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July 1988

COMMERCIAL BANKING

Trends in Performance From December 1976 Through June 1987

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The Honorable William Proxmire
Chairman, Committee on Banking,
Housing, and Urban Affairs
United States Senate

The Honorable Fernand J. St Germain
Chairman, Committee on Banking, Finance
and Urban Affairs
House of Representatives

In response to your requests for a review of the state of the commercial banking industry, we have assembled information on the current condition and recent trends in commercial bank performance. For this briefing report we reviewed data on all commercial banks insured by the Federal Deposit Insurance Corporation (FDIC) from December 31, 1976, through June 30, 1987, which includes the recession in calendar years 1981 and 1982, a period of substantial interest rate fluctuation and changes in bank regulation.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objectives of our work were to identify trends in commercial bank performance and the reasons for those trends. In accomplishing our objectives we reviewed key components of bank performance. Specifically, we reviewed commercial bank asset growth and distribution, bank profitability, solvency, asset composition, asset quality, and liability composition. Our primary sources of information were the reports of condition and income that commercial banks file with federal bank regulators. There is a wide variation in the asset size of commercial banks (bank size) and substantial differences in behavior across bank size categories. Consequently, we reported results for five distinct bank size categories. These categories include banks with assets of under $100 million, banks with assets of at least $100 million but less than $300 million, banks with assets of at least $300 million but less than $1 billion, banks with assets of at least $1 billion but less than $10 billion, and banks with assets of $10 billion or more.

In preparing this report, we did not audit the financial report data that commercial banks filed with bank regulators, the preparation of financial statements, or the transcription of financial statements to the computer tape data bases we used. (Details of our objective, scope, and methodology are in app. I.)

RESULTS IN BRIEF

The overall financial condition of the commercial banking industry has been declining since the recession in 1981 and 1982. The worsening condition of the industry can be seen in declines in both profitability and asset quality. These trends have produced some capital adequacy problems as seen in the rising number of bank failures. Commercial bank failures have risen from 7 in 1981 to 182 in 1987.

The principal factor contributing to declines in profitability has been the deterioration in asset quality. As a result of declining asset quality, banks have been setting aside larger reserves to cover expected losses on loans and this has decreased profits.

PRINCIPAL FINDINGS

The principal findings of our review are summarized below. Additional detail on each finding can be found in appendixes I through III.

Asset Growth and Distribution

Commercial banking industry assets have grown from $1,182 billion at year-end 1976 to $2,913 billion at midyear 1987; however, the industry asset growth rate declined from an annual rate of 13.26 percent in 1977 to 7.69 percent in 1986. Asset growth was negative in the first half of 1987. Coincident with the declining asset growth rates in banking has been a decline in commercial banks' share of the domestic financial services industry from 38.8 percent in 1975 to 32.5 percent in 1985. Partly in response to the loss of market share in standard credit activities, banks have increased their off-balance-sheet (OBS) activities. OBS activities are varied, but all essentially involve commitments or obligations on the part of banks such as commitments to extend businesses loans. Such commitments and obligations are not recorded on banks' balance sheets, yet may generate income or allow the bank to reduce operating risks. A recently completed GAO report[1] shows an increase in reported OBS activities across all bank size groups since banks began reporting certain OBS activities in 1983. (See p. 24 for additional discussion.)

Profitability

Commercial bank profitability has, in general, declined since 1980. The decline in profitability has been most severe among the smallest banks (banks with less that $100 million in assets). The smallest bank groups' return on assets declined from 1.12 percent in 1980 to 0.47 percent in 1986. The rise in profitability in midyear 1987 among the smaller banks may be due, in part, to many banks making greater loan loss provisions at year-end than in prior quarters. (See discussion on p. 29.)

Solvency

Although declines in profitability can impede growth in equity capital, most banks have been able to achieve a slight increase in equity capitalization (equity capital as a percent of assets) since 1980. For banks experiencing lower profitability, the growth in equity capitalization would be achieved by greater retention of profits and/or issuance of new equity shares. Recent problems with loans to less developed countries resulted in a drop in equity capitalization among the largest banks (banks with assets of $10 billion or more) in the first half of 1987, from 5.14 percent of assets at year-end 1986 to 4.22 percent of assets at midyear 1987.

Asset Composition

There have been several noteworthy changes in the composition of bank assets since 1976. Among these changes was a general decline in reliance on cash assets, particularly among the largest banks. Cash assets declined from 24.63 percent of the largest banks' assets at year-end 1976 to 14.47 percent of their assets at midyear 1987. The smallest banks have relied more heavily upon investment securities than have the largest banks. Investment securities have remained a fairly stable proportion of bank assets, while federal funds sold and resale agreements have risen among most banks between 1976 and midyear 1987. Over this same period, loans and

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[1] Banking: Off-Balance-Sheet Activities (GAO/GGD-88-35BR, Mar. 17, 1988).

leases have increased as a percentage of bank assets, except among the smallest banks. A cyclical decline in loan holdings occurred during the 1981 to 1982 recession among all but the largest banks. Finally, there has been a sharp increase in trading assets held for resale among the largest banks. Trading assets increased from 1.12 percent of the largest banks' assets at year-end 1976 to 3.34 percent of assets at midyear 1987.

Asset Quality

The principal factor contributing to declining profitability has been a deterioration in asset quality--the extent to which loans are expected to be repaid in full. Nonaccrual loans, those that are not maintaining normal repayments, have generally increased since 1982, the first year nonaccrual data were released. The smallest banks' large loan holdings in the troubled real estate and agricultural sectors of the economy may have contributed to the drop in asset quality. A decline in asset quality, primarily due to loans to less developed nations, contributed to the largest banks' profitability problems. This problem was particularly acute in the second quarter of 1987 when the largest banks reserved unprecedented amounts for potential future loan losses on loans to less developed countries.

Liability Composition

To review trends in the composition of bank liabilities we considered two broad categories of liabilities. The first category is core deposits, which consist of all transaction accounts and savings deposits, plus time deposits of under $100,000. The second is managed liabilities, which consist of short-term (remaining maturity of 1 year or less) time deposits of $100,000 or more and short-term nondeposit interest-bearing liabilities. Banks' reliance on both categories of funding has remained fairly stable since 1976. The smaller banks have relied most heavily on small, stable deposits (core deposits) while larger banks have relied upon larger, more volatile short-term liabilities (managed liabilities).

AGENCY COMMENTS

As arranged with your Committees, draft copies of this report were sent to FDIC, the Office of the Comptroller of the Currency (OCC), and the Board of Governors of the Federal Reserve System for review and comment. All responded informally. The agencies commented that the performance of banks operating in different geographic regions varied over the past decade. Thus, as the agencies said, many banks located in regions dependent upon the volatile energy and agricultural industries experienced poor performance when these markets became depressed. Conversely, banks operating in strong economic regions performed well. In addition, agencies said, the performance of multinational banks with large credit exposures to less developed countries has been adversely affected as they increased their reserves for possible loan losses. We recognize the importance of the relationships between regional economies and bank performance; however, in this report we chose to focus on performance trends related to bank size. This approach is consistent with previous analyses of the condition of the commercial banking industry.

Comments received from OCC attributed the decline in banking industry profitability since 1980 to restrictions on bank powers. The restrictions on the products and services banks may provide have not allowed banks to compete effectively in financial markets, OCC believes. This inability to compete effectively has forced banks to accept lower quality assets which has directly resulted in declines in bank profitability. In this report we focused upon measurable trends in bank performance and did not attempt to reach any conclusions about the underlying cause of deteriorating asset quality, the principal measurable influence on bank profitability.

Additional comments received were of a technical nature and, where appropriate, the report has been changed to reflect these comments.

If you need further information about this briefing report, please call me on (202) 275-8678.

Craig A. Simmons
Senior Associate Director

C O N T E N T S

TABLES

FIGURES

ABBREVIATIONS

FDIC	Federal Deposit Insurance Corporation
GNP	Gross National Product
OBS	Off-Balance-Sheet
OCC	Office of the Comptroller of the Currency
ROA	Return on Assets

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of this review was to describe trends in commercial bank performance for the period December 31, 1976, through June 30, 1987. This review includes all federally insured commercial banks filing financial reports with federal regulatory authorities.[1] Our work was done in accordance with generally accepted government auditing standards.

We segmented the industry into five bank size groups with size based on year-end total bank assets and made comparisons within and across these groups. We grouped banks according to asset size because of expected differences across bank size groups in operating efficiency, the nature of assets acquired, and liabilities incurred. In fact, past federal regulation of bank reserve and capital requirements recognized and reinforced these distinctions by establishing standards based on asset size. In this report we used bank size categories that closely follow those used by the FDIC. The bank size categories used include banks with assets of under $100 million, banks with assets of at least $100 million but less than $300 million, banks with assets of at least $300 million but less than $1 billion, banks with assets of at least $1 billion but less than $10 billion, and banks with assets of $10 billion or more. To allow comparisons of banks of different sizes we expressed all financial statistics, e.g., net income or equity, as weighted average percentages of bank assets, where the average is weighted by bank assets.[2]

Our analysis began with an overview of the growth and distribution of assets among commercial banks of different sizes. We then reviewed the industry's financial condition. Specifically, we considered bank profitability, solvency, asset composition, asset quality, and liability composition.

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[1]These agencies are the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Federal Reserve.

[2]Averages weighted by bank assets are preferable to simple averages due to the high degree of concentration in industry assets (see table II.2). In such situations ordinary averages may give a misleading impression of the financial composition of the industry. In addition, the weighted average reports the overall condition of the asset size group rather than an average for all banks in a group.

The data used in this review include the reports of condition and income commercial banks file with federal regulatory authorities. These data are included in our commercial bank data base. There have been many changes in the financial reporting requirements between December 31, 1976, and June 30, 1987. These changes include two major revisions in the reports filed. In most instances it was possible to construct consistent measures of the terms considered. In those instances where inconsistencies in the data could not be avoided, we either noted the inconsistency or omitted the measure, depending upon the severity of the inconsistency. In addition we used year-end financial data (except for 1987). Consequently, all revenues, expenses, and balance sheet values are annual values. Data for 1987 were taken from second quarter (June 30) financial statements. To allow comparability with prior periods, we annualized midyear 1987 revenues and expenses, i.e., we doubled the 6-month revenues and expenses to obtain annualized values.

There are other limitations inherent in this review. First, with the exception of market share data, we presented financial data only on commercial banks and did not include other financial institutions. Thus, the performance of the commercial banking industry was not compared to the performance of other segments of the financial service industry. Second, it is often difficult to relate changes in specific financial terms to individual economic/regulatory events. In this review we acknowledged readily identifiable causal influences but did not investigate them. Third, we only reported averages for the industry (asset size groups). We did not present data on ranges or variation about averages.

COMPOSITION OF THE COMMERCIAL BANKING INDUSTRY, DECEMBER 1976 THROUGH JUNE 1987

COMMERCIAL BANK ASSETS, DECEMBER 1976 THROUGH JUNE 1987

As shown in figure II.1, overall industry assets have grown from $1,182 billion at year-end 1976 to $2,913 billion at midyear 1987. Although inflation accounts for a large portion of this growth, real industry assets have grown to $1,597 billion at midyear 1987 when measured in 1976 dollars.[1]

Figure II.2 shows that asset growth has varied across bank size groups. The smallest bank size group's assets grew from $289 billion at year-end 1976 to $399 billion at midyear 1987. The largest bank size group's assets grew from $376 billion at year-end 1976 to $1,058 billion at midyear 1987. A partial reason for the lower growth in the smallest bank group's assets, relative to that of the four larger bank size groups, is the movement of some small banks into larger asset categories, as bank assets grow over time. Movement of banks near the upper bound of an asset category into higher brackets serves to dampen the growth in the original, smaller size group. This dampening is, of course, also true for the three middle bank size categories, but is potentially more severe for the smallest bank size category, given it has the smallest initial range of assets. A more detailed discussion of asset growth rates follows.

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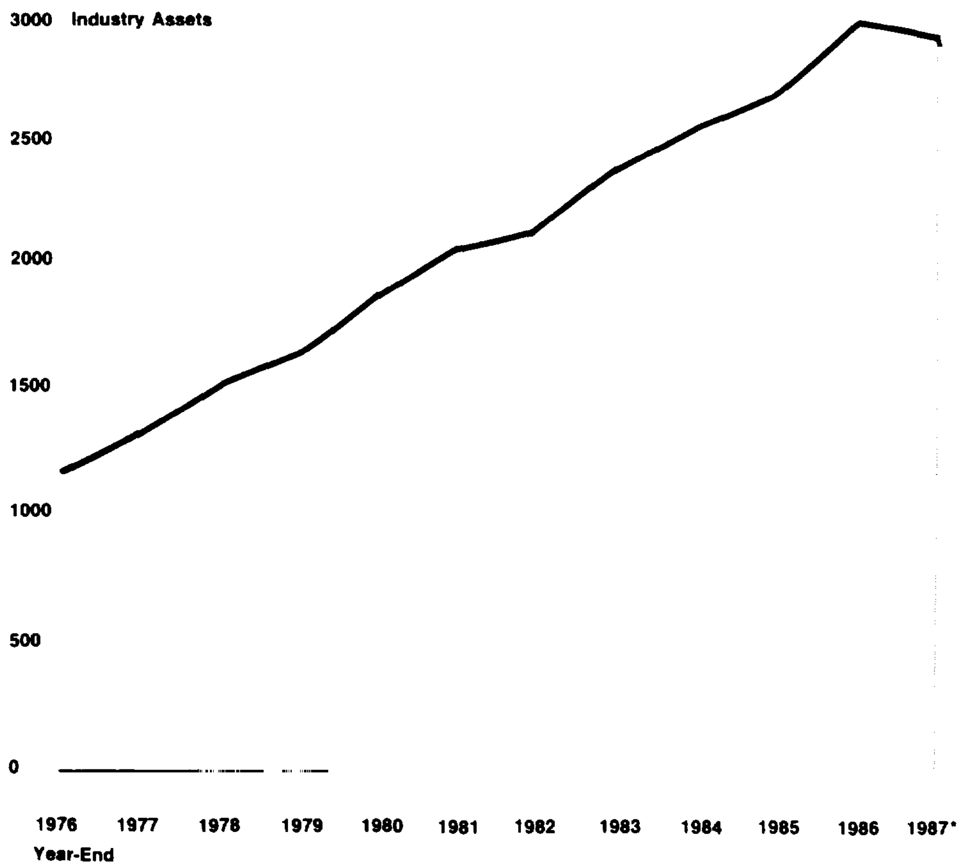
[1]Real asset values were computed in terms of 1976 dollars by deflating assets with the fixed weight Gross National Product (GNP) price index. The fixed weight GNP price index measures changes in average commodity prices, weighing individual prices by the composition of GNP in a specified year. Thus changes in the index solely reflect changes in commodity prices as opposed to changes in the composition of GNP. By dividing bank assets by the value of the price index in each year we hope to reduce the impact of general inflation on asset values and arrive at real (constant dollar) asset values.

Sources: Economic Report by the President 1986 and the Survey of Current Business, August 1987.

Figure II.1:

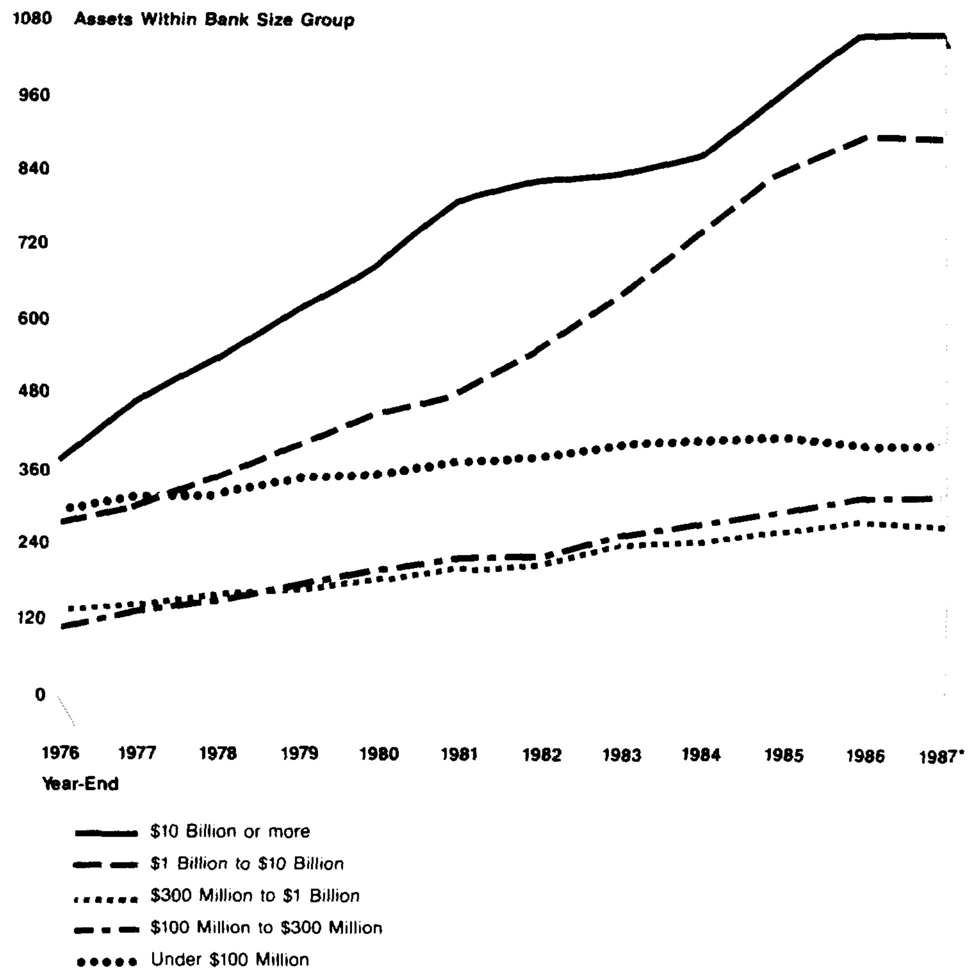
Commercial Banking Industry Assets
(dollars in billions)



*All 1987 data is for June 1987.

