APPENDIX I - A CHANGING INDUSTRY

Reform of the deposit insurance system must take into account not only what is happening in the world of depository institutions but also what changes are underway in the financial industry as a whole. Attempts to improve deposit insurance will come to naught if they are offset by conditions and trends elsewhere in the financial marketplace.

In an accompanying series of tables and graphs, three significant interrelated trends are isolated: banking is a riskier, more volatile business; banks are encountering greater degrees of competition; and the banking business is changing.

Banking Is Riskier

Perhaps the most persuasive piece of evidence that banking is a riskier business is the number of failed banks (Figure 1). Between 1943 and 1981, the greatest number of banks that failed in any one year was 17, in 1976. Annual failures increased dramatically in the 1980s, however, reaching a peak of 206 in 1989.

Net loan chargeoffs also rose significantly in the 1980s, reaching a peak of 1.15 percent of total loans in 1989 (Figure 2). A decade by decade comparison of the banking industry's return on assets reveal a fall in that measure of profitability during the most recent decade (Table 1). The slide is more evident when a trend line is fitted to industry return on assets for the period 1960-1989 (Figure 3).

One cause of bank difficulties has been a general rise in both the level and volatility of interest rates (Figure 4). Double-digit interest rates became common in the 1980s.

The marketplace has reacted to the banking industry's difficulties by being wary of bank stocks. As a percent of the Standard and Poor's 500 Stock Index, the Salomon Brothers 35 Bank Index has generally fallen since 1975 (Figure 5). The Bank Index was 55 percent of the S&P 500 in 1975, but only 38 percent in 1989.

Banks Are Encountering More Competition

The financial marketplace has become more crowded. A greater variety of players are offering a wider variety of products and services. One result is that the banking industry's share of financial sector assets fell from 34 percent in 1960 to 27 percent in 1987 (Table 2). The decline was most pronounced in the 1980s--banks still had 33 percent of the total in 1980.

The decline in the proportion of financial sector assets held by the banking industry was due to increasing proportions held by government-sponsored mortgage agencies, pension and retirement funds, and mutual and money market funds.

Figures 6 and 7 present more vivid evidence of the increased competition being encountered by U.S. banks. The commercial paper market has attracted a number of quality organizational customers that once relied on bank loans for short-term funds. The ratio of bank commercial and industrial loans to commercial paper outstanding has accordingly decreased (Figure 6). C&I loans fell from almost 10 times the amount of commercial paper outstanding in 1960 to only 1.2 times in 1989.

In Figure 7, the growth in competition afforded by foreign banking organizations is depicted. In 1972, foreign banking organizations controlled 3.6 percent of U.S. domestic banking assets. In 1989, the proportion was 21.4 percent.

A major change in the financial industry has been the growth of what might be termed nontraditional financial instruments. One example is provided by the packaging of mortgages for resale or to back the issuance of various types of securities. The proportion of mortgages in mortgage pools grew from one percent in 1970 to 23 percent in 1987 (Figure 8).

As another example of the growth of nontraditional financial instruments, the volume of financial futures contracts traded each year increased from 0.6 million in 1977 to 117 million in 1988, for an annual growth rate of 61 percent (Figure 9).

<u>The Banking Business Is Changing</u>

Defining with precision just what it is that banks do has provided economists, lawyers, and other interested parties with many hours of enjoyment but has not resulted in a great deal of success. One general function that banks can be said to perform is to provide credit. This only raises further questions, however, such as in what form and to whom.

The making of loans is probably the form that most often comes to mind when the credit-providing function of banks is mentioned. Loans, however, have not constituted a stable percentage of the banking industry's assets (Table 1). During the 1930s, loans were only 30 percent of industry assets. The percentage actually fell during the 1940s. The decline was due to the large quantities of government securities that banks acquired during World War II and to the constraints on non-war related economic activity during those years.

Since the 1940s, the proportion of loans in bank portfolios has steadily increased, reaching a peak of almost 60 percent for the period 1985-1989. While the loans to assets ratio of the banking industry was increasing, however, the equity to assets ratio remained static (Table 1). This has most likely resulted in a steadily increasing level of risk in the banking system because loans are for the most part more risky than the other major category of bank assets--investment securities.

As the percentage of the banking industry's assets devoted to loans has risen, the composition of the loan portfolio has changed. Two major changes are that the proportion of real estate loans has increased and the proportion of commercial and industrial loans has decreased (Figure 10). Real estate lending appears to be a more risky endeavor than C&I lending, so this change in loan composition has also likely increased the degree of risk in the banking system.

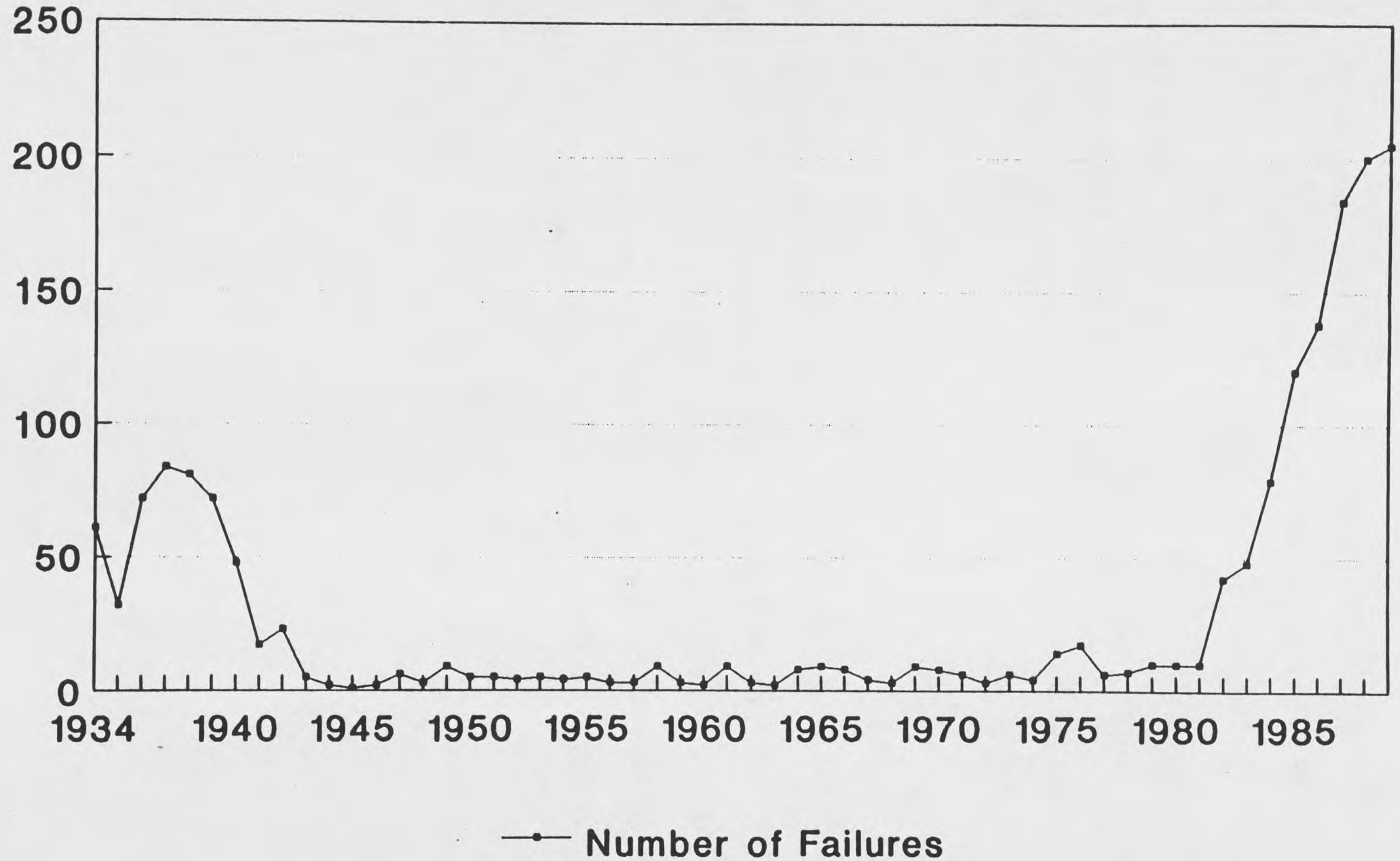
It bears emphasizing that the reduction in C&I lending by banks has not been a unilateral move. The rise of the commercial paper market has forced banks to seek other lending opportunities.

