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The Commercial Banking System and Competing Nonmonetary Intermediaries

THERE IS A STRONG IMPRESSION CURRENT that the commercial banking system has within the past generation become a much smaller part of the whole financial apparatus, with the consequence that monetary policy is less pervasive and effective than it once was. It is true that many old and some new nonmonetary intermediaries have increased in importance for several decades. Nevertheless, a reading of the recent history suggests that the commercial banking system may not have lost relative position as much as is generally surmised. Moreover, because of the nature of the assets held by the chief intermediaries there is little reason to suppose that monetary policy has been made less effective by their continuing growth.

A half-century comparison of changes in the assets of the banking system with changes in assets of the three largest nonmonetary intermediaries reveals two swings in the proportion of the total held by banks. Similarly, a comparison of changes in the principal liabilities of the banking system with changes in the chief claims against the nonmonetary intermediaries shows two pronounced cycles. The relative position of the banking system became stronger consequent upon the deficit financing of two great wars; it was weakest in the depths of the Great Depression. At the end of 1956 assets of commercial banks amounted to 55 per cent of the total assets of commercial banks, life insurance companies, savings and loan associations, and mutual savings banks. At the same time principal liabilities of commercial banks equalled 52 per cent of total claims against these four institutions.

It is possible that the assets and liabilities of commercial banks, taken as a percentage of the total owned and owed by the four financial institutions, may once again be restored to their historic highs, particularly in the event of governmental deficit financing on a large scale. But even if intermediaries, old and new, should continue to grow relative to the banking system, monetary policy may well remain as effective as it has ever been. This is so because commercial banks alone participate with the central bank in the expansion and contraction of the money supply and because the nonmonetary intermediaries cannot escape the influence of monetary policy, which affects their investment behavior by bringing about changes in the market value of their chief assets, long-term securities. In short, "tight money" means "tight finance," and "easy money" means "easy finance."

Federal Reserve Bank of St. Louis

The Commercial Banking System and

Competing Nonmonetary Intermediaries

IN THE 1957 ECONOMIC REPORT the President repeated his request to Congress, made but a few days before in the State of the Union Message, to authorize a National Monetary and Financial Commission. The request was substantiated with a single sentence: "Recent changes in our financial structure and practices call for careful study of the adequacy of existing facilities for meeting the Nation's capital and credit requirements and of the means for exercising appropriate controls over credit."

That the nation's financial institutions have recently undergone a fundamental structural change is a common observation among economists and financial observers as well as among their lay brethren. In particular there is a strong impression that the commercial banking system has become a much smaller part of the whole financial mechanism, with the consequence that monetary policy is less pervasive and effective than it once was. Some writers have even suggested that certain of the rapidly growing nonmonetary intermediaries should be brought under separate regulation so as to control the supply of financial assets which they create.¹

Unquestionably, many old and some new financial intermediaries have increased in importance for several decades. Self-financing of households and business units, though continuing to be substantial, has to some extent been replaced by external financing—borrowing from other units. External financing may, of course, be direct or indirect; i. e., a borrowing (deficit) unit may obtain funds directly from a lending (surplus) unit, or it may obtain them indirectly from an intermediary. It is the business of most intermediaries to exchange their own liabilities for funds, which are in turn lent to business or household units in exchange for securities such as bonds or mortgages. Indirect financing has for more than half a century increased at the expense of self-financing and direct financing with the result that financial intermediaries have grown, some of them remarkably.²

The commercial banking system has developed tremendously along with the nonmonetary intermediaries. The question so frequently raised nowadays is this: how has the banking system grown in comparison with the nonmonetary intermediaries, which are at once the customers and the competitors of the commercial banks? And after this question is answered, another arises. Given the relative rates of growth of the several institutional types over the recent decades, are there implications for monetary policy in these changes? More precisely, have financial developments outside the commercial banking system meant a lessening impact of central bank action?