Figure II.2:

Commercial Banking Industry Assets
Within Bank Size Groups
(dollars in billions)



*All 1987 data is for June 1987.

APPENDIX II

INDUSTRY ASSET GROWTH RATE

Though industry asset growth has been positive over the period studied, figure II.3 shows the growth rate has declined since 1977. The growth rate in industry assets dropped from an annual rate of 13.26 percent in 1977 to 6.75 percent in 1983. Between 1983 and 1986 there was a small improvement in asset growth, with the industry asset growth rate reaching 7.69 percent in 1986. Growth was negative in the first half of 1987. The sharp drop in industry asset growth in the first half of 1987 to an annualized rate of -1.89 percent, was due, in part, to unusually large loan and lease loss provisions (loan loss provisions) made during the second quarter of 1987.[2] The loan loss provisions are an operating expense made to help absorb anticipated losses on loans and leases. Increases in loan loss provisions decrease profits as well as assets. Assets decline because the accumulated value of loan loss provisions minus loan charge-offs plus recoveries (the loan loss allowance) is deducted from the book value of loans in determining the value of bank assets.

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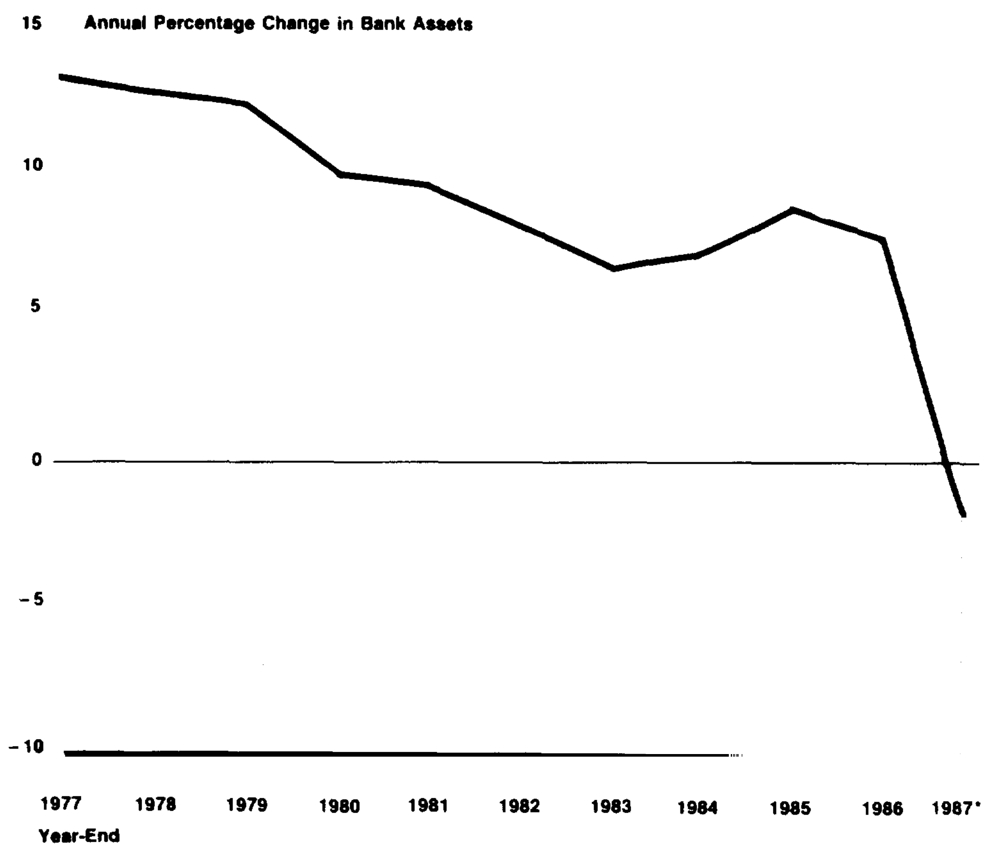
[2]Industry loan loss provisions for the second quarter 1987 reached a quarterly high of $21.2 billion according to the FDIC. Most of these provisions were made by large banks in response to problems with loans to less developed countries (LDC debt).

Source: Quarterly Banking Profile, second quarter 1987, p. 1, Federal Deposit Insurance Corporation.

Figure II.3:

Annual Growth Rates in Commercial Banking Industry Assets



*All 1987 data is for June 1987.

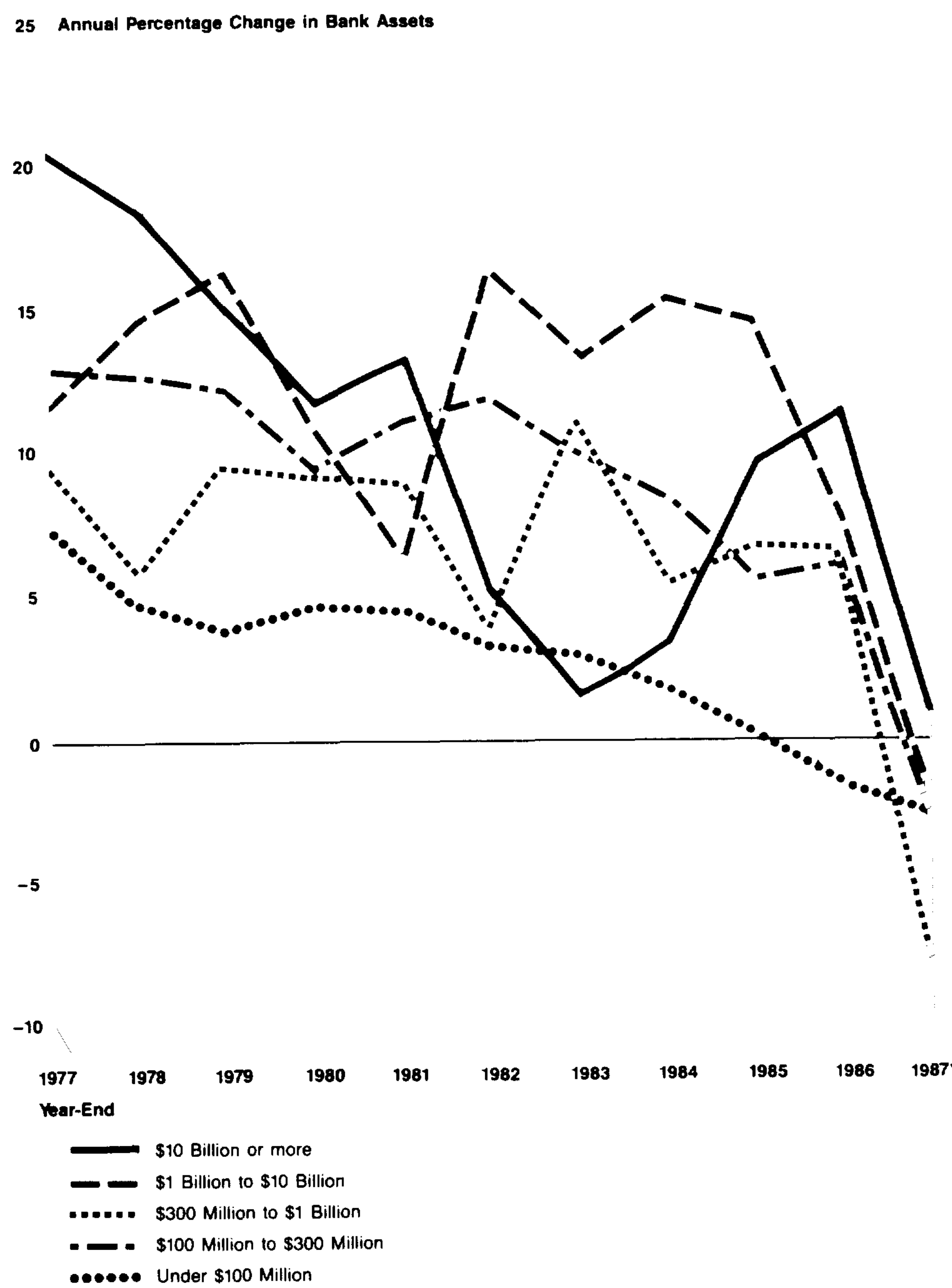
ASSET GROWTH RATES AMONG
BANK SIZE GROUPS

Figure II.4 indicates an overall decline in asset growth rates across all bank size groups since 1977. The smallest bank size group experienced the lowest asset growth rates in most periods. The smallest banks' annual average growth rate declined from 7.41 percent in 1977 to 0.27 percent in 1986. As discussed earlier, one factor contributing to the declining growth rate among the smallest bank group's assets, relative to that of the four larger bank size groups, is the movement of some small banks into larger asset categories over time. Movement of banks into larger asset categories dampens the growth rate of the original, smaller asset size group.

In recent years, asset growth has been greatest among banks with assets between $1 billion and $10 billion, also known as regional banks. Nevertheless, these banks experienced declines in asset growth similar to other size categories in the first half of 1987.

Figure II.4:

Annual Growth Rates in Bank Size Group Assets



NUMBER OF BANKS IN BANK SIZE GROUPS

Table II.1 shows that from 1976 to 1984 the number of commercial banks within the industry was highly stable, averaging 14,425 banks.[3] From year-end 1984 to midyear 1987, however, the number of banks in the industry has declined by 536 or 3.7 percent. This decline was largely the result of increased merger activity which, in turn, has been caused in part by a rising number of bank failures. The failure of 182 FDIC-insured commercial banks over full year 1987 resulted in a failure rate of 1.3 percent, the highest since 1934.

Much of the change in the number of banks within bank size groups over time has been due to inflation. As mentioned previously, with inflation there is a natural shifting of some banks into larger asset categories. A comparison of results under real versus inflationary growth (real growth results were not presented in this report) shows that inflationary growth in the smallest banks' assets explained most of the net increases in the number of banks in the larger bank size groups over time.

[3]The number of banks within the industry in each period that we report may differ slightly from values reported by FDIC. This difference occurs because our review excludes banks with incomplete financial information.

Table II.1:

Number of Banks in Bank Size Categories
(includes all FDIC-insured banks)

Year	$10 billion or more	$1 billion to $10 billion	$300 million to $1 billion	$100 million to $300 million	Under $100 million	Overall
1976	13	114	252	723	13,309	14,411
1977	15	130	280	822	13,165	14,412
1978	17	148	299	937	12,990	14,391
1979	17	158	319	1,049	12,821	14,364
1980	18	174	353	1,155	12,735	14,435
1981	22	186	375	1,283	12,548	14,414
1982	22	210	396	1,433	12,391	14,452
1983	23	234	449	1,577	12,182	14,465
1984	24	254	470	1,691	12,043	14,482
1985	27	288	509	1,791	11,790	14,405
1986	33	307	550	1,902	11,406	14,198
1987[a]	34	304	524	1,865	11,219	13,946

[a]All 1987 data are for June 30, 1987.

APPENDIX II

ASSET CONCENTRATION IN COMMERCIAL BANKING

The concentration of assets within the industry has been highly stable since 1976. Table II.2 shows that the proportion of industry assets held by the largest 0.1 percent of banks declined from 33 percent to 27 percent of industry assets between year-end 1976 and year-end 1986. At the same time, the remainder of the industry experienced a very slight compensating increase in asset concentration.

Table II.2:

Distribution of Assets in Commercial Banking
(Includes all FDIC-insured commercial banks)

Percentage of banks in top	Percentage of industry assets 1976	1982	1986
0.1	33	32	27
0.25	42	42	37
0.5	49	50	46
1	56	57	55
1.5	60	62	61
2	63	65	64
3	67	69	69
4	70	71	72
5	72	73	74
10	78	79	80
15	82	83	84
20	85	86	86
25	87	88	89
30	89	90	90
35	91	91	92
40	92	93	93
45	94	94	94
50	95	95	95
55	96	96	96
60	96	97	97
65	97	97	97
70	98	98	98
75	98	98	99
80	99	99	99
85	99	99	99
90	100	100	100
95	100	100	100
100	100	100	100

Note: There were: 14,411 banks in 1976.
14,452 banks in 1982.
14,198 banks in 1986.

All calculations were based on year-end asset values.

NONBANK COMPETITION

The declining asset growth rate in commercial banking, along with the decrease in the overall number of banks, has resulted in a decline in commercial banks' market share in the private domestic financial services industry. Table II.3 shows that between 1975 and 1985 commercial banks' share of total private domestic financial institutions' assets declined from 38.8 percent to 32.5 percent.

It should be pointed out that while the commercial banking industry's asset growth and market share have been declining in recent years, commercial banks have increased their off-balance-sheet (OBS) activities. OBS activities are financial commitments and obligations on the part of banks, such as commitments to extend business loans, which are not reflected on the bank's balance sheet. A recently completed GAO report found that there has been an increase in those OBS activities that banks have been required to report to bank regulators since 1983.[4]

In addition, it is important to point out that these data do not distinguish between domestically owned and foreign-owned banks operating in the United States. Our data does not permit this distinction to be made. However, the available data do show that foreign-owned United States banks' assets rose from 15 percent of total United States bank assets (U.S.-owned and foreign-owned banks operating in the United States.) in midyear 1982 to 21 percent of total United States bank assets in midyear 1987.

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[4]Banking: Off-Balance-Sheet Activities (GAO/GGD-88-35BR, Mar. 17, 1988).

Table II.3

Distribution of Assets Among Private Domestic Financial Institutions
(dollars in billions and as a percentage
of total private financial institutions assets)

Institutions	1975 Assets	1975 Percent	1980 Assets	1980 Percent	1985 Assets	1985 Percent
Commercial Banking[a]	834.6	38.8	1,389.5	35.9	2,202.3	32.5
United States Banks and their Domestic Affiliates	799.1	37.1	1,277.4	33.0	2,059.4	30.4
Foreign Bank Offices in United States	29.2	1.4	101.2	2.6	114.3	1.7
Banks in U.S. Possessions	6.4	0.3	10.9	0.3	28.7	0.4
Savings and Loan Associations	333.1	15.5	621.9	16.1	1,071.6	15.8
Mutual Savings Banks	121.1	5.7	171.5	4.4	220.1	3.3
Credit Unions	36.9	1.7	71.6	1.9	136.0	2.0
Life Insurance Companies	279.7	13.0	464.2	12.0	773.0	11.4
Other Insurance Companies	77.3	3.6	174.3	4.5	268.6	4.0
Private Pension Funds	186.6	8.6	412.5	10.6	738.5	10.9
State and Local Government Retirement Funds	104.8	4.9	198.1	5.1	424.6	6.3
Finance Companies	98.8	4.6	191.3	4.9	357.6	5.3
Mutual Funds	43.0	2.0	63.5	1.6	293.6	4.3
Security Brokers and Dealers	18.5	0.9	36.1	0.9	65.4	1.0
REIT's[b]	14.0	0.6	3.3	0.1	5.8	0.1
Money Market Funds	3.7	0.2	74.4	1.9	207.5	3.1
Total Private Nonbank Financial Institutions	1,317.5	61.2	2,482.8	64.1	4,562.6	67.5
Total Private Financial Institutions	2,152.1		3,872.3		6,764.9	

[a]U.S. bank holding company affiliate asset data are not reflected in U.S. commercial banking asset figures but are included in various financial sectors. Assets of U.S. bank branches abroad also are not reflected in commercial banking figures.

[b]Real Estate Investment Trusts (REIT)

Source: Federal Deposit Insurance Corporation's Regulatory Review, April 1986.

FINANCIAL CONDITION OF THE BANKING INDUSTRY, DECEMBER 1976 THROUGH JUNE 1987

The aggregated balance sheet and income statement for the commercial banking industry as of year-end 1986 are presented in tables III.1 and III.2, respectively.[1] The balance sheet gives an indication of the relative importance of various sources and uses of funds in the industry. Additionally, the major components of bank revenues and expenses can be seen in the income statement. In the analysis that follows we review trends in key components of these financial statements as well as related financial information.

The commercial banking industry derives the bulk of its revenues from interest income on loans and leases. At year-end 1986, net loan and lease financing receivables accounted for 59 percent of industry assets. Interest income on loans and other assets accounted for 86 percent of gross industry revenues. On the funding side, bank deposits accounted for 78 percent of liabilities at year-end 1986, while equity capital accounted for 6.2 percent of industry funding. Interest expense on deposits and other liabilities comprised 55 percent of total industry expenses (operating and nonoperating) in 1986.

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[1]Source: Reports of condition and income aggregation tables, December 31, 1986. FDIC.

Table III.1:

Aggregated Balance Sheet of the Commercial Banking Industry
(dollars in millions)
(as of December 31, 1986)

Assets	
Cash and balances due from banks	$ 379,035
Investment securities	484,824
Federal funds sold and resale agreements	139,243
	1,003,102
Loans and leases, net of unearned finance and fee income	1,755,812
Less:	
Allowance for loan and lease losses	(28,532)
Allocated transfer risk reserve	(105)
Net loan and leases	1,727,174
Assets held in trade accounts	42,933
Other assets	166,776
Total assets	2,939,983
Liabilities and Equity	
Deposits	$2,282,295
Federal funds purchased and repurchase agreements	248,309
Demand notes and other borrowed funds	107,555
Other liabilities	119,128
Total liabilities	2,757,286
Limited life preferred stock	82
Equity capital	182,615
Total equity	182,697
Total liabilities and equity	$2,939,983[a]

[a]Numbers many not sum due to rounding.