Other changes in the banking business bear noting. For one thing, noninterest income has become more important, constituting 16 percent of total income in 1989 (Figure 11). And off-balance sheet activities have increased substantially. The major categories of such activities grew in dollar terms from 58 percent of bank assets in 1982 to 116 percent of bank assets in 1989 (Figure 12).

Conclusion

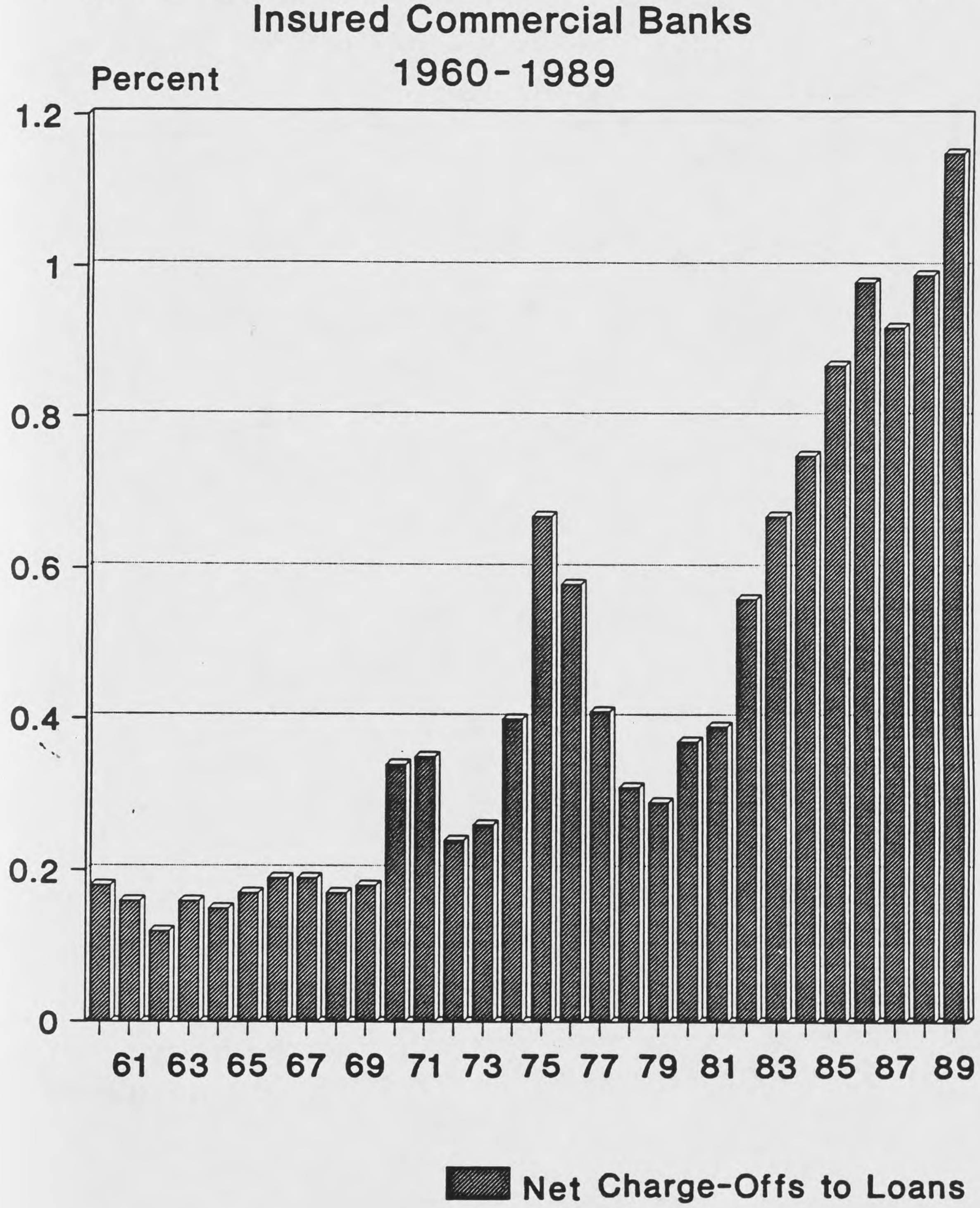
Thus the banking industry, and the financial marketplace in general, are undergoing significant changes. Volatility and risk seem to be on the increase, and there is no single simple way to contain the hazards. Moreover, legislative and regulatory efforts that do not recognize the changes taking place are likely to be ineffective.