Categorical answers to these questions do not emerge from the historical record. Moreover, the upsurge in assets of intermediaries almost unknown a generation ago will necessitate repeated assessments of their relative importance. Nevertheless, a reading of the recent history suggests that the commercial banking system may not have lost relative position as much as is generally surmised. Moreover, because of the nature of the assets held by the chief intermediaries there is little reason to suppose that monetary policy has been made appreciably less effective by the continuing growth of financial intermediaries.

The Banking System and Three Nonmonetary Intermediaries Historically Compared

Table I shows the change since 1910 in assets of commercial banks and the three intermediaries which loom largest in total assets and in the total of claims which they issue.³ The data of Table I are spread in a semi-logarithmic graph in Chart I so that a comparison of the slopes of the several lines permits a comparison of the rates of growth of the different institutions. It is quickly apparent that during the two great wars falling within the 46-year period studied the commercial banking system grew more rapidly than the other types of intermediary. Measured in

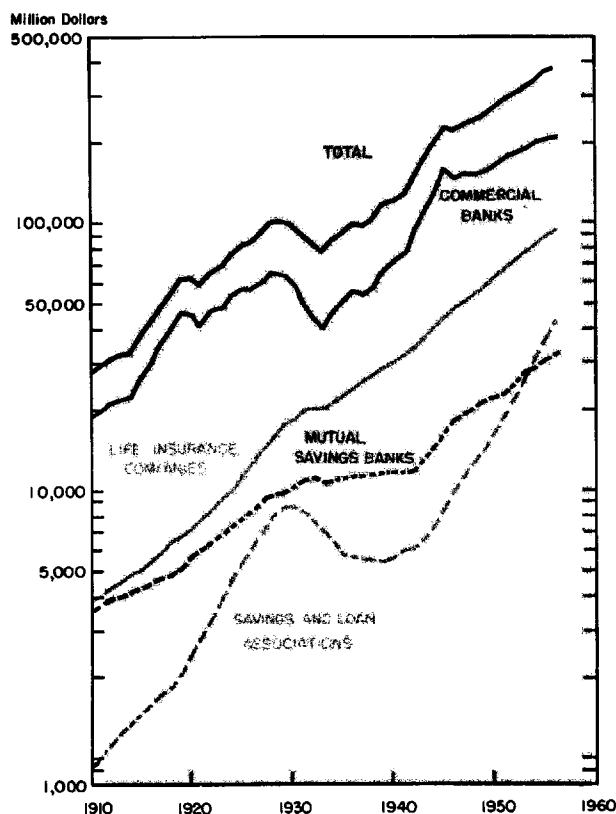
¹ See especially J. G. Gutley and E. S. Shaw, "Financial Aspects of Economic Development," *American Economic Review*, September 1955, pp. 515-538 and "Financial Intermediaries and the Savings-Investment Process," *The Journal of Finance*, May 1956, pp. 257-276.

² See R. W. Goldsmith, *The Share of Financial Intermediaries in National Wealth and National Assets, 1900-1949*, Occasional Paper 42, National Bureau of Economic Research, Inc., 1954, esp. p. 97. See also R. W.

Goldsmith, "Financial Structure and Economic Growth in Advanced Countries," *Capital Formation and Economic Growth*, Princeton: Princeton University Press, 1955, pp. 113-160.

³ For a full classification of intermediaries and trends in their growth to 1949 see Goldsmith, *The Share of Financial Intermediaries in National Wealth and National Assets, 1900-1949*, especially p. 26. Large public intermediaries, such as Federal pension and retirement funds and Government lending agencies, are omitted from present consideration. Some rapidly growing institutions, such as private self-administered pension funds, will be considered later.

Chart I
Growth of Total Assets
of Major Financial Institutions



Source: From Table I

terms of assets held, the sharpest retrogression of the banking system occurred with the deflation of the Great Depression, but it is a fact worth noting that total bank assets continued to rise during the recession years of 1948-49 and 1953-54. During the three years 1954-56 there was a pronounced tendency for the total curve and the curve of commercial-bank assets to diverge.