Source: Reports of condition and income aggregation tables, December 31, 1986. FDIC.

Table III.2:

Aggregated Income Statement for the Commercial Banking Industry
(dollars in millions)
(for the year ended December 31, 1986)

Interest income	$ 237,684
Interest expense	142,727
Net interest income	94,956
Provision for loan and lease losses	21,626
Provision for allocated transfer risk	50
Net interest income after provisions for loan and lease losses and allocated transfer risk	73,280
Total Noninterest income	35,882
Gains from securities in trading accounts	3,905
Noninterest expense	90,069
Income before taxes and extraordinary items	22,999
Applicable income taxes	5,341
Net income before extraordinary items	17,658
Extraordinary items and adjustments, net of income taxes	268
Net income	$17,926[a]

[a]Numbers may not sum due to rounding

Source: Reports of condition and income aggregation tables, December 31, 1986. FDIC.

PROFITABILITY

Bank profitability is important for three reasons. First, profitability reflects the net result of past management decisions as well as independent economic events. Second, profitability directly affects the ability of a bank to finance future growth. Finally, present and past retained profits provide an important cushion for losses on individual assets, preventing insolvency.

In this section we examine trends in bank profitability, as well as important sources of revenues and expenses that affect bank profitability.

Return on Assets

Bank profitability has, in general, declined since 1980. Figure III.1 presents information on average returns to equity shareholder as a percentage of assets, or return on assets. This is measured by the ratio of net income after taxes to bank assets. The decline in bank profitability has been most prolonged and severe for the smallest banks (under $100 million in assets). The smallest bank group's annual average return on assets declined from 1.12 percent in 1980 to 0.47 percent in 1986.

The midyear 1987 profitability measures are not strictly comparable to prior periods for two reasons. First, as pointed out earlier, the largest two asset size groups have had an unusual increase in loan loss provisions over the first half of 1987, thus reducing profits. Second, many banks normally make greater loan loss provisions in the fourth quarter (October through December) than in each of the three prior quarters.[2] This seasonality in loan loss provisions may explain the apparent rise in profitability among the three smallest size categories of banks over the first half of 1987. A recent FDIC publication stated that the return on assets for the full year 1987 was 0.13 percent, the lowest rate since 1934.[3]

There are three general sources of bank revenues and expenses that affect bank profitability: interest margin, or the difference between interest income and expenses; noninterest margin, or the difference between noninterest income and expenses; and the provisions for loan losses. The following figures provide an analysis of contributing factors.

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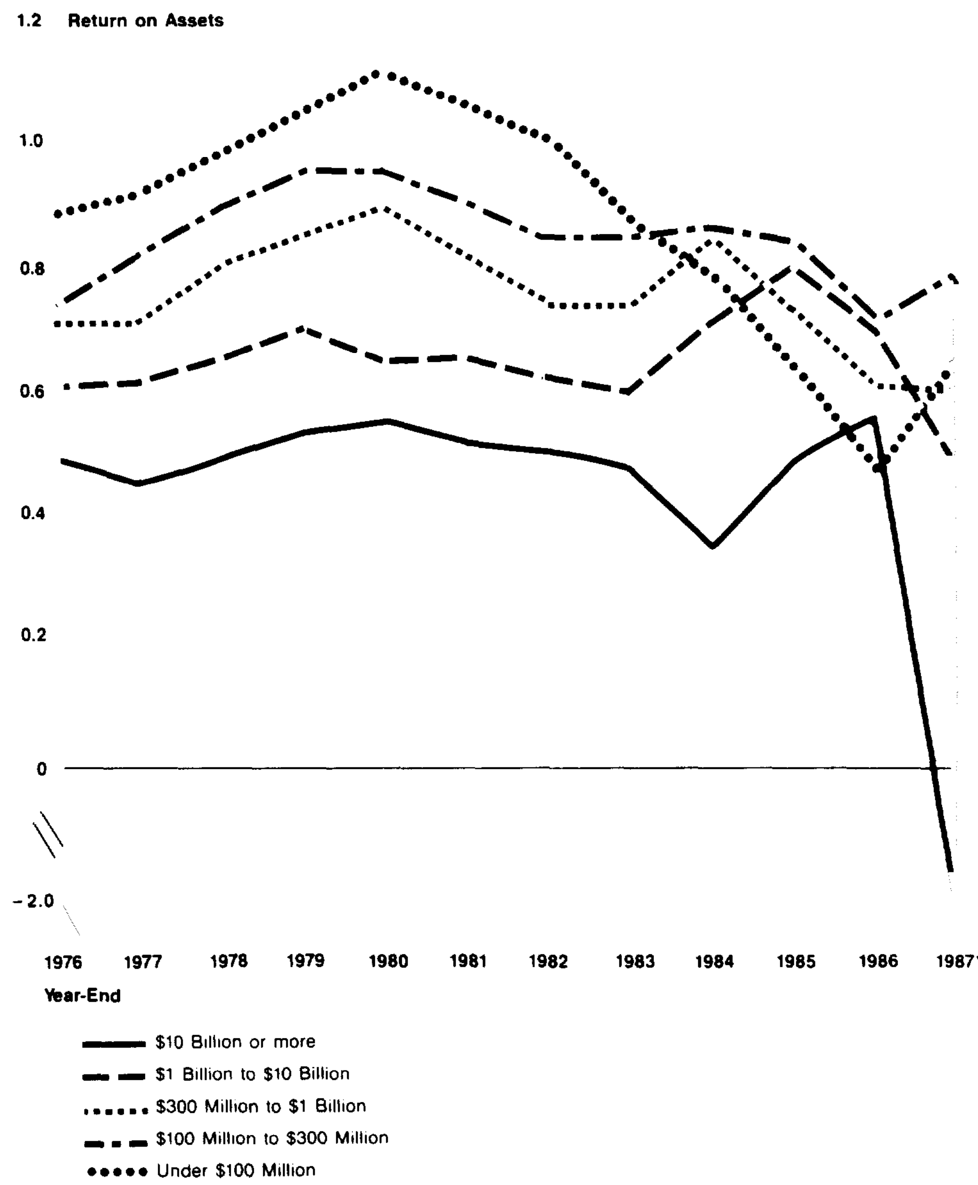
[2]See Quarterly Banking Profile, fourth quarter 1986, FDIC, p. 2.

[3]Source: Quarterly Banking Profile, fourth quarter 1987, FDIC p. 3.

Figure III.1:

Return on Assets



*All 1987 data is for June 1987.

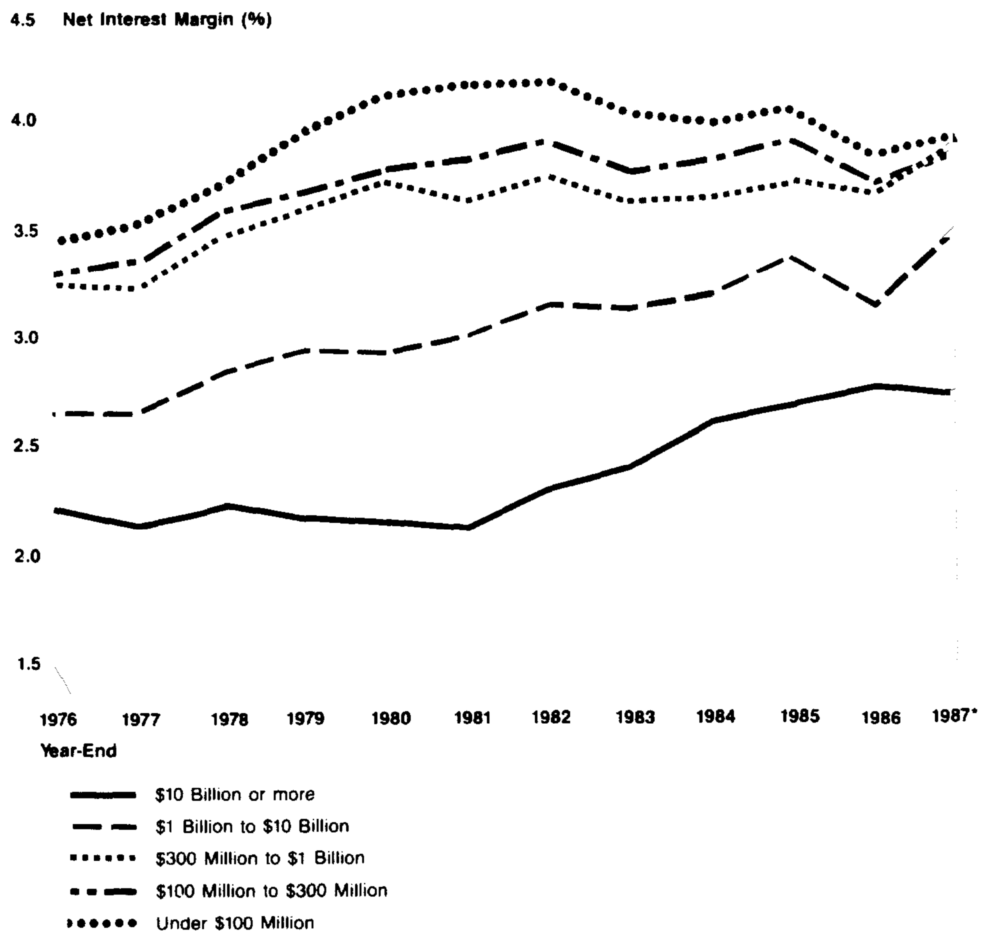
Net Interest Margin

Figure III.2 indicates that the removal of interest rate ceilings on deposit liabilities has not adversely affected net interest margins.[4] Net interest margins (interest income minus interest expense) have risen slightly as a percentage of bank assets since 1976. In addition, net interest margins are highest for the smallest bank size group. Over the first half of 1987, annualized net interest income, as a percentage of assets, for the smallest bank size group was 3.94 percent, while that for the largest bank size group was 2.73 percent.

[4] In accordance with the Monetary Deregulation and Control Act of 1980, all interest rate ceilings on time, savings, and negotiable order of withdrawal accounts were phased out by March 31, 1986. Demand deposit accounts are still required to be noninterest bearing.

Figure III.2:

Net Interest Margin as a Percentage of Total Assets



*All 1987 data is for June 1987.

PROVISIONS FOR LOAN AND LEASE LOSSES (AND ALLOCATED TRANSFER RISK)

Increases in loan and lease loss provisions explain most of the decline in bank profitability since 1980. Loan and lease loss provisions are an operating expense made by the bank to help absorb expected, yet unidentified, losses on loans and leases. We also included the relatively smaller provisions for allocated transfer risk, which are provisions made on anticipated losses on specified foreign loans due to the borrower having insufficient foreign exchange.[5]

Figure III.3 shows that commercial bank loss provisions have been rising as a percentage of assets since 1980. This upward trend reflects generally poorer asset quality among most banks. The decline in asset quality can be seen directly in figure III.19 by the rise in nonaccruing loans and leases, as a percentage of bank assets, among most banks since 1982 (1982 was the first year data on nonaccruing loans and leases were released by FDIC). Nonaccruing loans and leases are loans and leases carried on the bank's books, yet not expected to return full interest and principal due. The smallest bank size group's nonaccruals rose from 0.42 percent of assets at year-end 1982 to 1.05 percent of assets at midyear 1987. The largest bank size group's nonaccruals rose from 1.57 percent of assets at year-end 1987 to 1.91 percent of assets at year-end 1986 and reached 3.24 percent of assets at midyear 1987.

Coincident with the rising nonaccruals is the rise in the smallest bank group's loss provisions from 0.26 percent of assets in 1980 to 0.90 percent of assets in 1986. The largest bank group's loss provisions have increased from 0.20 percent of assets in 1980 to 0.77 percent of assets in 1986. In addition, large bank loss provisions shot up dramatically in the first half of 1987, reaching an annualized value of 3.38 percent of assets. Most of the increase in large bank loss provisions has been attributed to problems with loans to less developed countries. Further, most of the increase in loss provisions were in general provisions for loan losses versus provisions for transfer risk.[6]

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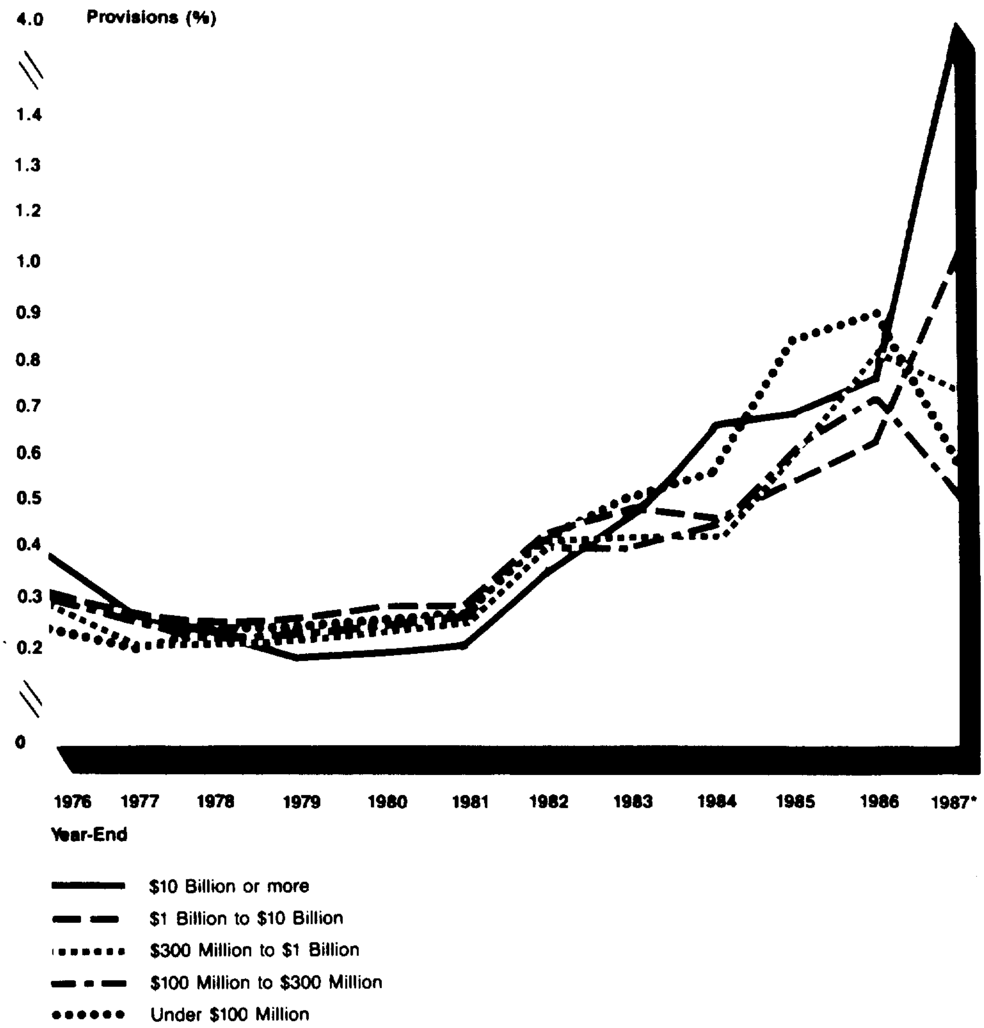
[5]The allocated transfer risk provisions are made in accordance with the International Lending Supervision Act of 1983. The specific foreign counties for which banks must establish transfer risk reserves are determined by federal bank regulators. Banks were not required to report or make provisions for allocated transfer risk before 1984.

[6]Industry loan loss provisions were $4.1 billion in the first quarter of 1987 and a record $21.2 billion in the second quarter of 1987. Industry transfer risk provisions

Figure III.3:

Provisions for Loan Losses
(Including Provisions for Allocated Transfer Risk)
as a Percentage of Total Assets



*All 1987 data is for June 1987.

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were $1.4 million in the first quarter 1987 and $14.6 million in the second quarter 1987.