Figure 1: Number of Failed Banks by Year
1934-1989

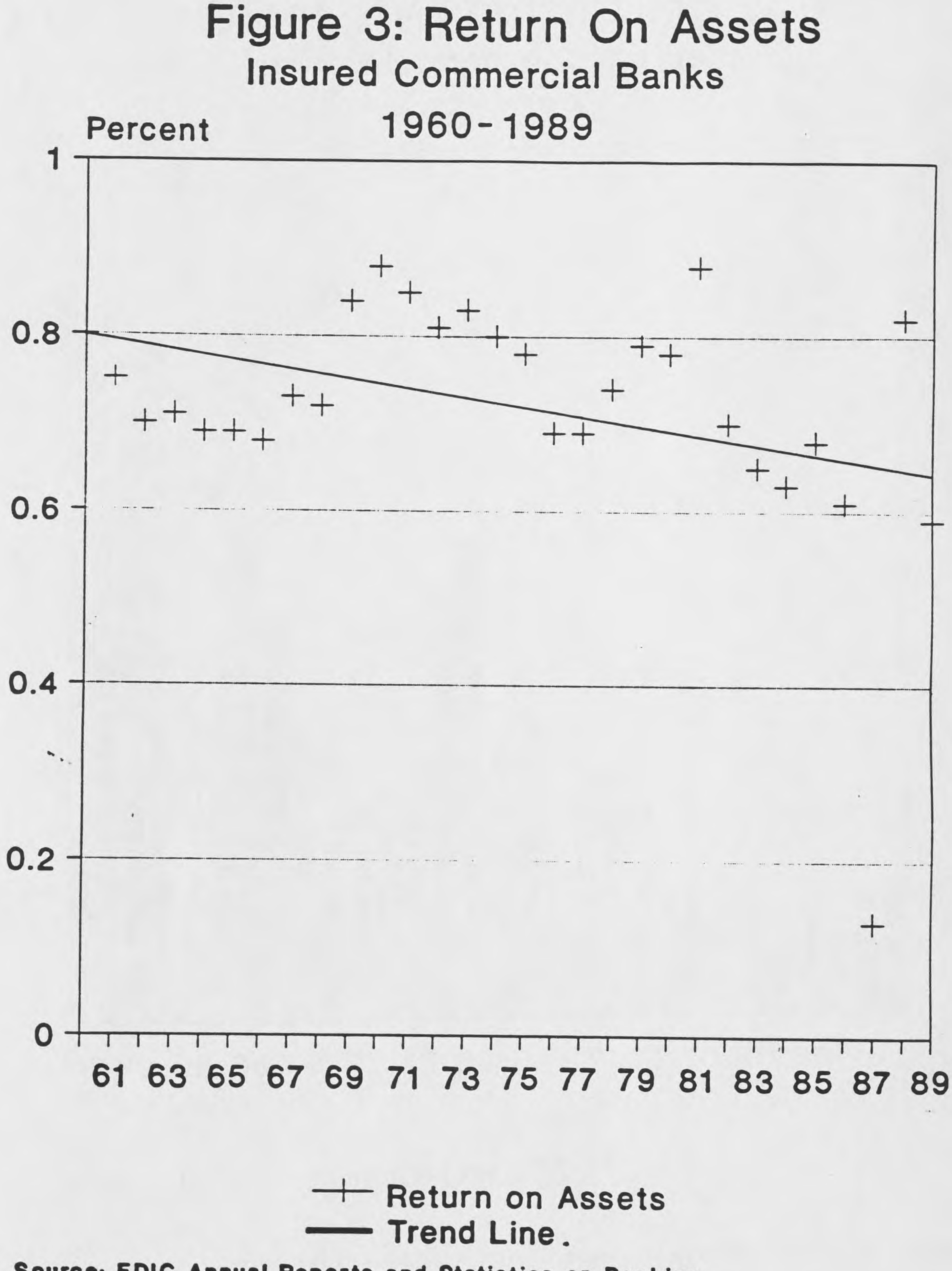


Source: FDIC Annual Reports and Statistics on Banking

Figure 2: Net Charge-Offs to Total Loans

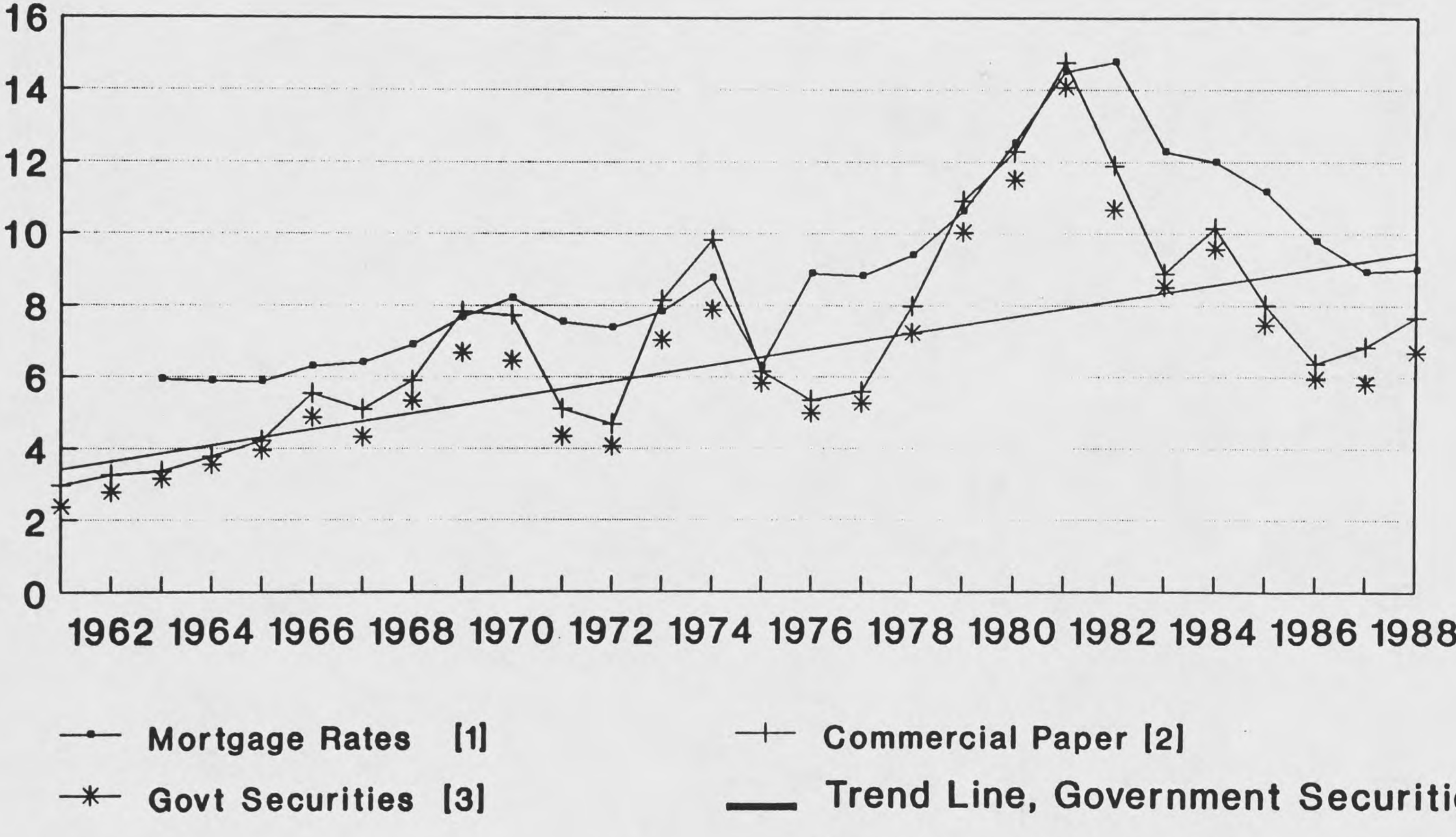


Source: FDIC Annual Reports and Statistics on Banking



Source: FDIC Annual Reports and Statistics on Banking

