	12,114	15,066	7,237	28,450
FOREIGN	32,671	0	N/A	31,582	965	N/A	N/A	N/A	N/A	125
DOMESTIC	303,370	1,846	17,995	207,239	8,292	5,256	12,114	15,066	7,237	28,325
REAL ESTATE	140,596	714	6,940	105,767	3,895	1,444	2,221	4,784	2,939	11,890
COMMERCIAL	76,538	659	3,883	51,921	2,484	1,382	1,622	5,325	1,713	7,549
CONSUMER	58,479	282	5,210	31,213	1,294	1,492	7,919	3,224	1,926	5,918
AGRICULTURE	4,904	6	464	2,458	38	506	17	321	122	974
INTERNATIONAL	380	N/A	14	365	0	N/A	N/A	N/A	N/A	0
SECURITIES TOTAL	42,824	1,741	3,265	21,193	3,391	1,726	1,969	3,783	2,092	3,664
U.S.T.S.	12,848	1,116	1,133	5,933	996	478	633	950	464	1,145
SECONDARY MARKET	17,875	213	1,029	9,893	1,533	728	573	1,558	1,096	1,252
OTHER SEC.	12,101	412	1,103	5,367	863	520	763	1,276	532	1,266
LIABILITIES TOTAL	438,899	3,789	25,413	304,891	15,377	7,542	14,920	20,791	10,614	35,561
DOMESTIC	398,329	3,788	25,413	266,687	13,465	7,542	14,920	20,791	10,533	35,190
DEPOSITS TOTAL	372,641	3,334	23,187	259,498	14,466	6,489	8,182	17,376	8,954	31,154
FOREIGN	34,964	0	N/A	32,748	1,764	N/A	N/A	N/A	81	371
DOMESTIC	337,677	3,334	23,187	226,751	12,702	6,489	8,182	17,376	8,873	30,784
DEMAND	79,285	910	4,463	57,035	2,337	1,053	1,981	3,296	1,649	6,561
NOW	32,628	226	2,174	20,900	1,235	768	842	2,239	1,057	3,188
TIME AND SAVINGS	258,392	2,424	18,724	169,716	10,365	5,435	6,202	14,080	7,224	24,223
MMDA	64,601	419	4,841	44,041	2,095	1,063	1,666	2,942	1,512	6,022
SAVINGS	31,537	357	1,221	22,408	1,375	375	872	1,415	795	2,719
SMALL TIME	71,046	707	8,039	39,258	1,749	2,586	1,197	5,567	2,905	9,037
LARGE TIME	58,048	697	2,431	42,760	3,906	617	1,625	1,908	955	3,150
OTHER BORROWINGS	43,774	403	1,720	26,977	426	967	5,811	2,784	1,473	3,212
EQUITY CAPITAL	29,880	449	1,725	20,258	936	535	1,038	1,543	768	2,627
LOAN LOSS RESERVE	8,060	42	702	6,116	143	89	214	211	143	400
LOAN COMMITTMENTS	178,886	557	8,464	135,288	5,561	1,771	2,187	7,467	2,651	14,942
LOANS SOLD	65,000	22	423	63,861	110	22	98	215	17	233
ASSET QUALITY -- PERCENT OF LOANS (LARGE COMMERCIAL BANKS)										
LOAN LOSS RESERVE (ALL BANKS)	2.40	2.29	3.90	2.56	1.54	1.70	1.76	1.40	1.98	1.40
NET CHARGEOFFS, TOTAL	0.72	0.15	1.64	0.63	-.02	0.23	2.88	0.51	0.83	0.44
REAL ESTATE	0.16	0.33	0.46	0.10	-.02	0.09	0.32	0.35	0.37	0.48
COMMERCIAL	0.39	0.07	3.65	0.26	-.22	0.23	1.61	0.33	1.41	-.10
CONSUMER	1.97	0.28	2.32	1.85	0.29	0.62	3.88	1.17	1.29	1.03
AGRICULTURE	-.97	N/A	-.07	-2.20	-.07	-.34	-.03	0.95	-.00	0.91
PAST DUE & NON-ACCRUAL, TOTAL	4.88	6.35	9.82	4.91	1.97	2.01	6.03	2.01	4.15	4.11
REAL ESTATE	4.50	8.86	16.00	3.73	2.24	2.84	5.89	2.70	6.26	5.46
COMMERCIAL	5.44	6.94	11.7	5.86	1.84	1.80	3.63	1.59	3.51	3.73
CONSUMER	3.03	1.91	1.65	2.78	2.50	1.36	6.74	1.73	2.53	1.74
AGRICULTURE	8.77	2.21	11.2	10.8	4.25	4.25	0.95	3.46	5.67	6.15
EARNINGS AND RETURNS -- $ MILLION, YEAR-TO-DATE (ALL COMMERCIAL BANKS)										
INCOME TOTAL	13,412	108	716	9,320	397	213	663	590	302	1,104
INTEREST	11,077	94	589	7,627	352	189	565	510	266	884
FEES & CHARGES	578	5	39	398	9	11	14	33	16	54
EXPENSES TOTAL	11,336	90	731	7,805	330	181	551	488	267	892
INTEREST	6,109	49	342	4,236	206	110	257	280	152	478
SALARIES	2,139	21	149	1,507	63	29	48	96	42	184
LOAN LOSS PROVISION	682	2	74	421	7	3	102	23	15	35
OTHER	2,405	18	166	1,641	54	40	144	90	58	195
INCOME BEFORE TAXES	2,071	18	-16	1,510	67	32	112	101	35	212
TAXES	675	4	-7	521	23	9	39	31	10	44
NET INCOME	1,544	14	-9	1,131	44	23	73	71	25	173
ROA (%)	1.34	1.32	-.13	1.41	1.13	1.16	1.72	1.30	0.88	1.84
ROE (%)	20.70	12.60	-2.00	22.30	18.70	17.20	28.20	18.30	12.80	26.30
NET INTEREST MARGIN (%)	4.31	4.19	3.74	4.24	3.76	4.01	7.25	4.26	4.09	4.33