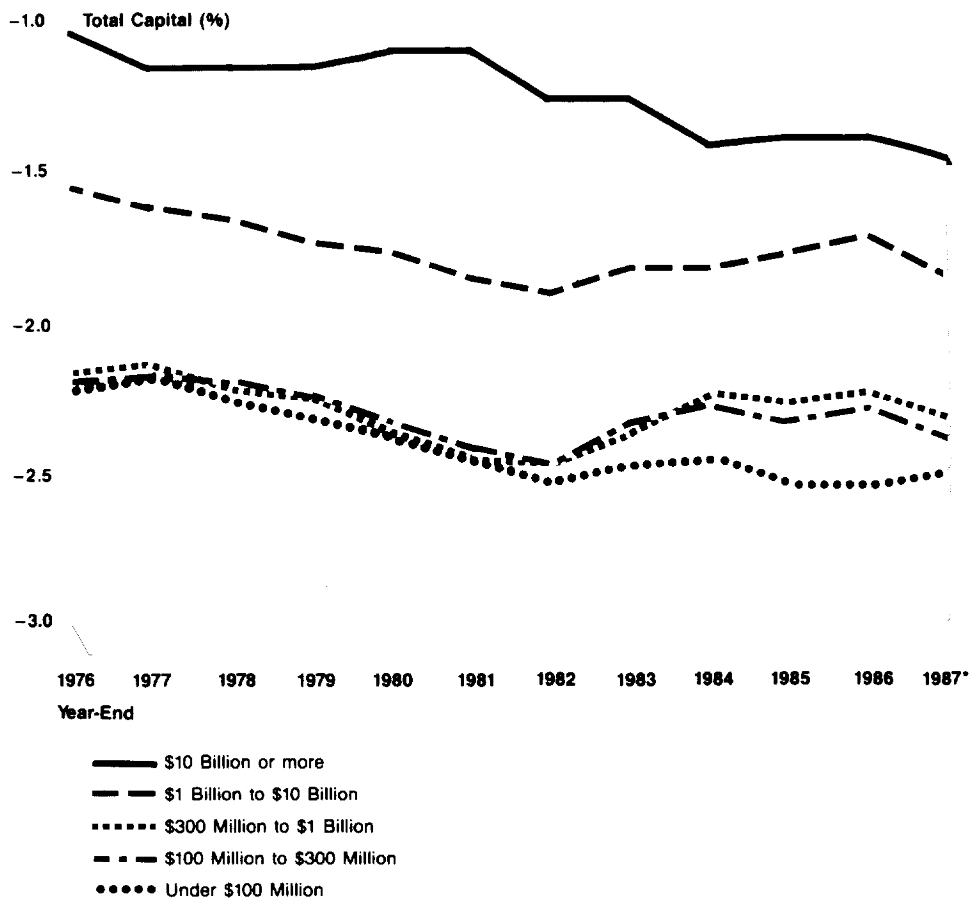
Source: FDIC, Office of Research and Strategic Planning.

NET NONINTEREST MARGIN

Figure III.4 indicates that net noninterest margins as a percentage of bank assets have been negative and, in general, declining. Net noninterest margins are defined here as the difference between noninterest income and noninterest expense (excluding provisions for loan losses and allocated transfer risk). Specifically, the net noninterest margin is defined as income from service charges on deposit accounts and all other noninterest operating income minus employee compensation and net expenses on fixed assets. The decline in net noninterest margins contributes to the decline in bank profitability, but the decline overall in net noninterest margins has not been large. The net noninterest margin for the smallest bank group (which has had the sharpest decline in return on assets) dropped from an average of -2.37 percent of assets in 1980 to an annualized value of -2.50 percent of assets in the first half of 1987.

Figure III.4:

Net Noninterest Margin as a Percentage of Total Assets



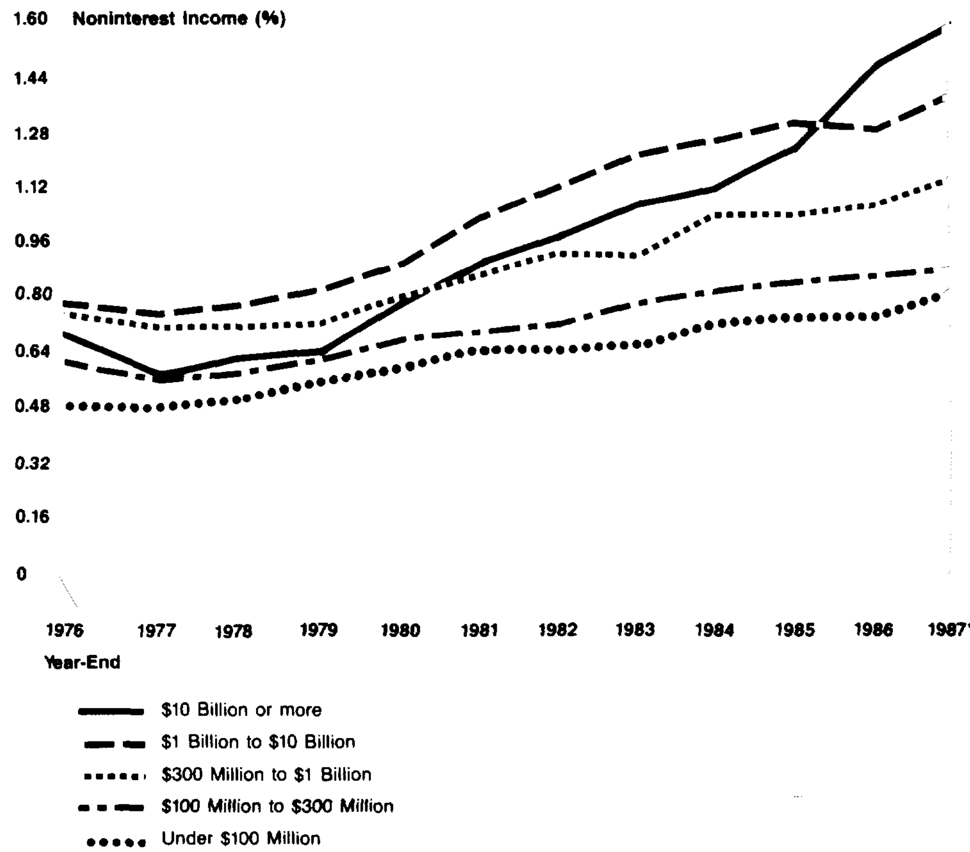
*All 1987 data is for June 1987.

Noninterest Income and Expense

The reasons for negative and declining net noninterest margins shown in figure III.4 can be seen in the separate trends in noninterest income (fig. III.5) and noninterest expense (fig. III.6). Noninterest income is the sum of income from service charges on deposit accounts and all other noninterest operating income. Noninterest expense is the sum of salaries and benefits to employees, net expenses on fixed assets, and all other noninterest operating expenses. Although noninterest income, as a percentage of assets, has been positive and rising for most banks, noninterest expenses have been greater and rising faster. As a result, noninterest margins (noninterest income minus noninterest expense) have been negative and declining since 1976.

Figure III.5:

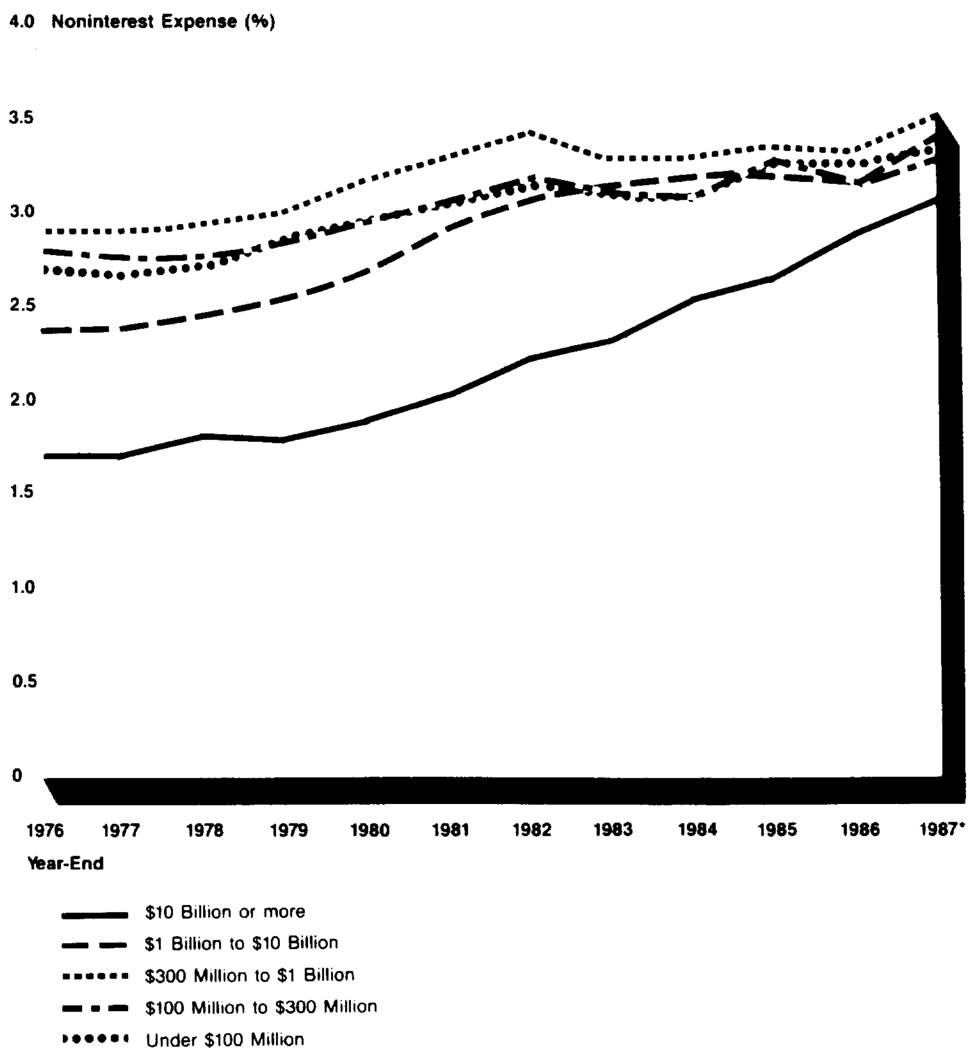
Noninterest Income as a Percentage of Total Assets



*All 1987 data is for June 1987.

Figure III.6:

Noninterest Expense as a Percentage of Total Assets



*All 1987 data is for June 1987.

SOLVENCY

To study trends in bank capital adequacy, we used two measures of bank capital. The capital measures we used were bank equity capital or reported net worth and a broader measure that we termed total capital. Equity capital represents bank resources available to protect all creditors (depositors and other creditors) in the event the bank incurs losses. The total capital measure we used closely follows regulatory total capital measures. One important concern of bank regulators is protection for depositors. To measure the extent of protection to depositors provided by bank resources, we use a total capital measure that adds to equity capital additional bank resources available to protect depositors in the event the bank incurs losses. Each of these capital measures is defined and discussed in detail in the following pages.

Equity Capital

Bank equity capital is defined as the difference between bank assets and liabilities, or net worth. Equity capital represents owners' (common and perpetual preferred stockholders') interest in the bank. Of paramount concern to bank customers and regulators is bank solvency, i.e., maintaining sufficient assets to cover liabilities. By maintaining adequate equity capital, a bank can absorb temporary and unexpected losses without jeopardizing creditors' claims.

By increasing the proportion of equity capital used to fund assets, a bank can reduce the risk of insolvency, other things being equal. Additionally, by using greater proportions of equity financing, the bank is faced with lower interest expense (other things being equal) which thus reduces the risk of failing to meet interest and principal payments. However, increasing equity shareholders' investment in the bank (either through retained profits or new issues of stock) also means owners' expected future rate of return on their investment declines unless future profit levels also rise sufficiently.

Conversely, by decreasing equity shareholders' investment (equity capital) in the bank, owners can increase their expected rate of return on equity as long as future profit levels do not decline too much. However, decreases in the proportion of equity finance also imply increased risks of insolvency and default on interest expense.

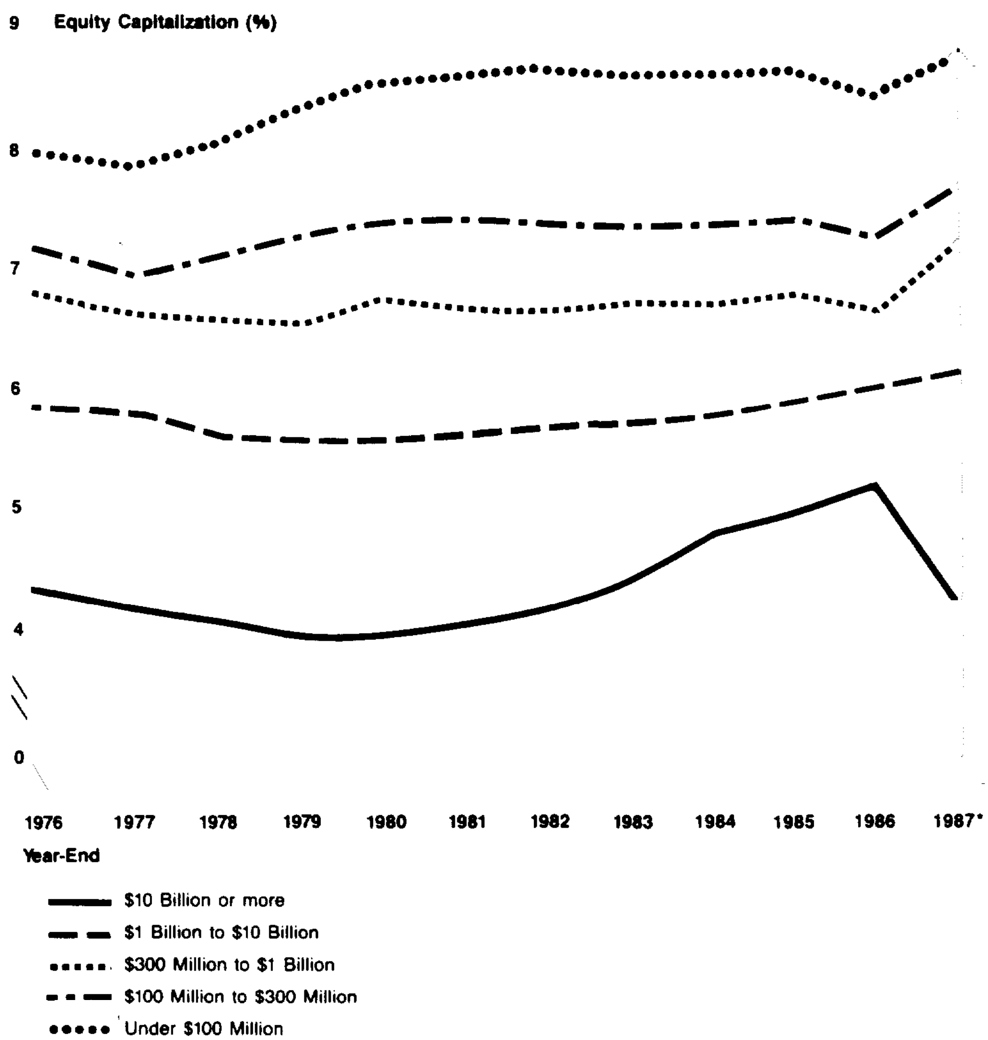
Thus, the decline in commercial bank profitability since 1980 could have been offset by greater reliance upon debt (and less on equity) in order to maintain a given return on equity. This, however, was not the case. Figure III.7 shows equity capitalization has generally increased since

1976 among most banks, albeit slightly.[7] As has been historically true, small banks continue to have greater equity, as a percentage of assets, than do larger banks. The smallest bank size group had an average equity capitalization of 8.69 percent of assets at midyear 1987, while that for the largest bank size group was 4.22 percent of assets. The sharp drop in equity capitalization for the largest banks in the first half of 1987, from an average of 5.14 percent to 4.22 percent, can be attributed, in part, to the previously mentioned increase in loan loss provisions.

[7]Before 1984, limited life preferred stock was included as part of reported bank equity capital. However, from 1984 to the present, limited life preferred stock is reported separately from equity capital and is not included as part of equity capital accounts. This inconsistency in the definition of equity capital over time does not significantly affect our results.

Figure III.7:

Equity Capital as a Percentage of Total Assets



*All 1987 data is for June 1987.

Total Capital

To account for changes in broader measures of capital as defined by bank regulators, we recomputed capital levels closely following regulatory measures.[8] Total capital includes equity capital, the allowance for loan and lease losses (excluding allocated transfer risk reserves), minority interests in consolidated subsidiaries, limited life preferred stock, and debt subordinated to depositors.[9] Total capital, as defined here, represents bank resources available to absorb losses without risk to depositors' claims. Figure III.8 shows a slight increase in total capitalization as a percentage of assets among most banks since 1976. Total capital for the largest bank size group rose in the first half of 1987, from an average of 7.41 percent of assets to 7.97 percent of assets at midyear 1987. This increase in total capitalization as a percentage of assets (despite a decline in equity capitalization) was due, in part, to the sharp increase in large bank loan loss provisions in the second quarter of 1987 and the resulting increase in the loan loss allowance. As said before, increases in the loan loss allowance decrease asset levels and thus equity levels as well. Because the loan loss allowance is included, along with equity capital, as part of total capital, total capital levels are unchanged by increases in the loan loss allowance. However, total capital as a percentage of bank assets increases, since bank assets are reduced.