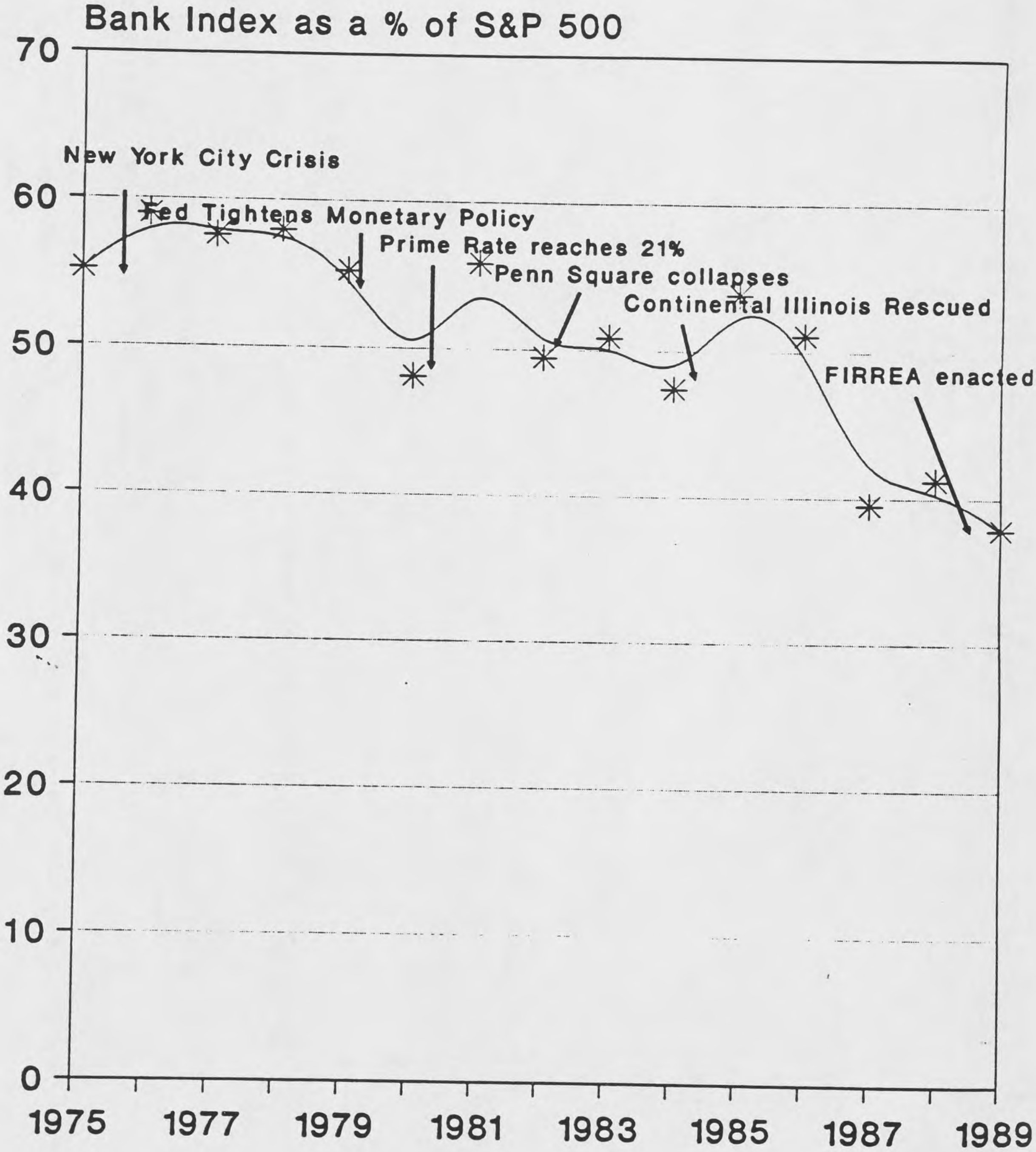
Figure 4: Average Interest Rates
1961-1988



Source: US Department of Commerce, Business Statistics

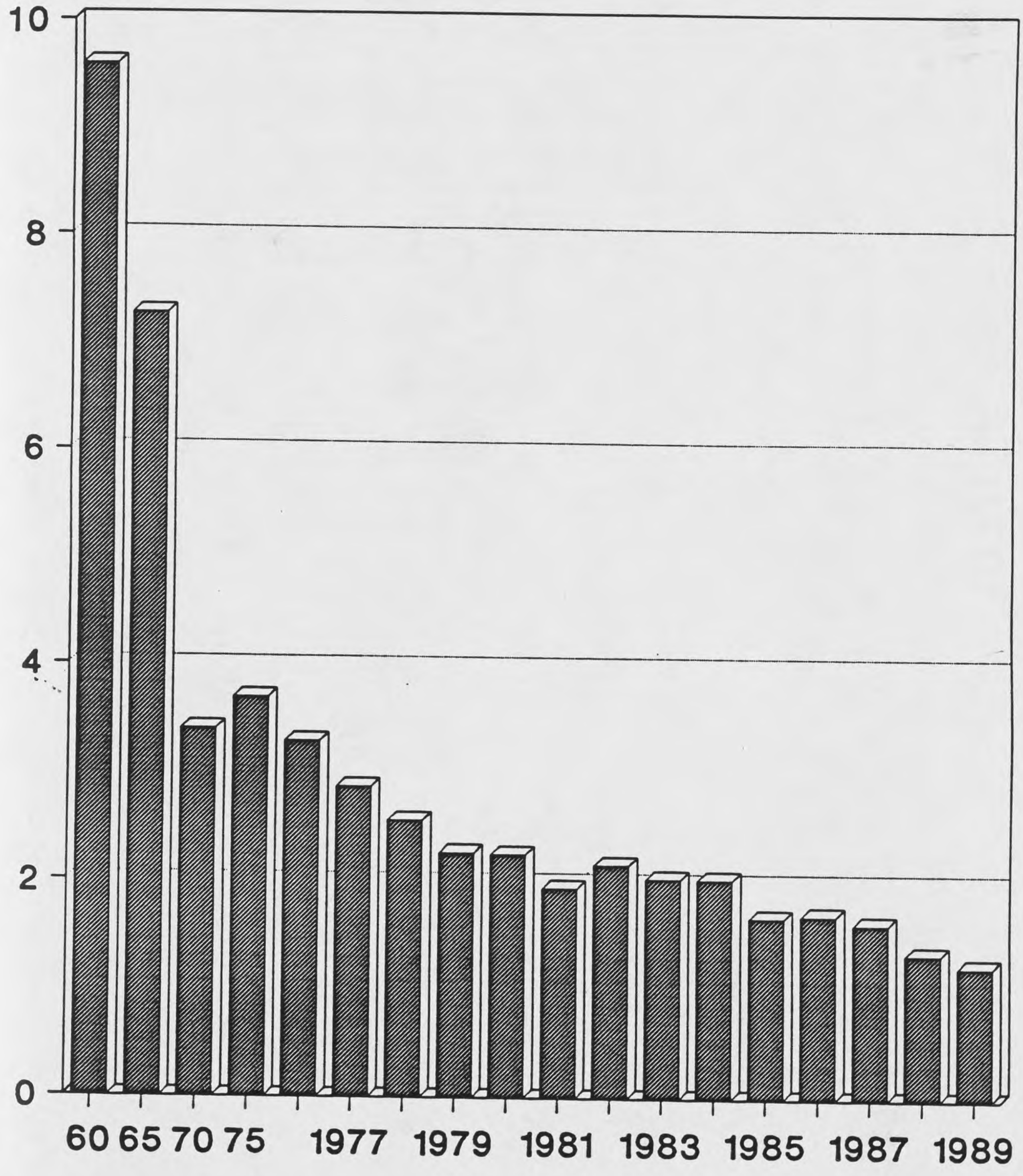
[1] Existing Home Purchases - U.S. Average
[2] Average Yield on 6-Month Maturity Paper
[3] Yield on new issue 90-day t-bills

