January 1988 Senior Financial Officer Opinion Survey on Demand Deposits

Summary

To obtain information about the behavior of demand deposits—especially their weakness in November and December -- and about the structure and importance of compensating balance arrangements for business demand deposits, a Senior Financial Officer Opinion Survey was conducted in mid-January.[1] The results of the survey indicate that, while there was sluggishness in household demand deposits over the November-December period, most of the weakness occurred in business accounts and generally was widespread across types of business. Apart from any unusual movements related to the stock market drop, the weakness in business demand deposits in November and December reflected most importantly lagged adjustments of account levels to earlier increases in interest rates. Respondents attributed this both to closer management of balances as rates rose in 1987 and to reductions in required compensating balances.

Survey results indicate that slightly more than 60 percent of business demand deposits are held under formal compensating balance arrangements, although there has been a continuing trend away from such arrangements in favor of reimbursing banks for credit and operational services by explicit fees. This trend was reported to have accelerated in 1987 by slightly less than 30 percent of all respondents. Despite these shifts, most banks stated that the proportion of their business accounts with compensating balances arrangements had remained stable over 1987.

There is marked variation in the structure of compensating balance arrangements across institutions, although most use a monthly average of the 3-month Treasury bill rate to determine their earnings credit rate (ECR) and compute required balances monthly. Some institutions calculate required balances based on their ECR for the current month (or quarter) while others lag the rate by a month or more. While period to period carryovers of surpluses and deficits usually are permitted, most institutions do not allow carryovers past the end of the calendar year,

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[1] The respondent panel to this survey is the same as that for the Senior Loan Officer Opinion Survey on Bank Lending Practices. See the note to the table for additional information about the survey panel.

effectively requiring settlement of accounts by year-end. Only a few institutions reported any changes in the structure of their compensating balance arrangements in 1987, and these were minor.

Senior financial officers also were asked about NOW account behavior in November and December. Most reported normal growth; of the institutions reporting less than normal growth, almost 60 percent cited shifts to higher-yielding accounts as a factor.

Demand Deposit Activity in the November-December Period.

Fifty percent of the respondents reported that demand deposit growth at their institutions was below normal or very weak over November and December. Only a few reported above normal demand deposit growth, and none experienced very strong growth. Of those with lower than normal demand deposit growth, 83 percent experienced weakness in business deposits while about half cited weakness in household accounts. A higher percentage of large banks reported weakness in both business and household accounts than did smaller institutions; however, smaller institutions cited weakness in other accounts such as correspondent and local government deposits more frequently than did large banks.

Higher interest rates were the most important single factor in the weakness in demand deposits; 54 percent of the banks that reported weakness in business demand deposits attributed it to more careful cash management by firms resulting from higher rates, and 29 percent indicated that higher interest rates (and thus higher ECRs) had led to reduced compensating balances. Apart from the direct effects of higher interest rates relative to their levels six months or a year earlier, one-third of the respondents stated that customers switching from compensating balance arrangements to payment for services by explicit fees had depressed demand deposits at their institutions. A few banks also noted that some customers had reduced their balances below the required minimums late last year, preferring to make up the difference with fees. The trend away from formal compensating balance arrangements in favor of fees, which appears to be continuing, is discussed more fully in the section on the structure of compensating balances.

Slowing business activity also was seen to have been a factor in the weakness in business demand deposits by 29 percent of the respondents with less than normal deposit growth. Perhaps mirroring this, reduced demand by corporate customers for credit and operational services combined, which in turn reduced required compensating balances, also was reported as a factor by 29 percent of the institutions with lower than normal demand deposit growth in November and December. Reduced financial activity associated with LBOs and merger financing was cited by only about 13 percent of respondents. Responses in the "other" category of question 3a were varied, including slow loan growth and the financial troubles of a particular bank.

The weakness in business demand deposits generally was not concentrated in any one sector; over three-fourths of the respondents reported weakness across all of their business accounts. Of the respondents that did cite specific sectors, real estate and mortgage banking were the most common. In terms of account structure, three-fourths of the institutions reported that the weakness in business demand deposits resulted from lower average balances, while about 14 percent reported a decline in the number of accounts as some customers continued to consolidate demand accounts in order to reduce expenses and to facilitate cash management.