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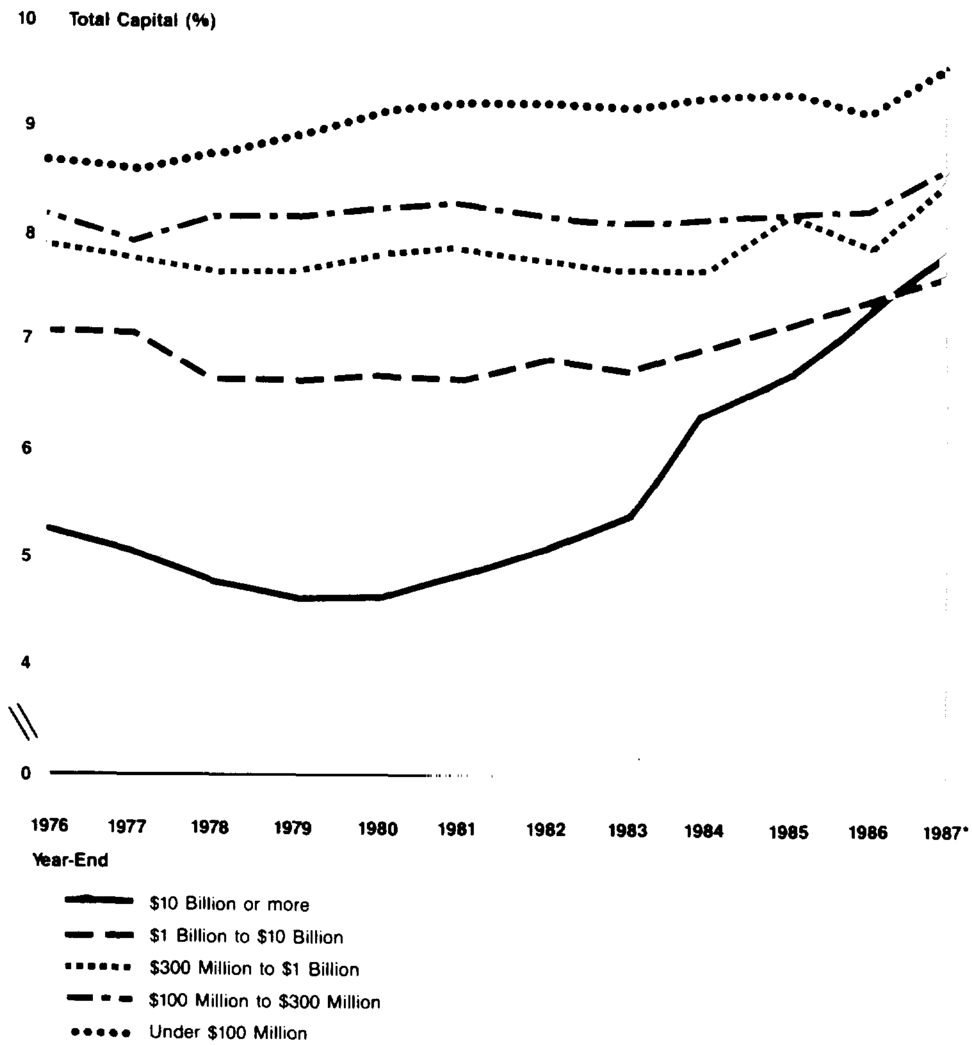
[8] FDIC's capital adequacy requirements are given in the Federal Register, March 14, 1985, Vol. 50, No. 53, pp. 11128 to 11143. The capital requirements of the Office of the Comptroller of the Currency are contained in the Federal Register, March 14, 1985, Vol. 50, No. 53, pp. 10207 to 10219. The capital adequacy guidelines of the Federal Reserve are contained in the Federal Register, April 24, 1985, Vol. 50, No. 79, pp. 16057 to 26201.

[9] Minority interests in consolidated subsidiaries were not reported by banks for the period 1978 through 1983 and banks with foreign offices only reported domestic office minority interests for the period 1976 through 1977. These reporting changes do not, however, significantly affect the computed value of total capital.

Figure III.8:

Total Capital as a Percentage of Total Assets



*All 1987 data is for June 1987.

ASSET COMPOSITION

Some insight into the reasons for variation in bank profitability, over time and across bank size groups, may be obtained by examining the composition of bank assets. The composition of bank assets determines a bank's earning potential, liquidity, and the credit risk incurred. Bank management can attempt to increase expected profitability by acquiring riskier assets with higher expected compensating yields. In addition, less liquid assets, i.e., assets that cannot be converted into cash quickly without significant loss in value, generally offer higher expected returns as compensation for low liquidity. In both cases, however, management must also consider the bank's fiduciary (and regulatory) obligations.

This section deals with trends in the major components of bank assets, as well as related financial information. Our analysis begins with cash assets and proceeds with the first five major categories of assets on the balance sheet (see industry balance sheet, p. 13). The five major categories of assets considered comprised 94 percent of industry assets at year-end 1986.

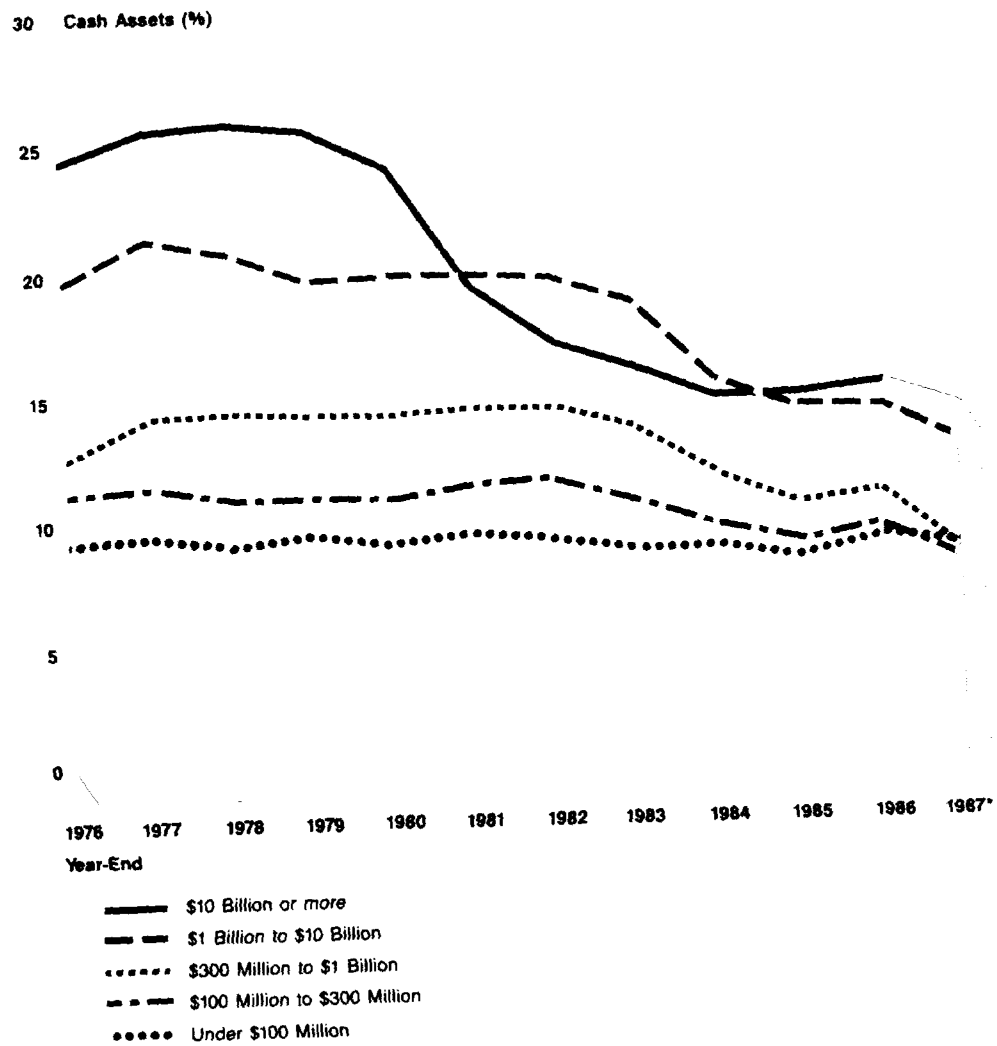
Cash Assets

Cash assets are defined as the sum of interest and noninterest bearing balances due from depository institutions, plus currency and coin. Figure III.9 shows that cash assets have, in general, been declining as a percentage of bank assets since 1976. The decline was greatest among the largest bank size group. The largest bank size group's cash assets declined from 24.63 percent of assets at year-end 1976 to 14.47 percent of assets at midyear 1987. Smaller banks tended to hold fewer cash assets than do larger banks. The smallest bank size group's cash assets declined slightly from 9.63 percent of assets at year-end 1976 to 8.71 percent of assets at midyear 1987.

APPENDIX III

Figure III.9:

Cash Assets as a Percentage of Total Assets



*All 1987 data is for June 1987.

Investment Securities

Investment securities, which are generally long-term, safe securities, such as U.S. government and municipal securities, have been a relatively stable proportion of bank assets since 1976.[10] The credit risk associated with investment securities will, of course, vary with the issuer. In addition, how sensitive security prices are to movement in interest rates is positively related to the remaining time to maturity of the security; that is, a longer term security's market price is more sensitive to interest rate changes than is the price of a shorter term security. Figure III.10 indicates that smaller banks held the highest proportions of investment securities between year-end 1976 and midyear 1987. Investment securities comprised 29.55 percent of the smallest bank group assets at midyear 1987, versus 10.03 percent of assets for the largest bank size group.

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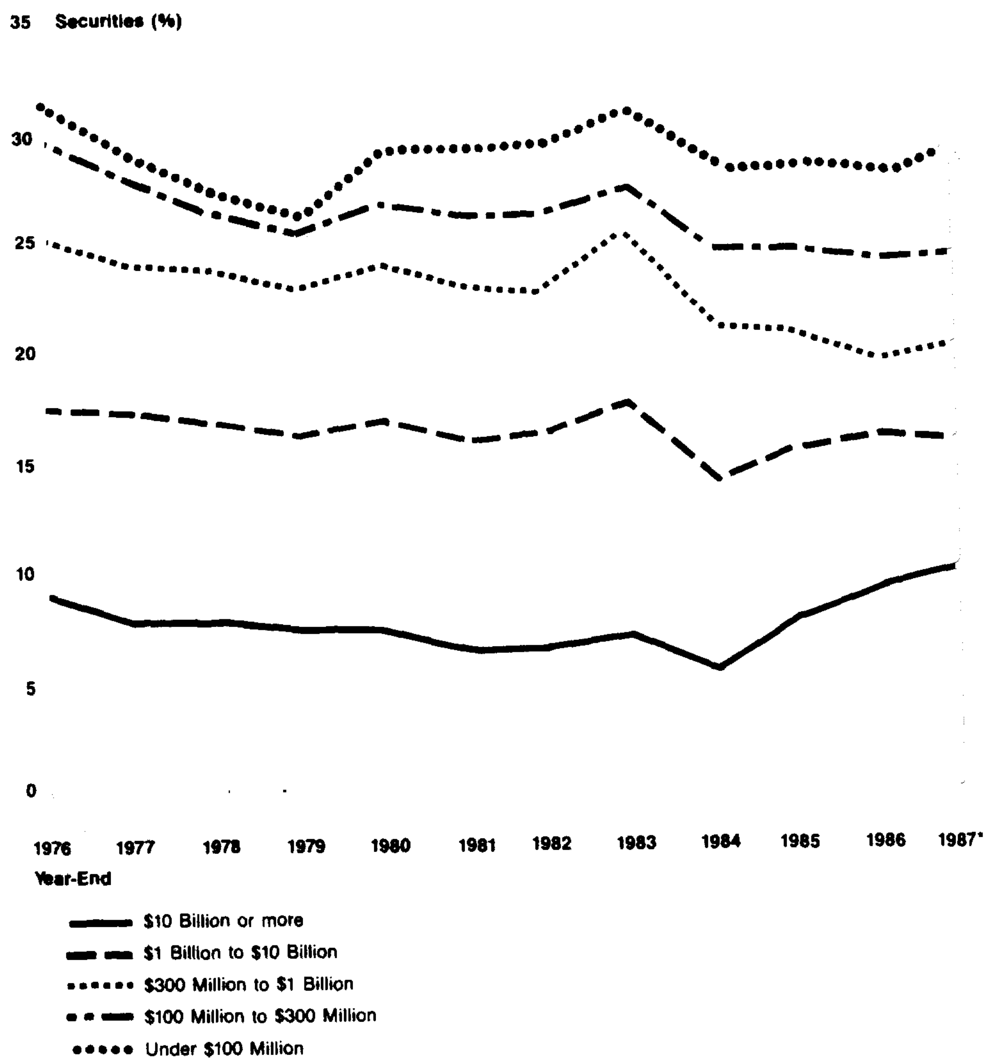
[10] Banks with foreign offices only reported domestic office investment security holdings for the period 1976 through 1977.

Figure III.10:

Investment Securities as a Percentage of Total Assets



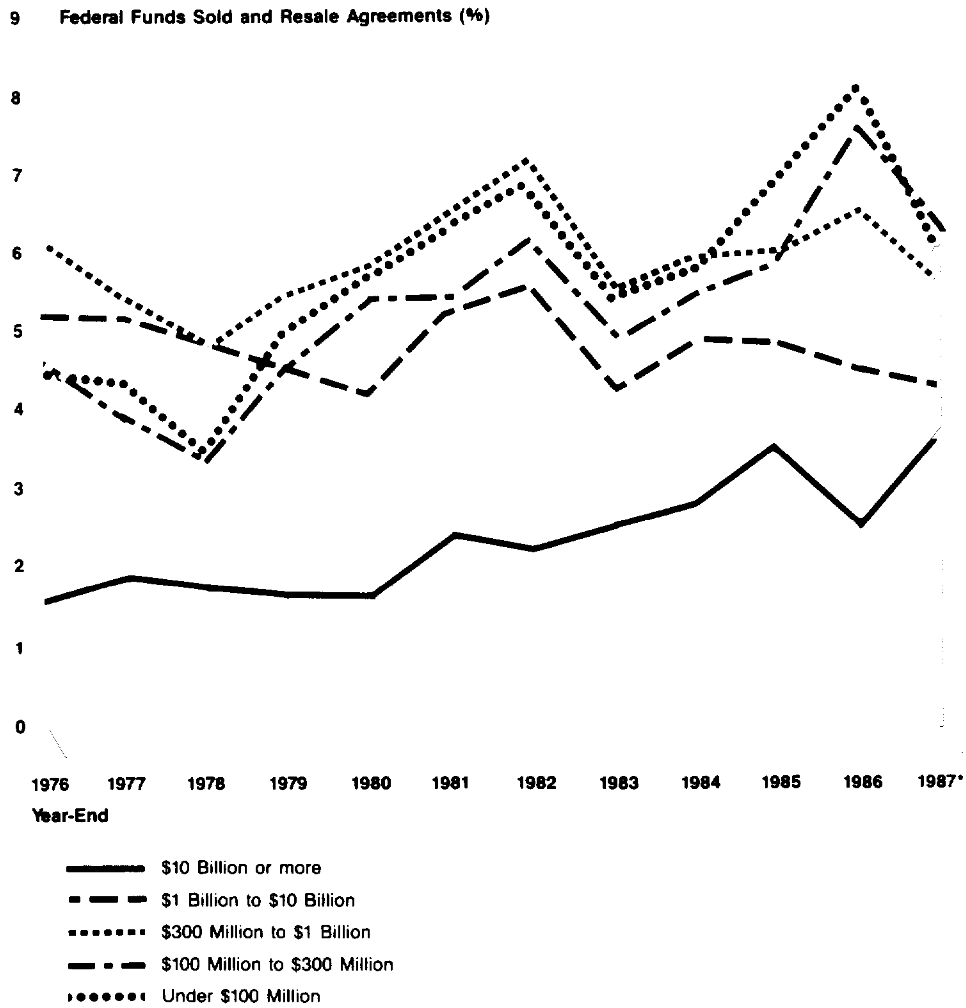
*All 1987 data is for June 1987.

Federal Funds Sold and Resale Agreements

Figure III.11 indicates a general upward trend in federal funds sold and resale agreements among the two smallest bank size groups as well as for the largest banks. Federal funds sold represent short-term bank loans of excess reserves to other institutions and may be considered to be short-term temporary assets like cash. Resale agreements are purchases of securities under short-term agreements to resell the same security. Both categories of assets represent highly liquid, safe assets. For the smallest bank size group, federal funds sold and resale agreements rose from 4.43 percent of assets at year-end 1976 to 6.09 percent of assets at midyear 1987. For the largest bank size group, federal funds sold and resale agreements rose from 1.55 percent of assets at year-end 1976 to 3.68 percent of assets at midyear 1987.

Figure III.11:

Federal Funds Sold and Resale Agreements as a Percentage of Total Assets



*All 1987 data is for June 1987.

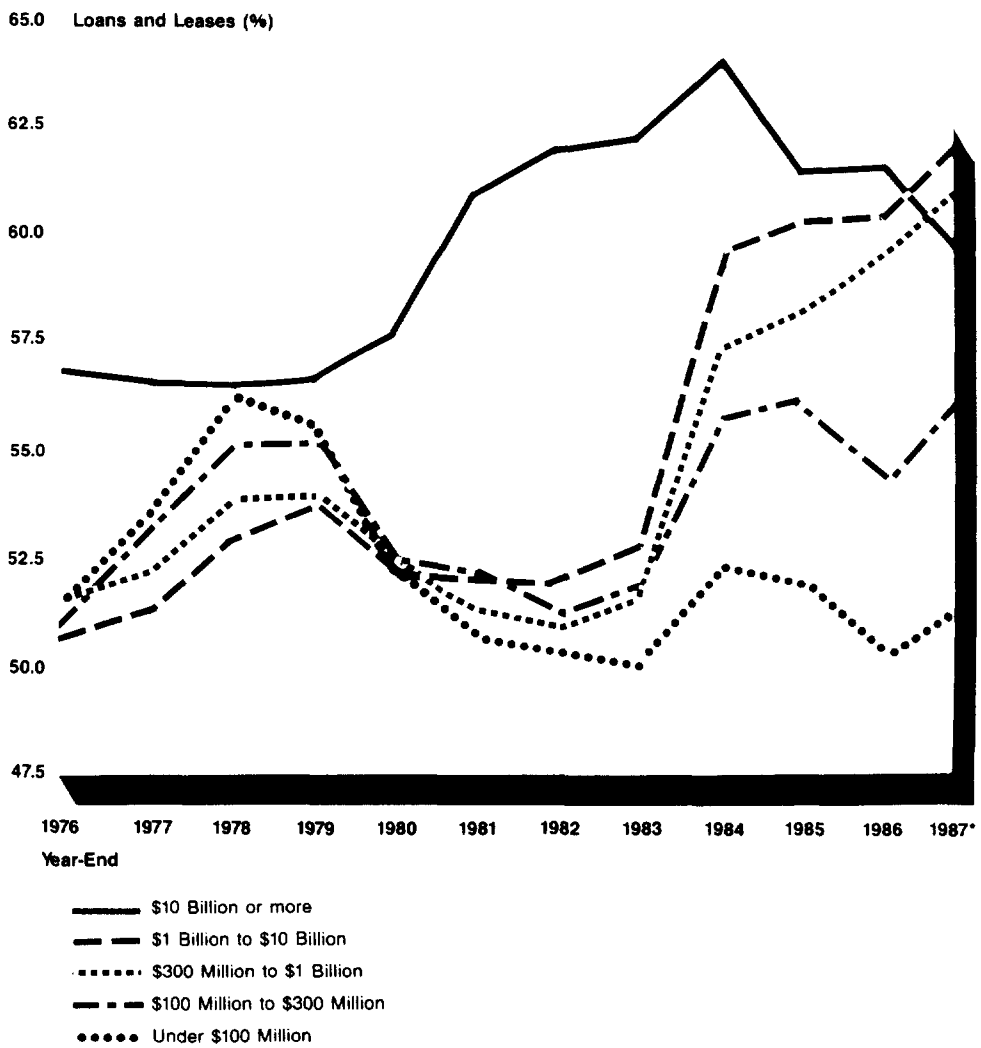
Loans and Leases

Total loans and leases are the largest component of bank assets, comprising 59 percent of industry assets at year-end 1986. Total loans and leases are defined here as the value of all loan and lease financing receivables (net of unearned income, allowance for loan and lease losses, and allocated transfer risk reserve).

