The August 2006 Senior Financial Officer Survey

In October 2006, the President signed legislation that will allow the Federal Reserve to pay interest to depository institutions (DIs) on account balances at their Federal Reserve Bank, including balances applied against reserve requirements, beginning in 2011. Because the Federal Reserve does not currently pay interest on the latter balances, reserve requirements essentially act as a tax, which DIs attempt to avoid through a number of activities. In retail sweep programs, DIs move funds from a customer's deposit that is subject to reserve requirements to one that is not. These sweep programs and similar activities absorb real resources and may diminish the efficiency of the banking system. The Federal Reserve has long supported proposals that would allow it to pay interest on some reserves.[1]

To obtain information on DI responses to this then-prospective development, in August 2006 the Federal Reserve conducted a survey of senior financial officers of large commercial banks. Forty-six large commercial banks were surveyed, with respondents selected from among the largest banks in each Federal Reserve District.[2] The survey questions and tabulations of the responses are included in Appendix A.

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[1] Many of the issues addressed in this survey have been discussed in testimony by Federal Reserve officials, most recently by Governor Donald L. Kohn in testimony before the Senate Committee on Banking, Housing, and Urban Affairs on March 1, 2006. This testimony is available on the Federal Reserve Board's web site (http://www.federalreserve.gov/boarddocs/testimony/2006/20060301/default.htm).

[2] The mean asset size of the survey banks was $92 billion, with total assets accounting for nearly half of all commercial bank assets. Given the nature of the sample, the results are most applicable to the behavior of large banks.

Retail Sweep Behavior

Retail Sweep Program Characteristics
(Questions 1 and 2)

Questions 1 and 2 were aimed at determining how many institutions had retail sweeps programs and how large such programs were. Over 90 percent of respondents reported that their institutions had a retail sweep program. Sweep program sizes, measured on a daily average basis for the month of June 2006, ranged from $140 million to $174 billion, with a mean size of $16.8 billion and median of $4.5 billion.

The Federal Reserve does not regularly collect data on the size of retail sweep programs. In general, staff estimates the size of such programs when they are initiated based on evidence obtained by the Reserve Banks as a part of their routine reviews of the quality of reported data on bank deposits. These estimates likely understate substantially the amounts currently being swept because such programs would be expected to grow over time. Indeed, the survey responses suggest that retail sweep programs are now twice as large as the initially swept amounts.

Response of Retail Sweep Programs to the Payment of Interest on Reserves
(Questions 3a and 3b)

DIs might be expected to dismantle sweep programs, at least to some extent, if they received interest on required reserve balances. Respondents were asked to specify the extent and timing of their institutions' expected unwinding of retail sweep programs for two different values of the interest rate to be paid on Fed account balances applied against reserve requirements—the intended federal funds rate less 10 basis points and the intended rate less 25 basis points.

Respondents almost unanimously reported that their institutions would unwind less than 25 percent of their retail sweep programs, regardless of the interest rate or time period.

Responses to the final, open-ended question—discussed below—and follow-up with several banks suggested that the amount of unwinding would be essentially zero. Only two respondents suggested any significant unwinding of sweep programs, and that was at a horizon of beyond three months.

Other Responses to the Payment of Interest on Reserves
(Question 4)

Consistent with the responses suggesting a minimal unwinding of retail sweep programs reported above, all but three respondents reported that their institutions would be likely or very likely to continue to minimize reservable liabilities and hence required reserve balances. Only about 20 percent of respondents stated that their institutions were likely or very likely to economize on vault cash in order to satisfy a greater share of their reserve requirements with Fed balances that would pay a return. Among these, the reported likely reductions of vault cash were between 5 and 25 percent.

Banks typically compensate implicitly the business holders of demand deposits for maintaining such balances by paying "earnings credits" to business than can be used to defray various banking services. The amount of earnings credits paid is reduced by banks' costs incurred in holding non-interest-bearing required reserve balances against demand deposits. Hence, the payment of interest on required reserve balances might be expected to increase the amount of earnings credits paid on compensating balances. However, only five respondents indicated any likelihood of their bank increasing the earnings credit rate paid to customers on demand deposits held under compensating balance arrangements. Only one respondent reported that his bank might increase the interest rate paid on interest checking accounts.