The Importance and Structure of Compensating Balances

Slightly more than 60 percent of balances in demand deposits at the respondent banks are made up of funds held under compensating balance arrangements.[2] This varies widely across institutions, with 12 percent reporting that 20 percent or less of their business demand deposits are held under such arrangements while a quarter of the respondents cited figures of over 80 percent. Although there is variation across banks in the structure of their compensating balance arrangements, all of the banks responding to question 5a deduct the 12 percent reserve requirement when crediting their customers for balances held.

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[2] This figure (61.6 percent in the table) is a simple mean of the proportions reported by the individual respondents. It appears, however, to be reasonably robust; when the responses are weighted by business deposits as reported on the Demand Deposit Ownership Survey (DDOS), the mean is 67.1 percent. Unfortunately, while this is the preferred weighting system, only about three-fourths of the surveyed institutions report on the DDOS. Weighting the reported proportions of all respondents by total demand deposits, which gives undue weight to banks with lower than average proportions of business to total demand deposits, yields a mean of 65.8 percent.

The bulk of the banks in the panel, 83 percent, base their ECR on the 3-month Treasury bill rate, using either the secondary market or auction rates. Other rates also are used, including the federal funds rate, wholesale CD rates, and, in one case, the average of competitors' ECRs for the previous month. Smaller banks were somewhat more likely to use a rate other than the T-bill rate than were large institutions.

Compensating balance requirements are measured over a variety of periods. While 81 percent of the respondents indicated that they measured balances primarily on a monthly basis with another 16 percent reporting quarterly computation periods, many of the banks indicated that such arrangements were open to negotiation or were left to the discretion of the account manager. As a result, some banks indicated they may be computing required balances over various periods for various customers. There also was somewhat more variation among smaller banks in the length of computation period used than among large institutions.

The variation in compensating balance arrangements also is evident in the willingness of banks to allow carryforwards of surpluses or deficits. About two-thirds of the respondents allow carryovers from one computation period to the next. Some allow it only for certain customers, and a few institutions allow carryovers only of overages, not deficits. About three-fourths of the respondents that allow period to period carryovers do not allow carryovers beyond the end of the calendar year, effectively requiring account settlement at year-end.

Only 14 percent of banks reported changes in their compensating balance arrangements during 1987. Overall the changes appeared to be minor, such as beginning to charge for FDIC insurance. Two banks indicated customers had initiated changes in their accounts.

The survey results confirm the view expressed in the corporate cash management literature that businesses have been moving away from compensating balance arrangements in favor of reimbursing their banks for services by explicit fees. Slightly less than three-fourths of the respondents reported that such a shift had been occurring, and 38 percent of these indicated that it had accelerated in 1987.[3] In general, the move away from compensating balances and toward fee compensation has been underway for some time, and a number of respondents commented that this had been occurring for several years. High interest rates in the late 1970s and in the early part of this decade spurred the rise of cash management techniques, and, more importantly, trained cash management personnel. More recently, heightened competition among commercial banks has led to increased unbundling of fees charged for various types of credit and especially operational services. The combination of spreading cash management expertise and the reserve requirement wedge, which makes payment for services or credit by compensating balances more expensive than by explicit fees, has continued to reduce the use of compensating balance arrangements.[4] Indeed, one bank commented that recent articles in cash management journals have spurred some shifts by their customers. Such changes do not occur instantly, however: the cash management literature often notes that such a shift requires the education of senior management because fees must be budgeted and approved while the cost of compensating balances is indirect.

NOW Account Growth

Approximately 70 percent of the respondents reported that growth in NOW accounts at their institutions had been about normal in November and December, with slightly more than 20 percent citing below normal or very weak growth. As with demand deposits, none reported very strong growth. Nearly 60 percent of the institutions with less than normal growth attributed it to shifts of funds into other, higher yielding accounts. One-third were not able to identify the reasons for the weakness in NOW accounts at their banks.

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[3] Despite the bulk of respondents indicating such a shift has been occurring, 80 percent indicated in question 4b that the proportion of business demand deposits with formal compensating balance arrangements had not changed over 1987. This may reflect higher compensating balances in the first part of 1987 compared to the first part of 1986 resulting from lower levels of interest rates. In addition, some firms dropping compensating balance arrangements may have switched to sweep or controlled disbursement accounts, which have zero balances.