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Address Correction Requested

MARKET SHARE STATISTICS

DEPOSITORY INSTITUTIONS REQUIRED TO HOLD RESERVES WITH THE FEDERAL RESERVE ON A WEEKLY BASIS

PERCENT OF COMBINED MARKET TOTAL FOR MAY 1990, BY REGION

	DISTRICT			ALASKA			ARIZONA			CALIF			HAWAII			IDAHO			NEVADA			OREGON			UTAH			WASH		
DEPOSIT TYPE	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU	CB	SL	CU
TOTAL DEPOSITS	48	47	5	73	4	22	56	39	5	44	52	4	66	29	5	87	10	3	69	29	3	68	26	6	68	21	11	57	36	8
DEMAND	92	4	4	99	0	1	91	4	5	92	4	4	93	4	4	92	1	6	99	1	0	95	1	4	92	4	5	93	5	3
NOW	61	31	7	58	5	36	70	22	9	57	37	6	71	26	3	88	8	3	78	16	6	77	16	7	75	14	11	65	23	12
SAVINGS	48	34	18	34	3	63	45	26	29	48	38	14	47	35	18	76	12	12	70	20	10	54	27	19	53	12	35	45	21	35
MMDA	65	32	2	89	8	3	77	22	1	61	37	2	82	18	0	94	6	0	81	18	2	81	16	4	81	9	10	70	28	2
SMALL TIME	29	68	3	76	8	16	43	54	3	22	75	3	40	56	4	83	15	2	43	54	2	53	43	5	56	36	8	44	51	5
LARGE TIME	41	57	2	95	2	3	45	52	2	37	61	2	79	18	2	84	11	5	70	30	0	80	16	4	78	16	6	47	52	1

CB = COMMERCIAL BANKS; SL = SAVINGS & LOANS AND SAVINGS BANKS; CU = CREDIT UNIONS; MAY NOT SUM TO 100% DUE TO ROUNDING

INTEREST RATES ON DEPOSITS AND LOANS AS OF MAY 1990 (%)

TYPE OF ACCOUNT OR LOAN		DATE	US	DISTRICT	ARIZ	CALIF	HAWAII	IDAHO	OREGON	UTAH	WASH
MONEY MARKET DEPOSIT ACCOUNTS		MAR90	6.32	6.26	5.86	6.49	5.69	6.07	6.38	6.45	6.34
		APR90	6.33	6.21	5.87	6.46	5.68	6.06	6.44	6.10	6.29
		MAY90	6.34	6.23	5.87	6.46	5.68	6.06	6.53	6.10	6.36
92 TO 182 DAYS CERTIFICATES		MAR90	7.77	7.45	7.41	7.76	6.89	7.45	7.77	7.61	7.15
		APR90	7.81	7.45	7.40	7.81	6.89	7.50	7.77	7.65	7.08
		MAY90	7.83	7.48	7.38	7.82	6.95	7.57	7.53	7.66	7.16
2½ YEARS AND OVER CERTIFICATES		MAR90	7.94	7.86	7.64	7.98	7.57	7.98	8.56	7.98	7.72
		APR90	8.01	7.87	7.64	8.04	7.57	8.00	8.34	8.05	7.72
		MAY90	8.03	7.89	7.59	7.99	8.00	8.00	7.98	8.05	7.71
COMMERCIAL, SHORT-TERM*	AVE. RATE		9.97	10.49	10.19	10.61	10.85	10.05	10.58	11.11	10.14
	AVE. MAT. (DAYS)		46	125	69	156	100	119	85	115	158
COMMERCIAL, LONG-TERM*	AVE. RATE		11.08	11.20	10.89	11.16	11.87	11.47	N/A	11.93	10.04
	AVE. MAT. (MONTHS)		44	36	39	35	32	56	N/A	26	40
LOANS TO FARMERS*	AVE. RATE		11.79	10.58	10.50	10.28	N/A	11.67	10.68	12.35	11.15
	AVE. MAT. (MONTHS)		14	11	5	12	N/A	16	3	47	24
CONSUMER, AUTOMOBILE	AVE. RATE		11.82	12.55	13.25	13.08	N/A	13.50	11.30	11.84	12.05
CONSUMER, PERSONAL	AVE. RATE		15.41	16.22	17.00	19.79	N/A	14.00	13.27	16.14	15.07
CONSUMER, CREDIT CARDS	AVE. RATE		18.14	18.47	18.00	19.44	N/A	N/A	19.24	20.40	16.00

SOURCES: SURVEY OF TERMS OF BANK LENDING AND TERMS OF CONSUMER CREDIT; MOST COMMON INTEREST RATES ON SELECTED ACCOUNTS.
*U.S. DATA ARE COMPOUNDED ANNUAL RATES, DISTRICT AND STATE DATA ARE SIMPLE ANNUAL RATES.