Figure 5: Bank Stocks as a % of S&P 500
1975-1989



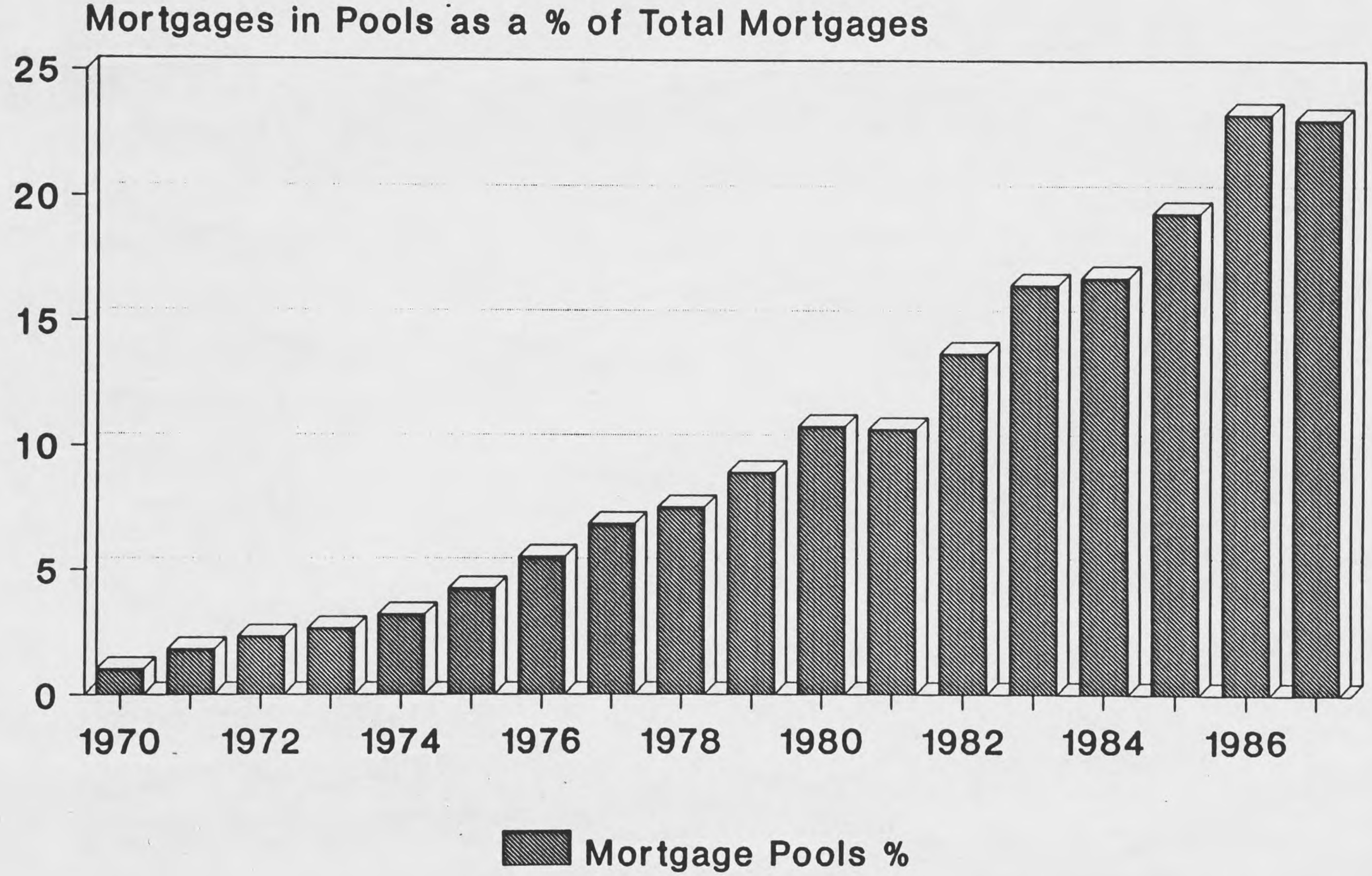
Source: Salomon Brothers

Figure 6: The Growth of the Commercial Paper Market
Ratio of Bank C&I Loans to Commercial Paper Outstanding
1960-1989