There has been an upward trend in total loans and leases as a percentage of bank assets among the four larger bank size groups, over the full 11-1/2-year period studied (see fig. III.12). This period (Dec. 31, 1976, to June 30, 1987) includes a cyclical decline in loans for all but the largest bank size category from the late 1970s until the end of the recession in 1982. Since that time the value of loans and leases as a percentage of bank assets has risen for the middle three bank size groups. The relatively lower holdings of loans among the smallest bank size group since 1980 coincides with their greater reliance on investment securities and federal funds sold. For the largest bank size group, loans and leases rose from 56.95 percent of assets at year-end 1976 to 59.43 percent of assets at midyear 1987.

Figure III.12:

Loans and Leases as a Percentage of Total Assets



*All 1987 data is for June 1987.

Types of Loans

Some indication of the riskiness of a bank's loan portfolio can be obtained by reviewing the composition of bank loans. In this section we consider trends in commercial and industrial loans, which are the largest component of bank loans, as well as several categories of loans to volatile sectors of the economy. The latter loan categories considered include real estate loans, farm loans, and loans for purchasing or carrying securities. These categories do not represent all volatile sectors. However, these three sectors were chosen because of their relevance to current bank problems and because data were available on these types of loans. While all private sector loans have some inherent risk of default, loans to sectors of the economy that are depressed or have a history of volatile prices may expose a bank to greater risks. For example, a severe drop in stock prices may adversely affect a borrower's ability to make payments on loans obtained for purchasing securities to the extent that the borrower was relying upon security sales to make loan payments. In addition, there is a decrease in the value of the collateral (securities) used. If the decline in securities' prices is severe enough, there may be increases in loan defaults.

Commercial and Industrial Loans

The largest component of loans, commercial and industrial loans, has been fairly stable among the four smaller bank size groups since 1978.[11] Commercial and industrial loans are loans to individuals and businesses for commercial, industrial, or professional purposes. As seen in figure III.13, commercial and industrial loans comprised an average of 42 percent of the largest banks' loans (25 percent of assets) at midyear 1987. However, at midyear 1987, for the smallest banks, such loans comprised an average of 23 percent of loans (12 percent of assets).

Among the largest bank size group, commercial and industrial loans have declined from 28.46 percent of assets at year-end 1987 to 24.99 percent of assets at midyear 1987.

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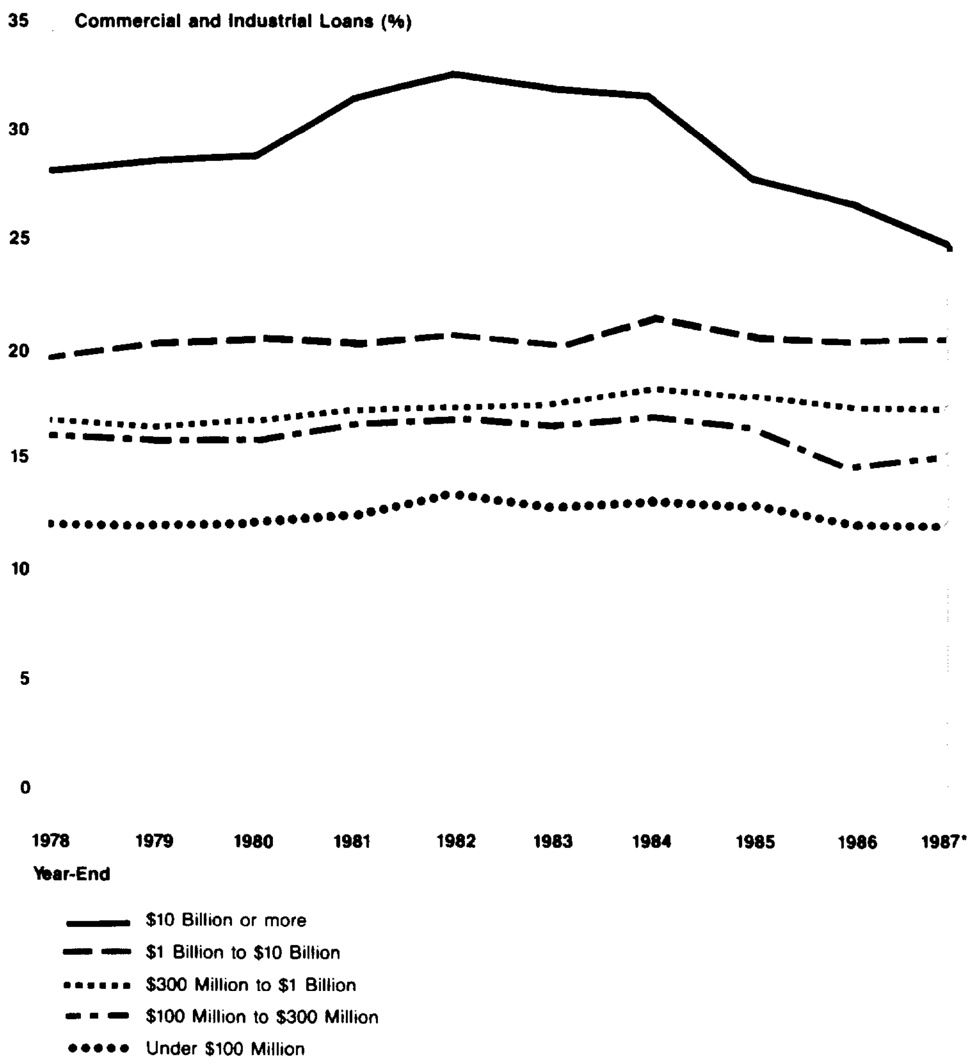
[11]Banks with foreign offices reported only domestic office commercial and industrial loans for the period 1976 through 1977. This results in a severe understatement of these loans for banks with foreign offices, which for our analysis affects the largest bank size segment, i.e., banks with assets of $10 billion or more. For this reason, we omitted all data on commercial and industrial loans before 1978.

Figure III.13:

Commercial and Industrial Loans as a Percentage of Total Assets



*All 1987 data is for June 1987.

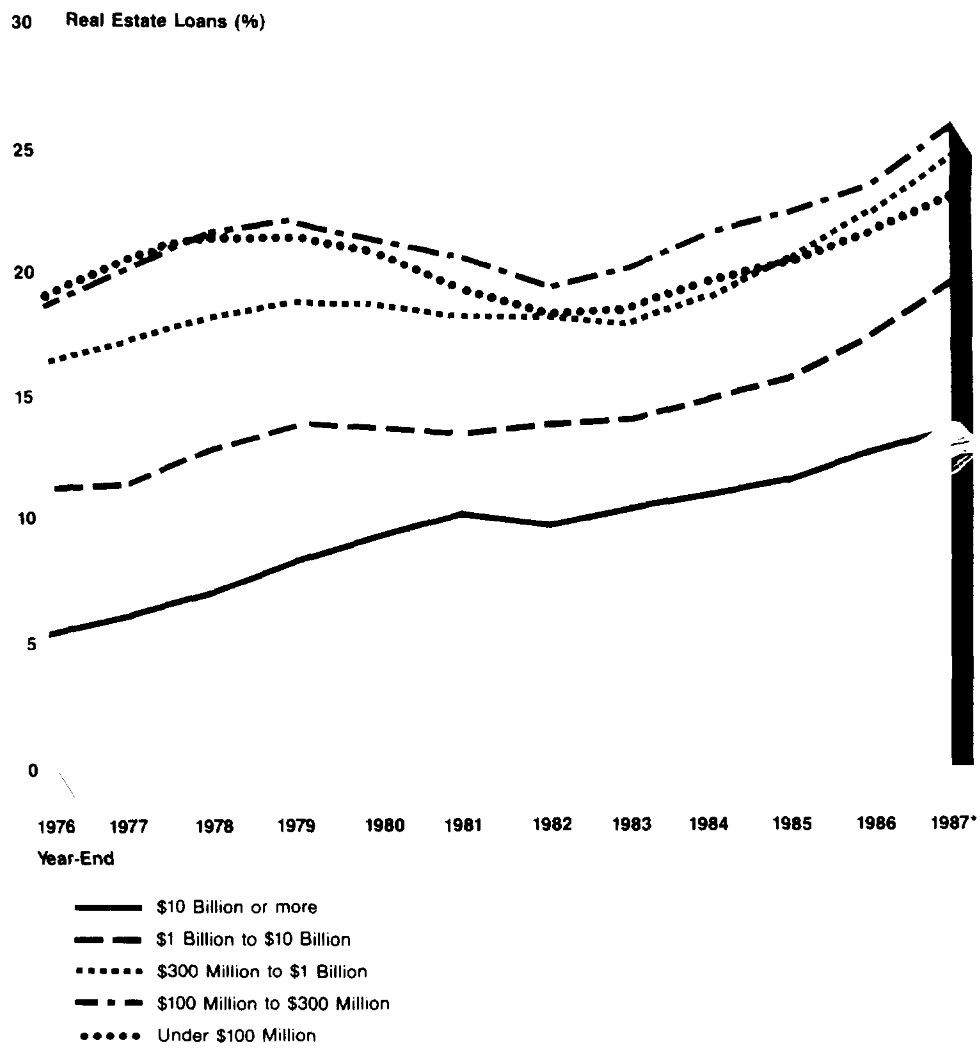
Real Estate Loans

Real estate loans include all loans secured by real estate. Specifically, they include construction and land development loans, loans secured by farmland (including residential farmland), loans secured by residential properties (single and multifamily) and loans secured by nonresidential nonfarm properties. There has been an overall increase in real estate loans since 1976.[12] Figure III.14 shows that smaller banks have tended to make a greater amount of real estate loans, as a percentage of bank assets, than did larger banks. Real estate loans comprised 23.12 percent of the smallest bank size group assets at midyear 1987, and 13.80 percent of the largest banks' assets.

[12]Banks with foreign offices only reported domestic office real estate loan activity for the period 1976 through 1977.

Figure III.14:

Real Estate Loans as a Percentage of Total Assets



*All 1987 data is for June 1987.

Construction and Land Development Loans

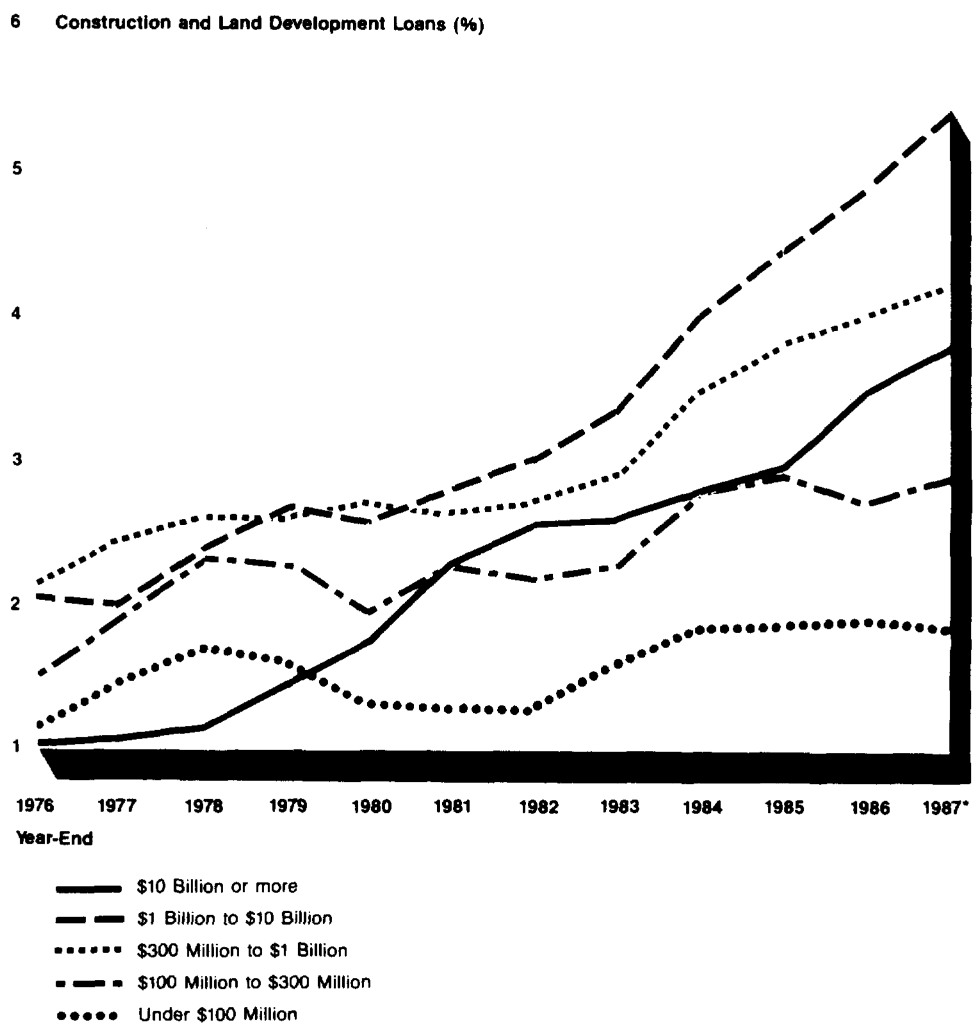
Figure III.15 reviews trends in construction and land development loans. Construction and land development loans are loans secured by real estate with maturities of 5 years or less that have been made to finance land development.[13] These short-term loans are risky to the extent that developers (borrowers) have difficulty selling their projects or finding long-term tenants that enable them to repay the mortgage.

There has been an overall upward trend in construction and land development loans since 1976, except among the smallest banks. Construction and land development loans made up a greater proportion of larger bank real estate loans than they did for smaller banks. At midyear 1987, construction and land development loans comprised 27 percent of the largest bank size group's real estate loans (3.7 percent of assets) and 8 percent of the smallest bank size group's real estate loans (1.8 percent of assets).

[13]Banks only reported domestic office construction and land development loans for the total period considered here, December 31, 1976, through June 30, 1987.

Figure III.15:

Construction and Land Development Loans as a Percentage of Assets



*All 1987 data is for June 1987.

Farm Loans

Farm loans, as defined here, include all loans to finance agricultural production and other loans to farmers (exclusive of those secured by agricultural real estate). Domestic agriculture has a long history of volatile prices and has been economically depressed in recent years.