Growth of life insurance company assets has been continuous since 1910, though the rise in assets was very small during three years of deepest depression. The long-term contractual nature of the savings involved plus the fact that households feel strongly the need for protection even in bad times accounts for the smooth upward thrust of the curve. Mutual savings banks were adversely affected by almost a decade of below-normal economic activity, but actual decreases in asset holdings were infrequent and mild. Savings and loan associations proved vulnerable to the onslaught of a major depression, and for nine successive years (1931-39, inclusive) suffered a decrease in assets. Since 1946, however, the rate of growth of the savings and loan associations has been greater

than that of commercial banks, life insurance companies or mutual savings banks and has somewhat exceeded their own rate of growth in the 1920's. Indeed, the effectiveness of savings and loan efforts to attract savings has been in large part responsible for much of the current agitation for a re-examination of the competitive positions of commercial banks and nonmonetary intermediaries.⁴

TABLE I
TOTAL ASSETS OF MAJOR FINANCIAL INSTITUTIONS
(MILLIONS OF DOLLARS)

End of Year	Commercial Banks	Life Insurance Companies	Savings and Loan Associations	Mutual Savings Banks	Total
1910	19,226	3,876	932	3,690	27,724
1911	20,574	4,164	1,031	3,837	29,606
1912	21,822	4,409	1,138	4,015	31,384
1913	22,683	4,659	1,248	4,170	32,760
1914	23,058	4,935	1,358	4,273	33,624
1915	27,527	5,190	1,484	4,408	38,609
1916	30,972	5,537	1,599	4,651	42,759
1917	36,747	5,941	1,769	4,810	49,267
1918	40,988	6,475	1,898	4,940	54,301
1919	47,843	6,791	2,127	5,363	62,124
1920	46,644	7,320	2,520	5,840	62,324
1921	42,208	7,936	2,891	6,160	59,195
1922	47,267	8,652	3,343	6,597	65,859
1923	49,203	9,455	3,943	7,023	69,624
1924	54,224	10,394	4,766	7,538	76,922
1925	57,475	11,538	5,509	8,025	82,547
1926	58,105	12,940	6,334	8,572	85,951
1927	61,433	14,392	7,179	9,240	92,244
1928	66,429	15,961	8,016	9,780	100,186
1929	65,621	17,482	8,695	9,873	101,671
1930	61,985	18,880	8,829	10,540	100,234
1931	51,420	20,160	8,417	11,137	91,134
1932	45,738	20,754	7,737	11,103	85,332
1933	40,640	20,896	7,018	10,758	79,312
1934	47,586	21,844	6,406	11,008	86,844
1935	52,338	23,216	5,875	11,173	92,602
1936	57,672	24,874	5,772	11,485	99,803
1937	55,475	26,249	5,682	11,562	98,968
1938	58,243	27,755	5,632	11,611	103,241
1939	65,216	29,243	5,597	11,852	111,908
1940	72,799	30,802	5,733	11,981	121,315
1941	79,104	32,731	6,049	11,808	129,692
1942	96,891	34,931	6,150	11,907	149,879
1943	114,199	37,766	6,604	13,024	171,593
1944	137,090	41,054	7,458	14,761	200,363
1945	160,312	44,797	8,747	16,987	230,843
1946	149,517	48,191	10,202	18,665	226,575
1947	155,377	51,743	11,687	19,714	238,521
1948	154,506	55,512	13,028	20,474	243,520
1949	157,462	59,630	14,622	21,493	253,207
1950	168,932	64,020	16,893	22,385	272,230
1951	179,464	68,278	19,222	23,439	290,403
1952	188,603	73,375	22,660	25,233	309,871
1953	193,010	78,533	26,733	27,130	325,406
1954	202,378	84,486	31,736	29,276	347,876
1955	210,734	90,432	37,880	31,274	370,320
1956 p	213,760	95,819	43,098	33,300	385,977

p Preliminary

Sources: *Banking and Monetary Statistics, Federal Reserve Bulletin, 1956 Life Insurance Fact Book, Savings and Home Financing Source Book, 1956, Annual Report, Comptroller of the Currency, and Goldsmith, Raymond W., A Study of Savings in the United States.*

⁴ For a discussion of competitive positions among intermediaries for savings, see "The Structure of Banking in the Eighth District: Chains, Groups and Interindustry Competition," *Monthly Review*, Federal Reserve Bank of St. Louis, October 1956, pp. 117-118.