Source: US Department of Commerce, Business Statistics

Figure 8: The Growth of Mortgage Pools
1970-1987

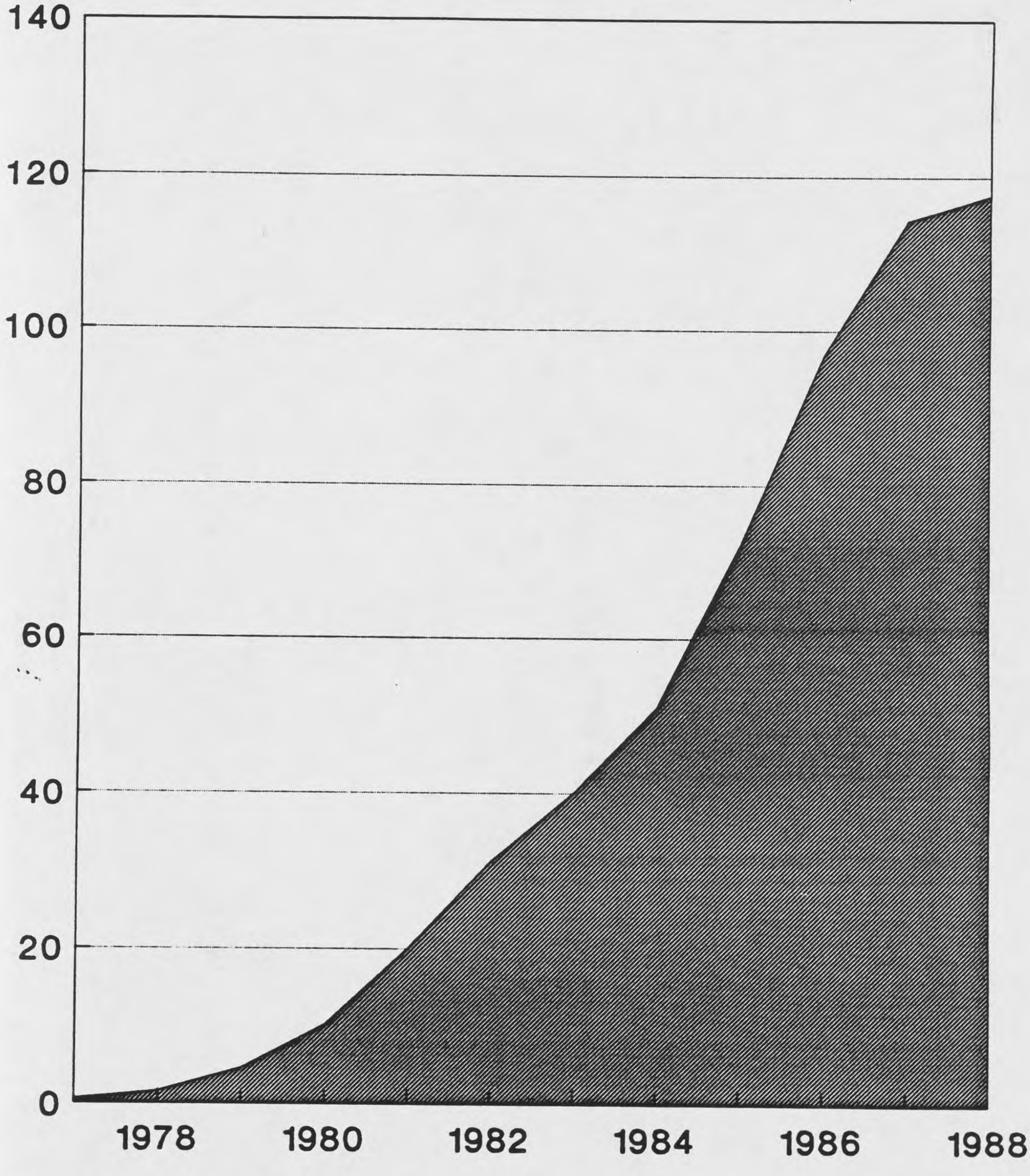


Source: US Department of Commerce, Statistical Abstract of the United States

Figure 9: Growth of the Financial Futures Market

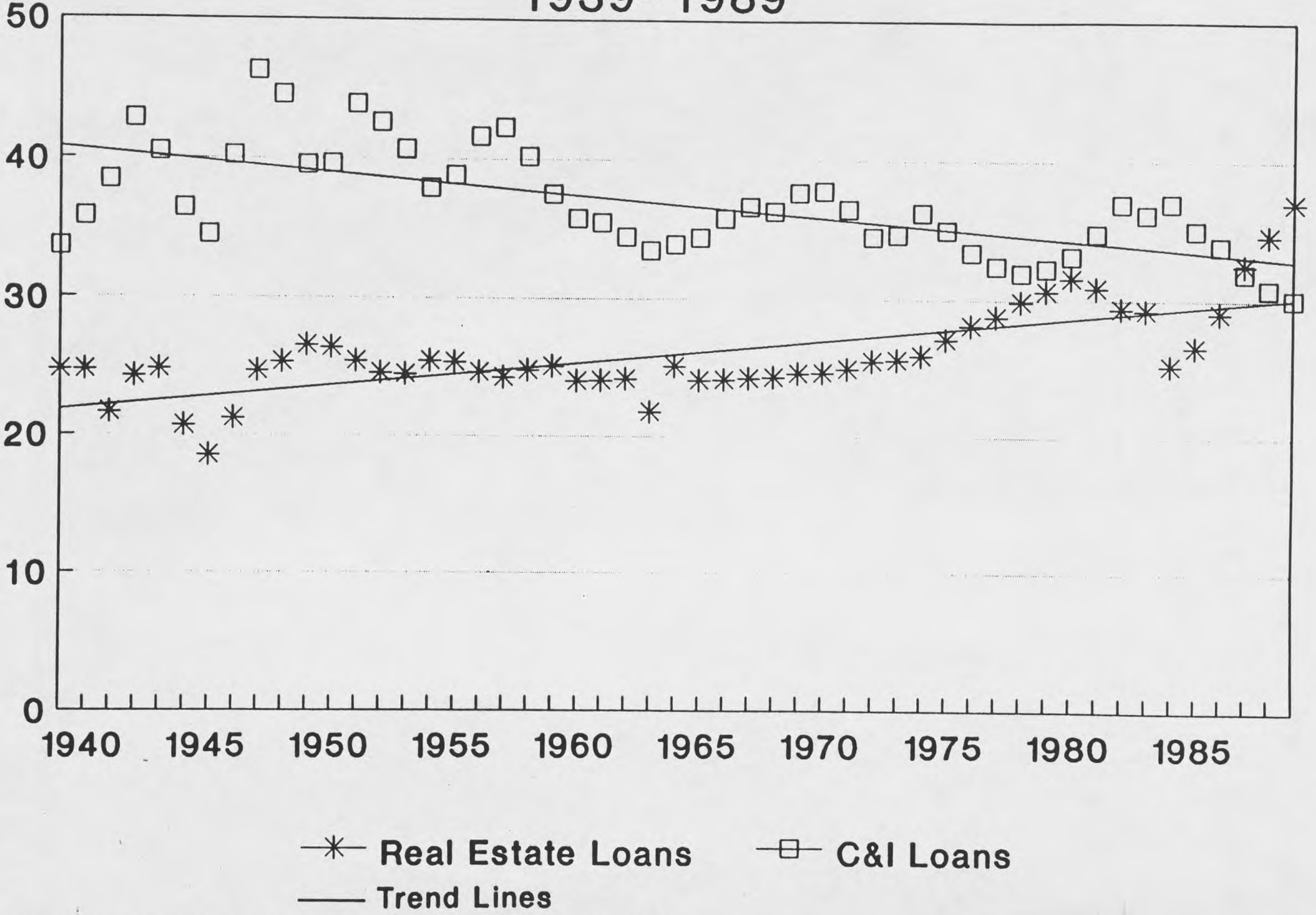
Volume, in millions, of Financial Futures Contracts Traded