[4] The panel was asked if the National Corporate Cash Management Association's proposed standardized account analysis had affected their compensating balance arrangements. This proposal was an attempt by the association to foster more standardization in reporting of charges for services to facilitate comparison among banks and to increase the efficiency of cash management practices. About 90 percent of the respondents reported it had not had any effect. Those citing an effect generally referred to changes in the format of their monthly statements. It was not seen as having an effect on year-end settlements.

SENIOR FINANCIAL OFFICER OPINION SURVEY
AT SELECTED LARGE BANKS IN THE UNITED STATES
(Status of policy as of January 1, 1988)
(Number of banks and percent of banks answering question)
(By volume of total domestic assets, in $ billions, as of June 30, 1987)[5]

1. Adjusting for normal seasonal variation and abstracting from any unusual movements related to the stock market drop, please characterize demand deposit growth at your bank over November and December on a monthly average basis.

Number of Banks (Percent)

	Very Strong	Above Normal	About Normal	Below Normal	Very Weak	Total Banks
All Respondents	0 (0.0)	4 (6.9)	25 (43.1)	23 (39.7)	6 (10.3)	58
$7.5 and Over	0 (0.0)	3 (9.7)	14 (45.2)	11 (35.5)	3 (9.7)	31
Under $7.5	0 (0.0)	1 (3.7)	11 (40.7)	12 (44.4)	3 (11.1)	27

2. If you characterized recent growth as "very weak" or "below normal", was the weakness in: (more than one may apply.

Number of Banks (Percent)

	Business Accounts	Household Accounts	Other Accounts	Total Banks
All Respondents	24 (82.8)	14 (48.3)	5 (17.2)	29
$7.5 and Over	13 (92.9)	8 (57.1)	0 (0.0)	14
Under $7.5	11 (73.3)	6 (40.0)	5 (33.3)	15

[5] As of June 30, 1987, 32 respondents had domestic assets of $7.5 billion or more; combined assets of these banks totaled $670 billion, compared to $810 billion for the entire panel of 60 banks and $2.5 trillion for all federally insured commercial banks,

3. a. If you characterized recent growth in business demand deposits as “very weak” or “below normal”, to what would you attribute the weakness? (more than one may apply.)
   a. Slowing business activity.
   b. Reduced financial activity associated with LBOs and merger financing.
   c. More careful cash management as a result of higher rates.
   d. Reduced compensating balance requirements because of higher interest rates.
   e. Reduced compensating balance requirements because of lower use of credit services
   f. Reduced compensating balance requirements because of lower use of operational services.
   g. Reduced compensating balance to make up for overage relative to requirements earlier in the year.
   h. Other (please explain)

Number of Banks (Percent)

	a. Slowing Business Activity	b. Reduced LBO and Merger Activity	c. Cash Management	d. Balance Requirements due to Higher Rate	e. Bal. Reqs due to Use of Credit Services
All Respondents	7 (29.2)	3 (12.5)	13 (54.2)	7 (29.2)	3 (12.5)
$7.5 and Over	3 (23.1)	2 (15.4)	7 (53.8)	3 (23.1)	2 (15.4)
Under $7.5	4 (36.4)	1 (9.1)	6 (54.5)	4 (36.4)	1 (9.1)

Number of Banks (Percent)

	f. Bal. Reqs due to Use of Op. Services	g. Bal. Reqs to Make up for Earlier Overage	h. Other	Shifts from Balances to Fees	Total Banks
All Respondents	4 (16.7)	2 (8.3)	6 (25.0)	8 (33.3)	24
$7.5 and Over	2 (15.4)	1 (7.7)	3 (23.1)	5 (38.5)	13
Under $7.5	2 (18.2)	1 (9.1)	3 (27.3)	3 (27.3)	11

b. If growth in business demand deposits has been weak, has the slow growth been concentrated in particular types of businesses? If so, which? (For example, nonfinancial business, mortgage bankers, or securities brokers)

Number of Banks (Percent)

	Financial Institutions	Securities Firms	Real Estate Firms	Reduced M&A Activity	Energy-Related Firms	No Apparent Concentration	Total Banks
All Respondents	2 (8.7)	1 (4.3)	3 (13.0)	1 (4.3)	1 (4.3)	18 (76.3)	23
$7.5 and Over	1 (8.3)	1 (8.3)	2 (16.7)	1 (8.3)	0 (0.0)	9 (75.0)	12
Under $7.5	1 (9.1)	0 (0.0)	1 (9.1)	0 (0.0)	1 (9.1)	9 (81.8)	11

c. If growth in business demand deposits has been weak, has the slow growth primarily reflected sluggish expansion in the number of accounts or slow increases in average account balances?