Open-ended Responses

(Question 5)

The final question in the survey requested any additional information that the Federal Reserve should consider on these issues. One clear theme in the responses was that many banks saw little reason to unwind any of their existing retail sweep programs. Several respondents expressed concern that holding higher required reserve balances would expand their balance sheets and so erode their leverage capital ratios.[3] Others thought that holding higher required reserve balances at the Federal Reserve at the proposed interest rates would reduce their return on assets and return on equity. Evidently, the costs associated with maintaining sweep programs are viewed as extremely low, and so even modest benefits from such programs are sufficient to keep them in place. Moreover, several respondents noted that there may be significant costs associated with dismantling existing sweep programs.

Comparison with Previous Surveys

Over time, institutions appear to have become substantially less likely to eliminate their retail sweep programs in response to the payment of interest on reserves. Both the 1996 and 1998 Senior Financial Officer Surveys asked about possible responses to the payment of interest on required reserve balances. In the 1996 survey, more than two-thirds of respondents stated that their institutions would dismantle their retail sweep programs either immediately or over time in response to the payment of interest on reserves. In the 1998 survey, while several banks indicated that they would dismantle their sweep programs if interest were paid on required reserve balances, more than half of banks responded that they would continue to seek ways to reduce their required reserves. About one half of banks would try to economize on vault cash. As in the current survey, the respondents in 1998 reported that they would not be likely to increase their offering rates on existing transactions accounts or to increase the earnings credit rate paid on

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[3] The leverage ratio is equity capital divided by total assets. Total assets include balances held at the Federal Reserve, loans, securities, and other investments.

demand deposits held in compensating balance arrangements. In the 1998 survey, the hypothetical interest rate paid on required reserve balances was the intended federal funds rate less 20 basis points, a rate that is between the two proposed rates in the 2006 survey. (No specific rate was suggested in the 1996 survey.) While the cause of the evolution in banks' views is unclear, the fact that these programs have become commonplace, are reported to be relatively inexpensive to maintain, and have existed for over a decade may be partial explanations.

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Appendix A: Survey Questions and Responses
Payment of Interest on Required Reserve Balances

Congress is currently considering legislation that would allow the Federal Reserve to pay interest to depository institutions on *Fed account balances, including balances applied against reserve requirements*. This survey asks you about your likely response to payment of interest on such balances. In answering the questions below, please assume that the Federal Reserve pays explicit interest only on Fed balances applied against reserve requirements, that *required reserve ratios* are unchanged, that the Federal Reserve does not pay explicit interest on *excess reserves*, that the Federal Reserve's *contractual clearing balance (required clearing balance)* program is unchanged, and that interest would not be paid on vault cash. A glossary of important terms used in the survey is provided at the end of the survey. Each glossary term is noted in italics when first used in the survey.

The following questions ask about your bank's likely response to this proposed change.

1. Does your bank currently have a *retail sweep program*?

Yes: 41 banks
No: 5 banks

If your answer to the previous question is "no," please skip to question 4.

2. How large is your bank's retail sweep program (to the nearest million dollars, on a daily average basis for the month of June 2006)?

Minimum: $140 million
Maximum: $174,081 million
Mean: $16,822 million
Median: $4,526 million

3. The next two questions (3a and 3b) ask about how your bank would likely change its retail sweep program in response to different possible levels of the interest rate paid on Fed account balances applied against reserve requirements. The questions ask about both the extent to which your bank would dismantle its sweep program, as judged by the change in average balances swept, and the time frame over which it would do so. Question 3a asks about the extent of the adjustment within three months of the introduction of interest on reserves, and question 3b asks about the ultimate extent of the adjustment beyond three months.

   For both questions 3a and 3b, each row corresponds to an interest rate equal to the *Federal Open Market Committee's intended federal funds rate* less a fixed differential.

   For each row in question 3a, please indicate the approximate fraction of your bank's retail sweep program that would be dismantled within three months given the indicated differential, as measured by the reduction in average balances swept (a reduction of 75 to 100 percent of such balances; a reduction of 25 to 75 percent of such balances, or a reduction of less than 25 percent of such balances).

3a. Changes in your bank's retail sweep program **within three months**

Monthly-average balances swept would decrease by: (Please check one response in each row.)

Number of Banks

	Rate paid on Fed account balances applied against reserve requirements	75 to 100 percent of your retail sweep program	25 to 75 percent of your retail sweep program	Less than 25 percent of your retail sweep program
a	10 basis points below the intended federal funds rate	0	1	40
b	25 basis points below the intended federal funds rate	0	1	40

For each row in question 3b, please indicate the approximate fraction of your bank's retail sweep program that would ultimately be dismantled after the introduction of interest on reserves given the indicated differential, as measured by the reduction in average balances swept (75 to 100 percent of your bank's retail sweep program; 25 to 75 percent of your bank's retail sweep program, or less than 25 percent of your bank's retail sweep program).