Farm loans had been a relatively stable proportion of bank assets between 1976 and 1984 (see fig. III.16).[14] After 1984, however, there was a decline in farm loans as a percentage of assets among most banks. The smaller bank size group has relied more heavily on farm loans than larger banks since 1976. At midyear 1987 farm loans comprised 4.70 percent of the smallest bank size groups' assets and 0.28 percent of the largest bank size groups' assets.[15]

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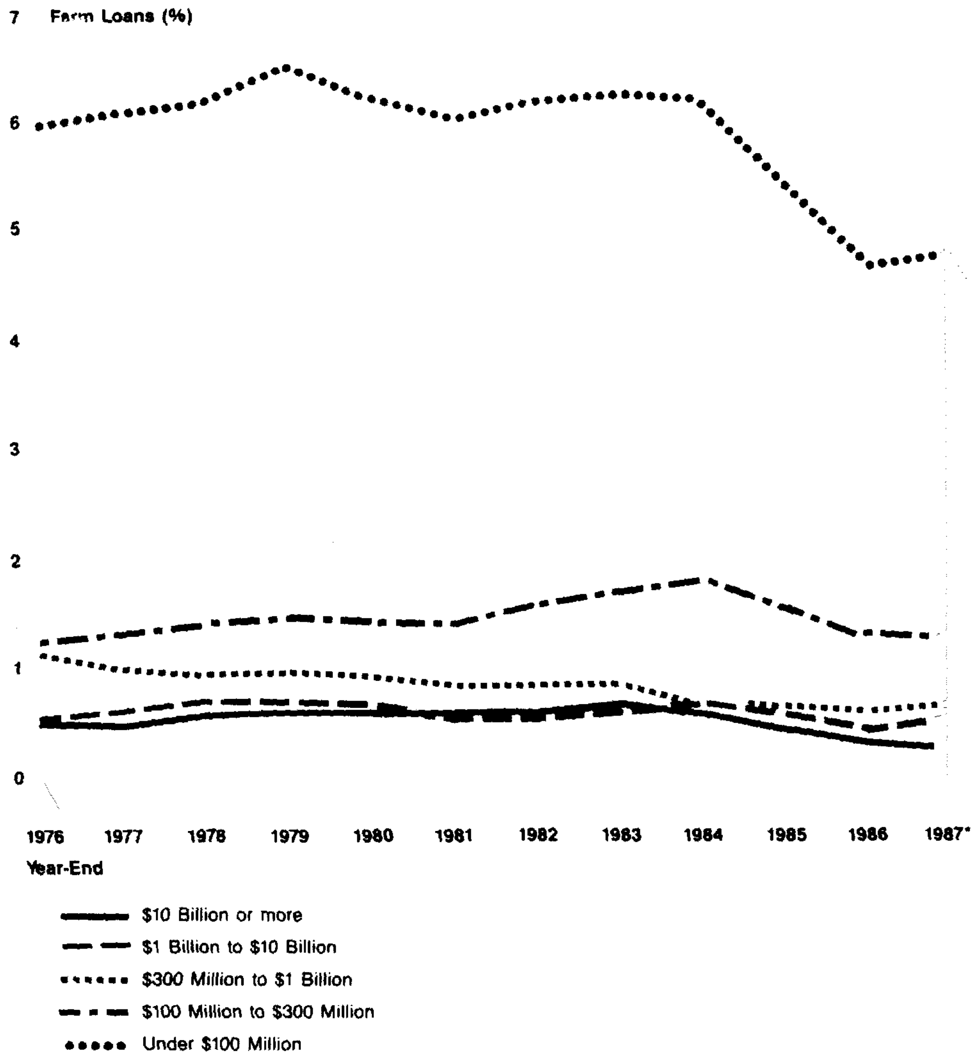
[14]Banks with foreign offices only reported domestic office farm loans for the period 1976 through 1977.

[15]FDIC officials in commenting on a draft of this report pointed out that it is not possible to get a precise measure of farm loans from the loan information that banks are required to report to bank regulators. In addition, FDIC officials pointed out that because we excluded loans secured by agricultural real estate from our measure of farm loans, the relative size of "farm" loans would be less for many banks. When we included loans secured by agricultural real estate in our measure of farm loans for the smallest bank size group, the value of farm loans increased from an average of 5.82 percent of assets to 7.64 percent of assets for the period December 1976 through June 1987. For the largest bank size group, the inclusion of loans secured by agricultural real estate in the definition of farm loans increases the value of farm loans from an average of 0.50 percent of assets to 0.56 percent of assets for the period December 1976 to June 1987. The trends in farm loans and our interpretation of these trends were not materially changed by the inclusion of loans secured by agricultural real estate in our definition of farm loans.

Figure III.16:

Farm Loans as a Percentage of Total Assets



*All 1987 data is for June 1987.

Loans for Purchasing or Carrying Securities

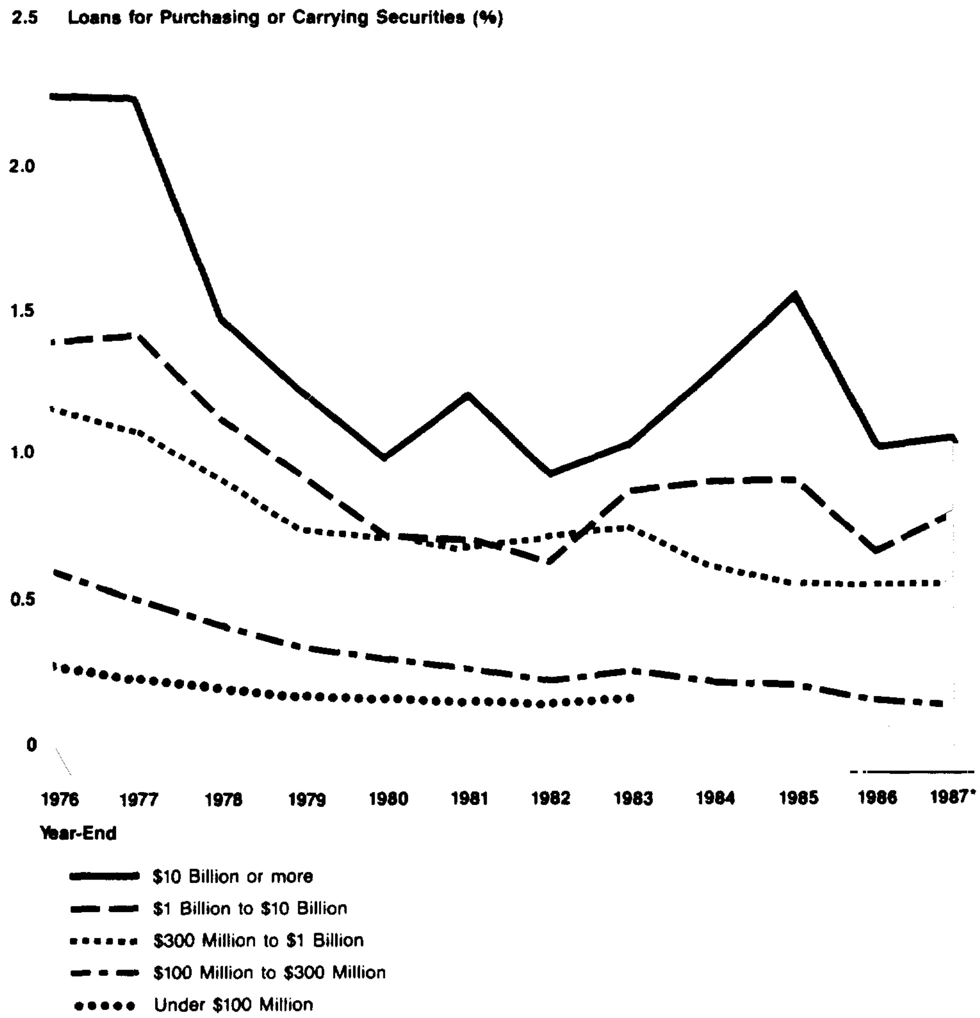
Because of the recent stock market crash on October 19, 1987, we included the trends in loans for purchasing or carrying securities (secured and unsecured).[16] These loans may be considered risky to the extent borrowers rely upon security sales to make loan payments (e.g., security speculators). Further, a sudden and severe drop in securities prices will diminish the value of collateral (securities) used in the loans.

Figure III.17 shows that there has been a general decline in loans for purchasing and carrying securities since 1976. As of midyear 1987, these loans comprised 1.05 percent of the largest banking group's assets and 0.15 percent of assets of banks in the second smallest bank size group (assets between $100 million and $300 million). Banks with assets under $100 million have not been required to report such loans since 1984.

[16]We only consider domestic bank office loans for purchasing or carrying securities here in order to ensure consistency in the data. This was done because foreign bank office loans for purchasing or carrying securities were not reported for 1976 through 1977 as well as from 1984 through June of 1987.

Figure III.17:

Loans for Purchasing or Carrying Securities as a Percentage of Total Assets



*All 1987 data is for June 1987.

Assets Held in Trading Accounts

Larger banks tended to make greater use of trading assets, i.e., assets held with the intent to resell soon. There has been a sizable increase in the proportion of assets held in trading accounts among the largest bank group since 1980. As seen in figure III.18, assets held in trading accounts comprised 1.03 percent, the largest bank group assets at year-end 1980 and rose to 3.34 percent of assets at midyear 1987. Over this same period, trading assets as a percentage of total assets were declining and low (below 1 percent of assets) among the remaining bank size groups.[17]

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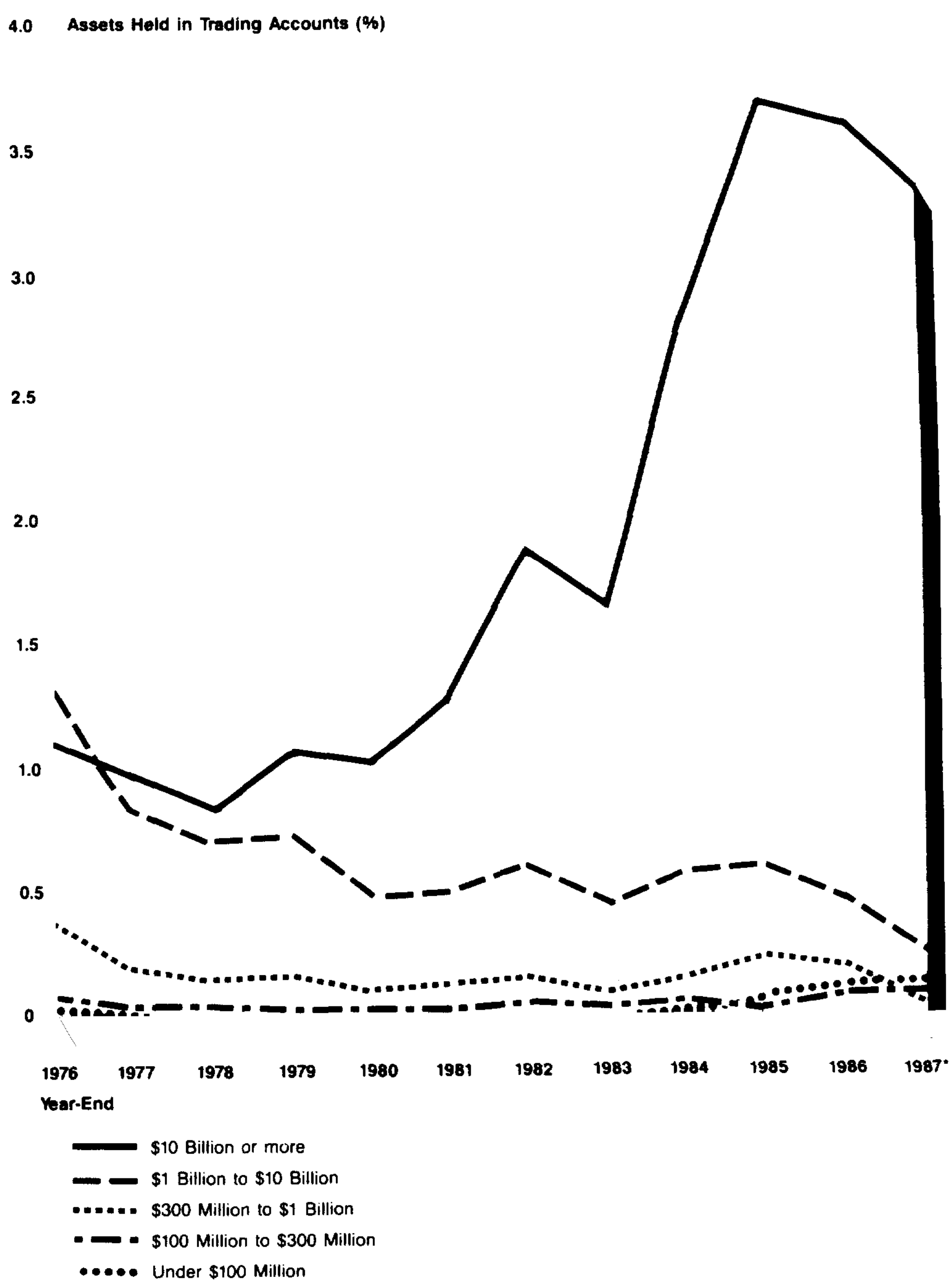
[17]Banks with only domestic offices and total assets less than $100 million did not report assets held in trading accounts for the period 1978 through 1983.

Figure III.18:

Assets Held in Trading Accounts as a Percentage of Total Assets



*All 1987 data is for June 1987.

ASSET QUALITY

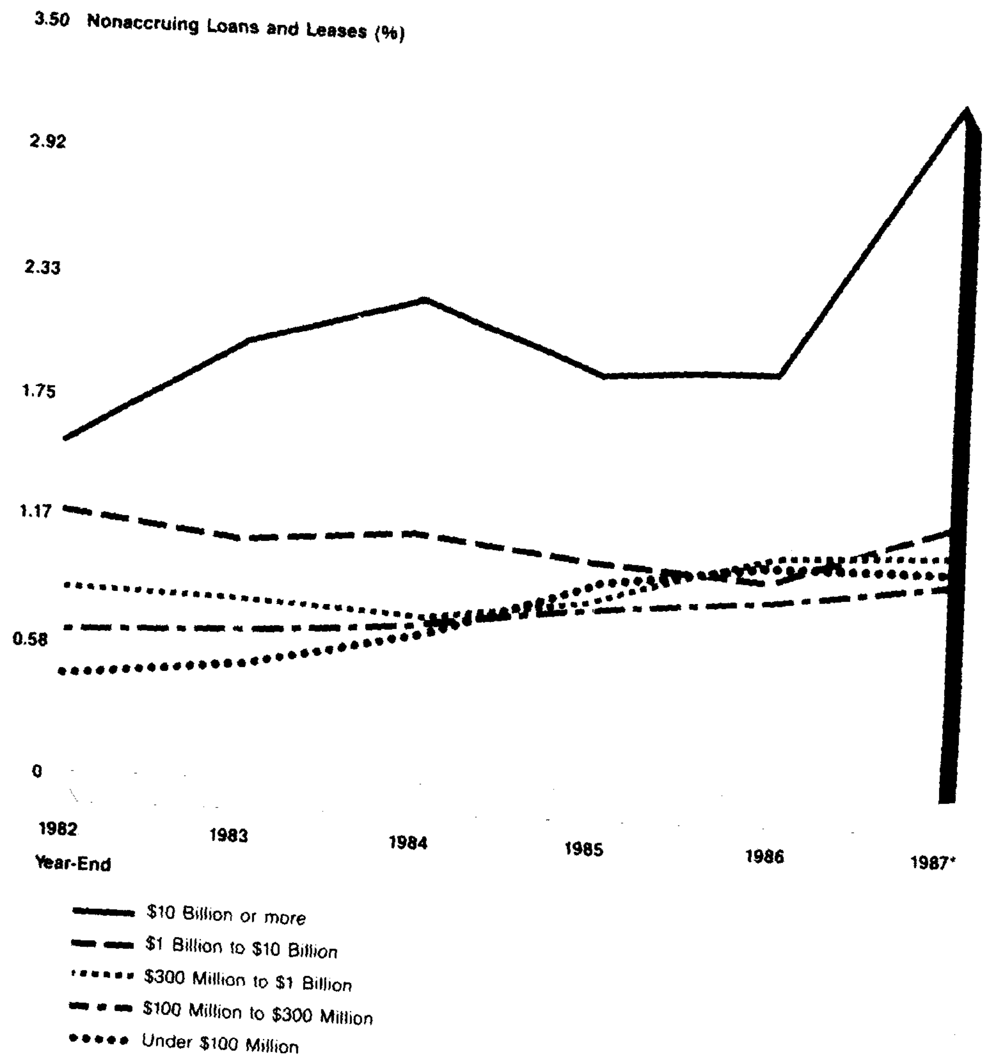
Banks earn profits and maintain solvency, in part, by holding quality loans that will be repaid in full in a timely manner. Increases in loans not repaid on time (nonaccruals) or loans that are unlikely to be repaid at all (the allowance) indicate decreases in asset quality. Both are discussed on the following pages.

Nonaccruing Loans and Leases

One measure of the quality of bank assets is the amount of nonaccruing loans as a percentage of bank assets. Nonaccruing loans represent loans carried on the bank's books that (1) are on a cash basis because of deterioration in the financial position of the borrower, (2) are not expected to repay interest on principal in full, and (3) are in default for a period of 90 days or more unless they are both well-secured and in the process of collection. Figure III.19 shows nonaccruals have been increasing as a percentage of bank assets since 1982 for most banks (1982 is the first year data on nonaccruals were released by the FDIC). The recent increase in nonaccruals for the largest bank group is largely attributable to difficulties with foreign loans. For the largest bank group, average nonaccruals rose from 1.91 to 3.24 percent of assets in the first half of 1987. This rise in nonaccruals could adversely affect future bank profitability by decreasing interest income and increasing provisions for loan losses.

Figure III.19:

Nonaccruing Loans and Leases as a Percentage of Total Assets



*All 1987 data is for June 1987.