Number of Banks (Percent)

	Number of Accounts	Avg Account Balances	Both	Uncertain/ No Response	Total Banks
All Respondents	2 (6.9)	20 (69.0)	2 (6.9)	5 (17.2)	29
$7.5 and Over	1 (7.1)	9 (64.3)	1 (7.1)	3 (21.4)	14
Under $7.5	1 (6.7)	11 (73.3)	1 (6.7)	2 (13.3)	15

4. a. Roughly what portion of balances in business demand deposits held at your bank would you estimate typically is made up of funds held under formal compensating balance arrangements? (Include balances held to compensate for both credit services and operational services.)

Number of Banks (Percent)

	0-20%	21-40%	41-60%	61-80%	Over 80%	Mean Proportion	Total Banks
All Respondents	6 (11.8)	2 (3.9)	16 (31.4)	14 (27.5)	13 (25.5)	61.6	51
$7.5 and Over	4 (13.8)	2 (6.9)	8 (27.6)	8 (27.6)	7 (24.1)	61.0	29
Under $7.5	2 (9.1)	0 (0.0)	8 (36.4)	6 (27.3)	6 (27.3)	62.3	22

b. Has this proportion changed much in the last year?

Number of Banks (Percent)

	Increased	Decreased	No	Uncertain	Total Banks
All Respondents	2 (3.9)	6 (11.8)	41 (80.4)	2 (3.9)	51
$7.5 and Over	0 (0.0)	5 (17.2)	24 (82.8)	0 (0.0)	29
Under $7.5	2 (9.1)	1 (4.5)	17 (77.3)	2 (9.1)	22

5. a. What is the most common formula for the earnings credit rate (ECR) used for your compensating balance arrangements?

Adjustments to Balances:

Number of Banks (Percent)

	Adjusted for Required Reserves	Total Banks
All Respondents	48 (100.0)	48
$7.5 and Over	27 (100.0)	27
Under $7.5	11 (100.0)	21

b. Please indicate which interest rate is used as a basis for your ECR.

Number of Banks (Percent)

	Three-Month Treasury Bill Rate	Ninety-Day CD Rate	Other Rate	Average of Several Rates	Total Banks
All Respondents	49 (83.1)	3 (5.1)	3 (5.1)	4 (6.8)	59
$7.5 and Over	27 (84.4)	2 (6.3)	0 (0.0)	3 (9.4)	32
Under $7.5	22 (81.5)	1 (3.7)	3 (11.1)	1 (3.7)	27

c. How is this rate measured? For example, is a moving average used? Are rates measured on a weekly, monthly, or quarterly basis? Are rates measured on an average basis over the period or on an end-of-period basis?

Basis:

Number of Banks (Percent)

	Month	Quarter	Weekly	Longer	Total Banks
All Respondents	47 (81.0)	9 (15.5)	1 (1.7)	1 (1.7)	58
$7.5 and Over	26 (81.3)	5 (15.6)	1 (3.1)	0 (0.0)	32
Under $7.5	21 (80.8)	4 (15.4)	0 (0.0)	1 (3.8)	26

Other:

Number of Banks (Percent)

	ECR Applied with Lag	A Moving Average is Used	Total Banks
All Respondents	19 (33.3)	10 (17.5)	57
$7.5 and Over	13 (40.6)	6 (18.8)	32
Under $7.5	6 (24.0)	4 (16.0)	25

d. Over what period (e.g. a month, a quarter) are compensating balance requirements measured?

Number of Banks (Percent)

	Month	Quarter	Year	Total Banks
All Respondents	49 (83.1)	9 (15.3)	1 (1.7)	59
$7.5 and Over	28 (87.5)	4 (12.5)	0 (0.0)	32
Under $7.5	21 (77.8)	5 (18.5)	1 (3.7)	27

e. Can account surpluses or deficiencies in one period be carried over to the following period?

Number of Banks (Percent)

	Yes	No	For Some Customers	Total Banks
All Respondents	40 (67.8)	16 (27.1)	3 (5.1)	59
$7.5 and Over	21 (65.6)	10 (31.3)	1 (3.1)	32
Under $7.5	19 (70.4)	6 (22.2)	2 (7.4)	27

f. If so, are there any limits on these period-to-period carryovers?