In each case, you should report the reduction in average balances swept relative to the period just before the introduction of interest on reserves, not the average balances swept three months after the introduction of interest on reserves (as reported in question 3a). For example, if at a differential of 25 basis points below the intended federal funds rate, your bank would dismantle 20 percent of its sweeps program within three months, and an additional 30 percent thereafter, for a total of 50 percent, you should check the middle column of row b in question 3b, to correspond to the 50 percent total reduction.

3b. Ultimate changes in your retail sweep program beyond **three months**.

Monthly-average balances swept would ultimately decline by:
(Please check one response in each row)

Number of Banks

	Rate paid on Fed account balances applied against reserve requirements	75 to 100 percent of your retail sweep program	25 to 75 percent of your retail sweep program	Less than 25 percent of your retail sweep program
a	10 basis points below the intended federal funds rate	1	2	38
b	25 basis points below the intended federal funds rate	0	2	39

4. For parts (a), (b), (d) and (f) of this question, please indicate how likely your bank would be to take any of the following actions in response to the payment of interest on Fed balances applied against reserve requirements at a rate slightly below the Federal Open Market Committee's intended federal funds rate. For parts (c) and (e), indicate the approximate percent changes that you would expect to ultimately occur.

Number of Banks

		Not Likely	Likely	Very Likely
a	Your bank would continue to seek ways to minimize its transaction liabilities and hence required reserves because the return on alternative investments would exceed the rate paid by the Federal Reserve on Fed account balances	3	10	33
b	Your bank would attempt to satisfy a significantly larger portion of its reserve requirements with Fed account balances by economizing on vault cash	37	4	5

		Approximate ultimate percent reduction in vault cash holdings
c	If you answered "Likely" or "Very Likely" to part (b), by what percent would your bank ultimately reduce its vault cash holdings?	Responses: 5-10, 15, 20, 25

Number of Banks

		Not Likely	Likely	Very Likely
d	Your bank would increase the earnings credit rate it pays on demand deposits held under *compensating balance arrangements*	39	5	0

		Approximate ultimate percent increase in demand deposits
e	If you answered "Likely" or "Very Likely" to part (d), what percent rise in demand deposits held at your bank would you ultimately expect?	Responses: 0, minimal, marginal, not specified, 25

Number of Banks

		Not Likely	Likely	Very Likely
f	Your bank would increase its interest rates on existing interest-bearing checking accounts	43	1	0

5. Please describe briefly any additional issues the Federal Reserve should consider with respect to the payment of interest on Fed balances applied against reserve requirements.

Glossary

Compensating Balance Arrangement: An arrangement in which demand deposits held by a bank's business customers receive implicit interest in the form of earnings credits than can be applied against charges that the customer incurs in using various bank services. Often the rate at which earnings credit accrue—the earnings credit rate—is based on the level of a short-term market interest rate such as the three-month Treasury bill rate with adjustments to reflect the bank's reserve requirement ratio and deposit insurance premium rate.

(Contractual) Clearing Balance Requirement: A contractual arrangement in which a depository institution agrees to maintain a specified level of Fed account balances on average over a maintenance period. Such balances generate earnings credits based on the three-month Treasury bill rate over the maintenance period and these credits may be applied against the institution's charges for various Federal Reserve priced services.

Excess Reserves: Balances held on average over a maintenance period that exceed the balances a bank must maintain in order to fully satisfy its reserve requirement and clearing balance requirement.

Fed Account Balance Applied Against Reserve Requirements: The actual level of balances that a depository maintains in its Fed account over a maintenance period that is used to meet the institution's reserve balance requirement. The reserve balance requirement is the difference between the reserve requirements and the amount of vault cash used to satisfy the reserve requirement (often called usable or applied vault cash).

Federal Open Market Committee's Intended Federal Funds Rate: A level of the federal funds rate that is announced by the FOMC as consistent with its short-term policy objectives. The Open Market Desk seeks to promote conditions in the reserve market so that federal funds generally trade in a narrow range around the FOMC's intended rate.

Required Reserve Ratios: Fractions of deposit liabilities, by type of liability, against which the Federal Reserve requires depository institutions to hold reserves.

Retail Sweep Program: Program implemented by many depository institutions that sweep balances from a customer's transaction account into that customer's money market deposit account. Such programs have allowed many depository institutions to significantly reduce their reserve requirements.