1977-1988



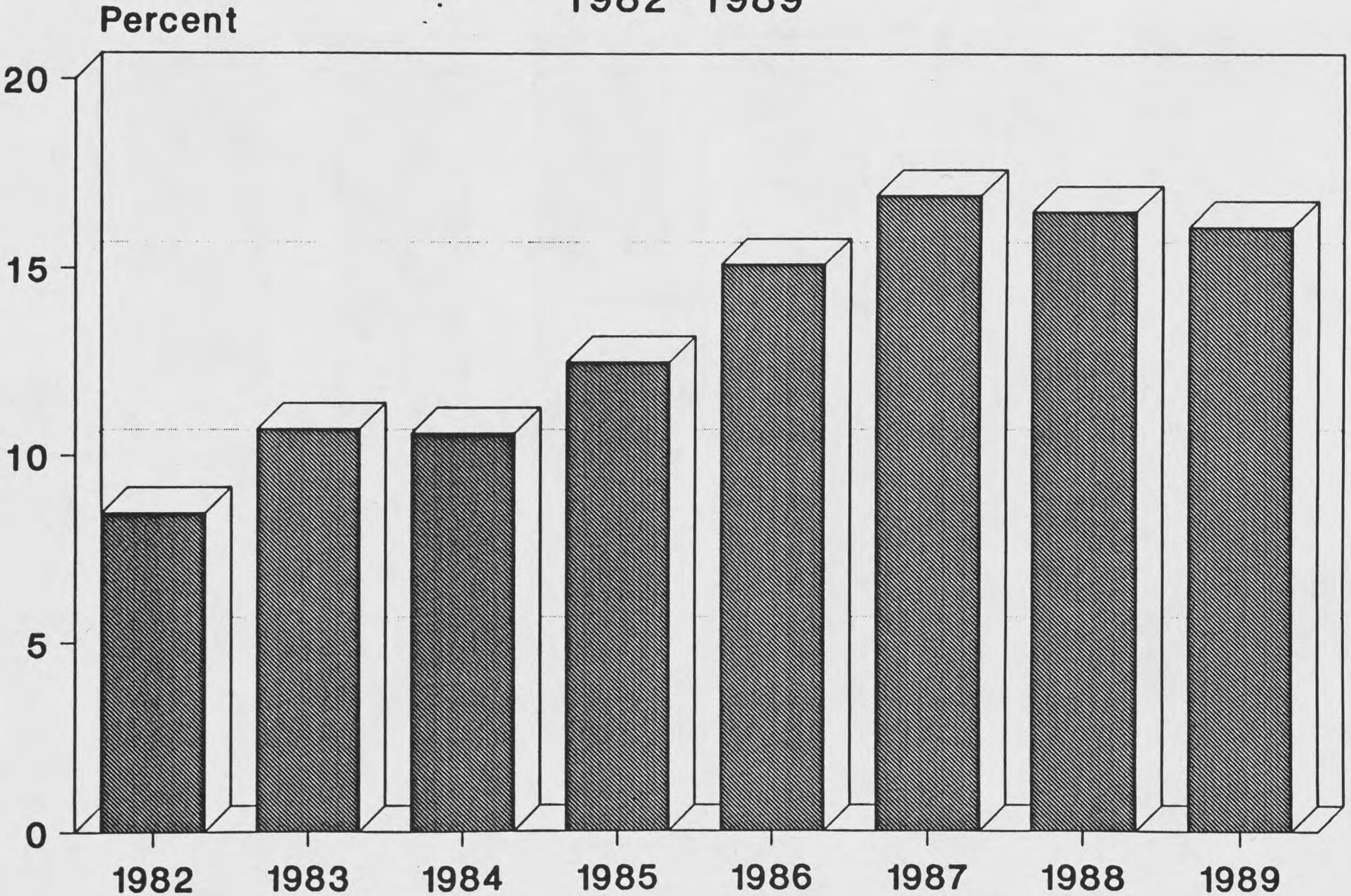
Source: Commodity Futures Trading Commission Annual Report

Figure 10: Real Estate and C&I Loans as a % of Total Loans
Insured Commercial Banks
1939-1989



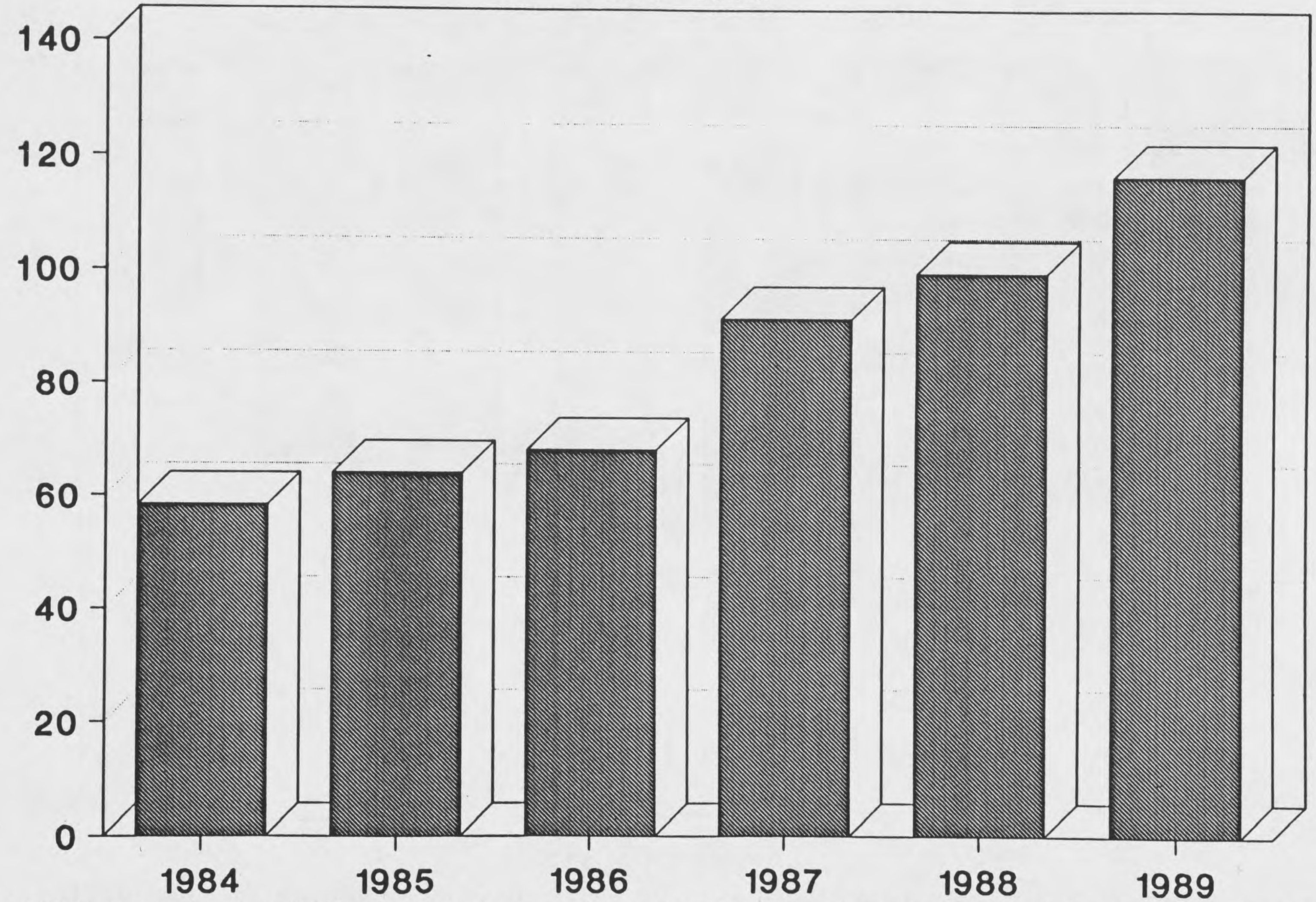
Source: FDIC Annual Reports and Statistics on Banking