Number of Banks (Percent)

	Yes	No	For Some Customers	Total Banks
All Respondents	4 (9.3)	38 (88.4)	1 (2.3)	43
$7.5 and Over	0 (0.0)	22 (100.0)	0 (0.0)	22
Under $7.5	4 (19.0)	16 (76.2)	1 (4.8)	21

g. Can they be carried past the end of a calendar year?

Number of Banks (Percent)

	Yes	No	For Some Customers	Total Banks
All Respondents	10 (23.3)	32 (74.4)	1 (2.3)	43
$7.5 and Over	6 (27.3)	15 (68.2)	1 (4.5)	22
Under $7.5	4 (19.0)	17 (81.0)	0 (0.0)	21

h. Has the standardized account analysis recently promulgated by the National Corporate Cash Management Association encouraged any changes in compensating balance arrangements?

Number of Banks (Percent)

	Yes	No	Total Banks
All Respondents	5 (9.1)	50 (90.9)	55
$7.5 and Over	2 (6.5)	29 (93.5)	31
Under $7.5	3 (12.5)	21 (87.5)	24

In particular, has it encouraged settlement of accounts by year-end?

Number of Banks (Percent)

	Yes	No	Total Banks
All Respondents	0 (0.0)	4 (100.0)	4
$7.5 and Over	0 (0.0)	1 (100.0)	1
Under $7.5	0 (0.0)	3 (100.0)	3

6. More broadly, how have your ECR formula and other aspects of your compensating balance arrangements been changed during 1987, if at all?

Number of Banks (Percent)

	No Change	Customers Changed Procedures	Bank Changed Procedures	Began Adjusting for FDIC Insurance	Other	Total Banks
All Respondents	51 (86.4)	2 (3.4)	4 (6.8)	2 (3.4)	0 (0.0)	59
$7.5 and Over	28 (87.5)	0 (0.0)	4 (12.5)	0 (0.0)	0 (0.0)	32
Under $7.5	23 (85.2)	2 (7.4)	0 (0.0)	2 (7.4)	0 (0.0)	27

6.a. Reportedly, arrangements for compensating for banking services have been shifting in recent years from compensating balance arrangements to explicit fees. Has such a shift been occurring at your bank in recent years?

Number of Banks (Percent)

	Yes	No	Total Banks
All Respondents	37 (72.5)	14 (27.5)	51
$7.5 and Over	15 (62.5)	9 (37.5)	24
Under $7.5	22 (81.5)	5 (18.5)	27

If so, did it accelerate in 1987?

Number of Banks (Percent)

	Yes	No	Uncertain/ No Response	Total Banks
All Respondents	14 (37.8)	22 (59.5)	1 (2.7)	37
$7.5 and Over	8 (53.3)	7 (46.7)	0 (0)	15
Under $7.5	6 (27.3)	15 (68.2)	1 (4.5)	22

7. Growth in aggregate other checkable deposits (i.e. NOW accounts) also slowed in 1987 and especially weak in November and December. Adjusting for normal seasonal variation, please characterize growth in NOW accounts at your bank over November and December, on a monthly average basis.

Number of Banks (Percent)

	Very Strong	Above Normal	About Normal	Below Normal	Very Weak	Total Banks
All Respondents	0 (0.0)	5 (8.8)	40 (70.2)	11 (19.3)	1 (1.8)	57
$7.5 and Over	0 (0.0)	2 (6.7)	21 (70.0)	7 (23.3)	0 (0.0)	30
Under $7.5	0 (0.0)	3 (11.1)	19 (70.4)	4 (14.8)	1 (3.7)	27

8. If you characterized recent growth in NOW accounts as "very weak" or "below normal", to what would you attribute the weakness?

Number of Banks (Percent)

	Slow Growth in Avg Account Balances	Shifts to Other Accounts	Reduced Consumer Spending	Not Identifiable	Total Banks
All Respondents	1 (8.3)	7 (58.3)	1 (8.3)	4 (33.3)	12
$7.5 and Over	0 (0.0)	4 (57.1)	1 (14.3)	3 (42.9)	7
Under $7.5	1 (20.0)	3 (60.0)	0 (0.0)	1 (20.0)	5