Allowance for Loan and Lease Losses

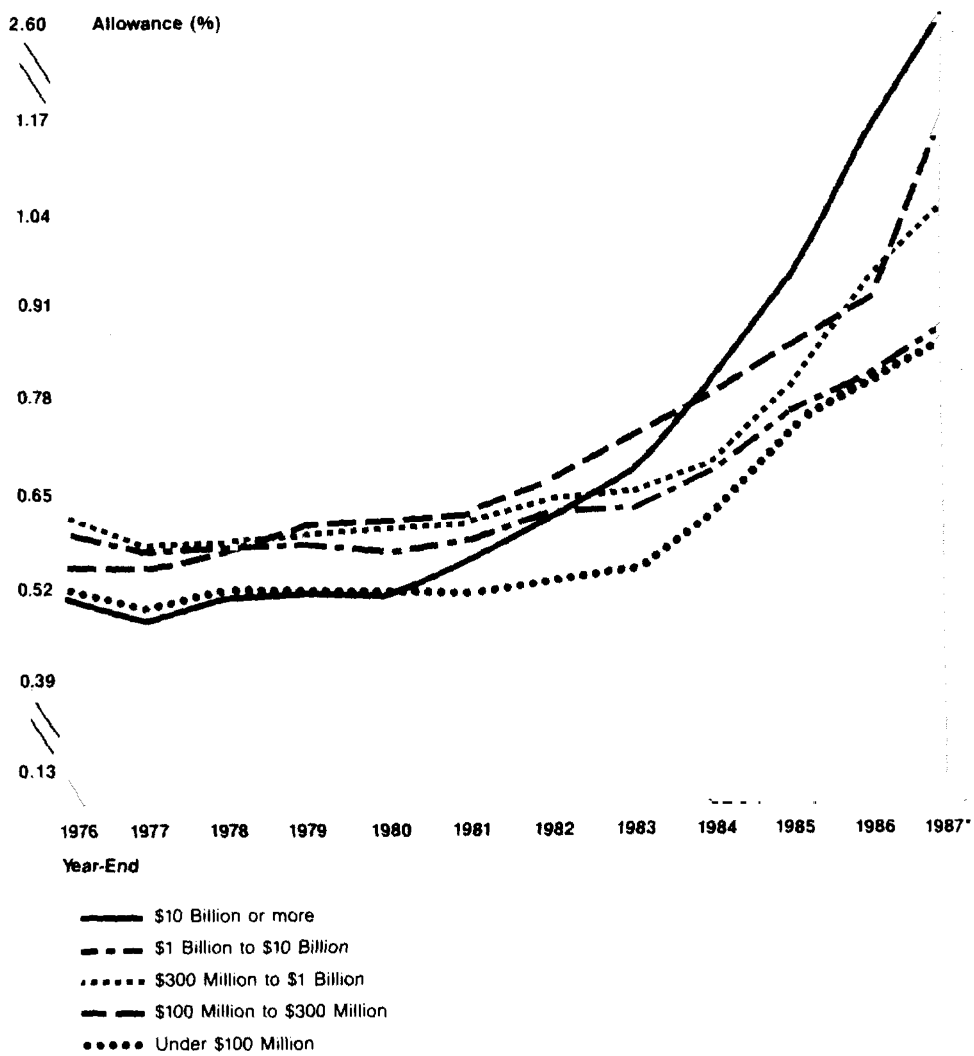
One other measure of the quality of bank assets is the loan and lease loss allowance. The loan loss allowance is the accumulated value of loan loss provisions (i.e., provisions for anticipated losses on loans), minus loan charge-offs, plus recoveries to date. Because the allowance for allocated transfer risk is not considered part of regulatory capital due to the fact that these reserves are considered to be for identifiable losses, we do not include such reserves here. This permits us to see directly the impact of changes in the allowance upon regulatory capital.

In general, the loan loss allowance has been rising as a percentage of bank assets among most banks since 1980 (see fig. III.20). The rise in the loan loss allowance has been greatest among the largest banks. The largest bank group's loan loss allowance rose from 0.50 percent of assets at year-end 1976 to 1.15 percent of assets at year-end 1986. In addition, problems with less developed countries debt have contributed to the sharp rise in the largest bank's loan loss allowance to 2.61 percent of assets as of midyear 1987.

Over this same period the smallest bank size group's loan loss allowance rose from 0.51 percent of assets at year-end 1976 to 0.85 percent of assets at midyear 1987.

Figure III.20:

Allowance for Loan and Lease Losses as a Percentage of Total Assets



*All 1987 data is for June 1987.

LIABILITY COMPOSITION

The composition of bank liabilities, or funding, directly determines the interest expense and liquidity needs a bank must cover. In this section we considered two categories of bank liabilities, core deposits and managed liabilities, which jointly comprised over 80 percent of total bank funding at midyear 1987.

Core Deposits

Figure III.21 presents data on trends in core deposits, the most stable component of bank funding, which include the sum of all transaction accounts and saving deposits, plus time deposits of less than $100,000.[18] Core deposits as a percentage of bank assets have in general returned to their pre 1981 to 1982 recession levels. The smallest bank size group has relied more heavily upon core deposits than have larger bank categories. At midyear 1987, core deposits comprised 78.43 percent of the smallest bank size group's assets and 33.82 percent of the largest bank size group's assets. Presently, FDIC insures deposit accounts of up to $100,000 (for joint accounts, multiply this coverage by the number of account members). Thus, banks with heavy reliance on core deposits that are insured by FDIC are less exposed to bank runs than are banks with less reliance on insured core deposits.

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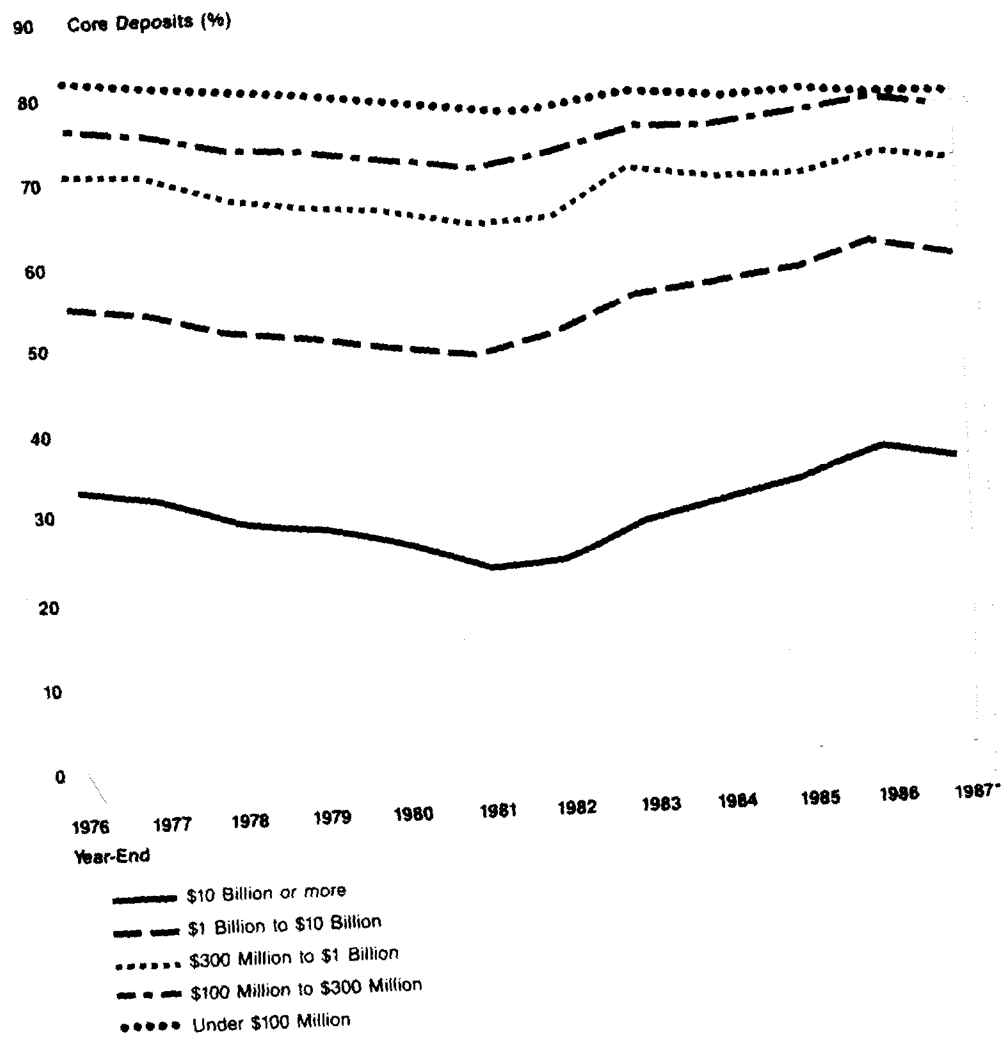
[18]Core deposits, as defined here, only include domestic office liabilities for December 31, 1976, through June 6, 1987.

APPENDIX III

Figure III.21:

Core Deposits as a Percentage of Total Assets



*All 1987 data is for June 1987.

Managed Liabilities

As seen in figure III.22, larger banks have used greater proportions of managed liabilities as a percentage of assets than have smaller banks. Managed liabilities are defined here as the sum of time deposits of $100,000 or more with a remaining maturity of 1 year or less and nondeposit interest-bearing liabilities with remaining maturities of 1 year or less.[19] These larger deposits show greater sensitivity to interest rate changes and are therefore more volatile. The appropriate level of such volatile funding must be judged against the bank's ability to meet its liquidity needs with short-term, liquid assets, as well as anticipated fluctuations in market interest rates. At midyear 1987, managed liabilities comprised 48.76 percent of the largest banks size group's assets and 10.49 percent of the smallest banks size group's assets.

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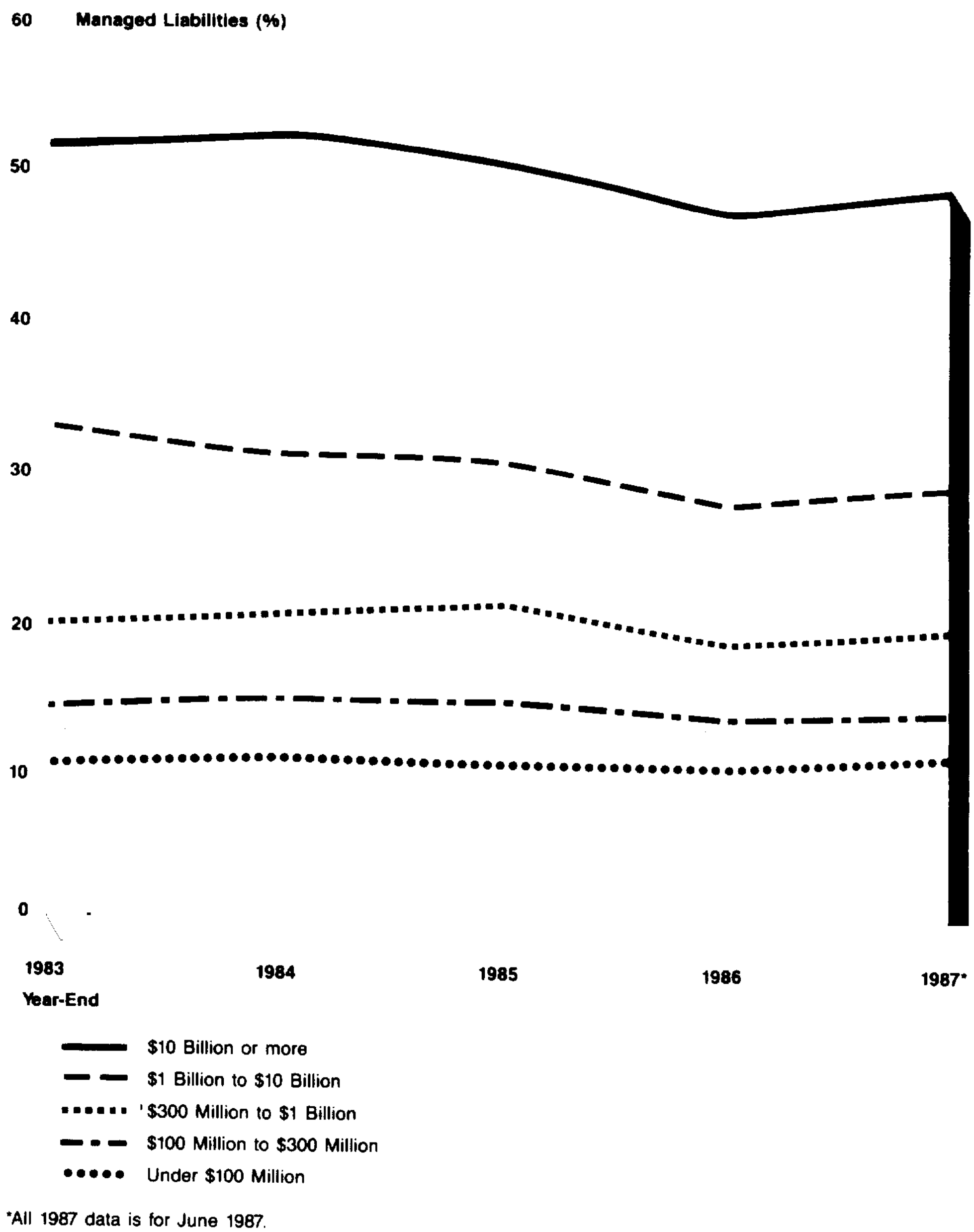
[19]Data on managed liabilities, as defined here, are not available before 1983.

Figure III.22:

Managed Liabilities as a Percentage of Total Assets



*All 1987 data is for June 1987.

Allowance for loan and lease losses	The accumulated value of loan lease losses provisions minus charge-offs plus recoveries (reversals of previous charge-offs) to date.
Assets	The value of total bank assets. Specifically, the sum of cash and balances due from depository institutions, securities, federal funds sold and securities purchased under resell agreements, net loans and leases, assets held in trading accounts, premises and fixed assets, other real estate owned, investment in unconsolidated subsidiaries, customers' liability on acceptances outstanding, intangible assets, and other assets.
Assets held in trading accounts	The sum of all assets held in the bank's trading accounts. These include, for example, U.S. Treasury securities, certificates of deposit, and other assets.
Commercial and industrial loans	Loans to individuals and businesses for commercial, industrial, or professional purposes.
Construction and land development loans	Loans secured by real estate with maturities of 5 years or less that have been made to finance land development. Land development refers to improvements in land, e.g., laying water pipes necessary for construction or alteration of buildings.
Core deposits	The sum of all transaction accounts (including demand deposits) and savings deposits (including money market deposit accounts), plus time deposits less than $100,000.
Equity capital	The sum of common stock, perpetual preferred stock, surplus, undivided profits, contingency and other capital reserves and cumulative adjustments for changes in foreign currency exchange rates.
Farm loans	Loans to finance agricultural production and other loans to farmers. These loans are not secured by agricultural real estate.

Federal funds sold and resale agreements	Loans of immediately available funds and purchases of securities under agreements to resell the same security where the term of these contracts is either for 1 business day or under a continuing (open-ended) contract.
Fixed weight Gross National Product (GNP) price index	Measures changes in average commodity prices (of commodities included in GNP) weighing individual prices by the composition of GNP in a specified base year. Changes in the index solely reflect changes in commodity prices as opposed to changes in the composition of GNP.
Interest expense	The sum of interest on deposits, expense on federal funds purchased and securities sold under repurchase agreements, interest on demand notes issued by the U.S. Treasury and other borrowed money, interest on mortgage debt and obligations under capitalized leases, and interest on notes and debentures subordinated to deposits.
Interest income	The sum of interest and fee income on loans, income from lease financing receivables, interest income on balances due from depository institutions, interest and dividend income on securities, interest income from assets held in trading accounts, and interest income from federal funds sold and securities purchased under resell agreements.
Investment in consolidated subsidiaries	A liability representing minority shareholder's equity investment in the bank's consolidated subsidiaries. (Also known as minority interests in consolidated subsidiaries.)
Investment securities	The sum of securities issued by the U.S. Treasury, U.S. government agency and corporation obligations, state and municipal securities, and other securities (debt and equity) not held in trading accounts.
Limited life preferred stock	Preferred stock with a stated maturity which can be redeemed at the shareholder's discretion. Excludes those issues that convert into common or perpetual preferred stock.

Loans for purchasing or carrying securities	Includes all loans for purchasing or carrying securities (secured and unsecured).
Loans and leases	Total loans and lease financing receivables (net of unearned income, allowance for loan and lease losses, and allocated transfer risk reserve).
Managed liabilities	The sum of time deposits of $100,000 or more (excluding open-account time deposits) with remaining maturity of 1 year or less and nondeposit interest bearing liabilities with remaining maturity of 1 year or less (includes Federal Funds purchased, other borrowed money and notes and debentures subordinated to deposits).
Net income	Net income after taxes, extraordinary items, and other adjustments.
Net interest margin	The value of interest income minus interest expense.
Net noninterest margin	The value of noninterest income minus noninterest expense.
Nonaccrual loans	Loans that are (1) maintained on a cash basis because of deterioration in the financial position of the borrower, (2) not expected to pay interest and principal in full, and (3) in default for a period of 90 days or more unless they are both well secured and in process of collection.
Noninterest expense	The sum of salaries and benefits to employees, net expenses on premises and fixed assets, and all other operating expenses (excluding provisions for loan and lease losses and allocated transfer risk).
Noninterest income	The sum of income from service charges on deposit accounts and all other noninterest operating income.
Nonperforming loans	The sum of loans and leases that are past due 90 days or more and still accruing and nonaccrual loans and leases.

Notes and debentures subordinated to deposits	Debt issues of the bank or its consolidated subsidiaries that are subordinated to depositor's claims and have an original weighted average maturity of at least 7 years.
Operating expenses	The sum of interest expense, noninterest expense, provisions for loan loss and allocated transfer risk.
Operating income	The sum of interest income and non-interest income.
Provisions for loan and lease losses	Provisions made by the bank to adjust the loan and lease loss allowance sufficiently to absorb anticipated loan and lease losses.
Provisions for allocated transfer risk	In accordance with the International Lending Supervision Act of 1983, banks must create a reserve against foreign borrowers having trouble servicing their debt due to insufficient foreign exchange.
Real estate loans	The value of all loans secured by real estate. Specifically, the sum of all construction and land development loans, loans secured by farmland (including residential farmland), loans secured by residential properties (single and multifamily) and loans secured by nonresidential nonfarm properties.
Return on assets	The ratio of net income after taxes, extraordinary items, and other adjustments to total assets.
Total capital	The sum of common stock, perpetual preferred stock, surplus, undivided profits and capital reserves, allowance for loan and lease losses, minority interest in consolidated subsidiaries, limited life preferred stock, and subordinated notes and debentures.

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