Figure 11: Non-Interest Income as a % of Interest Income
Insured Commercial Banks
1982-1989



Source: FDIC Annual Reports and Statistics on Banking

Figure 12: Selected Bank Off-Balance Sheet Activities
as a Percentage of On-Balance Sheet Activities
1984-1989



Note: Off-balance sheet activities include loan comittments, standby and commercial letters of credit, futures and forwards contracts, and commitments to purchase foreign exchange
Source: FDIC Annual Reports and Statistics on Banking

TABLE 1: SELECTED BALANCE SHEET RATIOS INSURED COMMERCIAL BANKS

ITEMS	1930's	1940's	1950's	1960's	1970's	1980's	'80-84	'85-89
EQUITY/ASSETS	11.88%	6.89%	7.38%	7.62%	6.39%	6.11%	5.96%	6.22%
LOANS/ASSETS	29.43%	22.04%	38.35%	51.49%	53.73%	57.75%	54.71%	59.94%
LOANS/EQUITY (X)	2.48	3.20	5.20	6.75	8.41	9.45	9.18	9.64
RESERVES/LOANS	-	-	1.65%	1.98%	1.33%	1.78%	1.14%	2.20%
LOANS/DEPOSITS	33.92%	23.79%	42.19%	58.92%	65.00%	74.15%	69.67%	77.42%
RETURN ON ASSETS	0.46%	0.56%	0.61%	0.73%	0.77%	0.61%	0.69%	0.55%
RETURN ON EQUITY	3.84%	8.19%	8.22%	9.61%	12.09%	9.94%	11.65%	8.77%
NET INTEREST MARGIN	1.85%	1.46%	2.32%	2.76%	3.00%	3.32%	3.20%	3.41%
NET LOAN CHARGE-OFFS/LOANS AND LEASES	-	-	0.07%	0.17%	0.39%	0.82%	0.57%	0.99%
NET LOAN CHARGE-OFFS/NET INCOME	-	-	4.39%	11.88%	26.86%	78.39%	45.04%	108.96%

Source: FDIC Annual Report and Statistics on Banking

Table 2: Financial Assets held by Financial Sector

1960-1987

	Commercial Banks	Other Depository Institutions	Sponsored Agencies & Mortgage Pools	Monetary Authority	Insurance Companies	Pension and Retirement Funds	Mutual and Money Market Funds	Other
1987	27.24%	16.98%	10.40%	2.84%	13.78%	14.85%	7.64%	6.27%
1986	28.51%	17.28%	9.67%	3.04%	13.37%	14.69%	7.91%	5.52%
1985	29.49%	18.09%	8.80%	3.08%	13.66%	15.06%	6.21%	5.61%
1984	30.25%	18.98%	8.54%	3.17%	13.56%	14.75%	5.41%	5.34%
1983	30.32%	18.37%	8.21%	3.33%	14.03%	15.70%	4.79%	5.26%
1982	31.14%	17.67%	7.94%	3.56%	14.11%	14.86%	5.43%	5.29%
1981	32.32%	18.22%	7.28%	3.66%	13.95%	14.13%	4.95%	5.48%
1980	32.83%	19.11%	6.85%	3.85%	14.15%	14.74%	3.06%	5.41%
1979	32.80%	20.71%	6.68%	4.29%	14.81%	12.57%	2.50%	5.65%
1978	33.53%	21.64%	5.96%	4.57%	14.98%	12.03%	1.66%	5.62%
1977	33.49%	21.98%	5.41%	4.78%	15.13%	11.94%	1.65%	5.63%
1976	34.25%	21.56%	5.24%	5.09%	15.32%	11.06%	1.90%	5.59%
1975	35.30%	20.99%	5.14%	5.27%	15.10%	10.65%	1.98%	5.57%
1974	37.19%	20.26%	5.08%	5.27%	15.01%	9.46%	1.75%	5.98%
1973	36.96%	19.77%	3.87%	5.19%	15.37%	10.52%	2.30%	6.02%
1972	34.91%	19.51%	3.04%	5.17%	16.04%	12.21%	3.20%	5.92
1971	34.89%	17.90%	3.02%	5.68%	16.44%	11.85%	3.39%	4.41%
1970	35.12%	17.29%	3.19%	5.76%	17.02%	11.46%	3.25%	4.54%
1969	34.81%	17.37%	2.65%	5.89%	17.44%	11.33%	3.53%	4.64%
1968	34.40%	17.52%	2.11%	5.93%	18.07%	11.29%	4.12%	3.90%
1967	33.94%	17.96%	2.03%	6.17%	18.72%	10.97%	3.83%	3.81%
1966	33.66%	18.40%	2.25%	6.35%	19.05%	10.47%	3.28%	4.12%
1965	33.53%	18.65%	1.85%	6.27%	19.26%	10.50%	3.50%	4.07%
1960	34.22%	16.97%	1.71%	7.90%	21.82%	8.75%	2.57%	3.65%

Source: Federal Reserve Board Annual Statistical Digest