Table II gives a percentage distribution of the total assets of major financial institutions. In 1910 commercial banks owned 70 per cent of the assets held by the institutions studied; by 1956 the percentage had dropped to 55. Life insurance companies, meantime, had increased their percentage of the total from 14 to 25, savings and loan associations had increased their percentage of the total from 3 to 11, and mutual savings banks had dropped from 13 per cent of the total to 9 per cent.

It should be observed, however, that these changes were not uninterrupted. Actually, within the period studied the commercial banks held their highest por-

tion of total assets in 1919, a year which marked a low point for the life insurance companies. On the other hand, in 1933 commercial banks held only 51 per cent of the assets of these four institutions; in this same year mutual savings banks were at their high point with 14 per cent of the total, and life insurance companies, at 26 per cent, were within one point of their 1938 high. By 1945 commercial banks once again held 70 per cent of the total assets owned by the four groups. However, this percentage dropped sharply in 1946 with a sudden decrease in bank-held debt and continued to fall slowly until 1953.

A 1953-56 drop of 5 percentage points in the commercial bank proportion of total assets has doubtless been startling to some people. The fall is in large part the result of a slowing of the growth of the money supply. It leaves the commercial banking system in about its position of a generation ago but at least ten percentage points below the proportion of assets held during the prosperous years of the late 20's.

A change in the focus of attention from the assets of major financial institutions to their principal liabilities is enlightening (see Tables III and IV). In 1910 total deposits of commercial banks amounted to 63 per cent of claims against the major financial institutions studied; in 1956 the percentage had dropped to 52.

Again, variations within the 46-year time span are instructive. In 1920 total commercial bank deposits were 71 per cent of claims against the financial institutions studied, the remaining 29 per cent being almost equally divided between mutual savings banks and life insurance companies. The growth of the non-monetary intermediaries steadily reduced this percentage to 60 in 1929. The reduction was in demand deposits, however; time deposits actually increased in proportion by a substantial amount during the decade of the 1920's. From a low point of 48 per cent of the total in 1933 commercial banks' total deposits rose slowly during the depressed 1930's, rising rather rapidly with the onset of war to a recent high of 64 per cent of the total in the years 1945-47. The trend has been downward since that year, with a pronounced decline in the most recent three-year period.

The notable recent decline in the commercial banks' share of total claims against the financial institutions studied has been on the demand-deposit side, a drop of 11 percentage points in the postwar years. In the same period time deposits have remained remarkably stable as a proportion of total liabilities. In the post-

TABLE II

TOTAL ASSETS OF MAJOR FINANCIAL INSTITUTIONS,
PERCENTAGE DISTRIBUTION

End of year	Commercial Banks	Life Insurance Companies	Savings and Loan Associations	Mutual Savings Banks	Total
1910	70	14	3	13	100
1911	70	14	3	13	100
1912	70	14	3	13	100
1913	69	14	4	13	100
1914	68	15	4	13	100
1915	71	14	4	11	100
1916	72	13	4	11	100
1917	75	12	3	10	100
1918	75	12	4	9	100
1919	77	11	3	9	100
1920	75	12	4	9	100
1921	71	14	5	10	100
1922	72	13	5	10	100
1923	71	13	6	10	100
1924	70	14	6	10	100
1925	70	14	6	10	100
1926	68	15	7	10	100
1927	67	15	8	10	100
1928	66	16	8	10	100
1929	65	17	8	10	100
1930	62	19	9	10	100
1931	57	22	9	12	100
1932	54	24	9	13	100
1933	51	26	9	14	100
1934	55	25	7	13	100
1935	57	25	6	12	100
1936	58	25	6	11	100
1937	56	26	6	12	100
1938	56	27	6	11	100
1939	58	26	5	11	100
1940	60	25	5	10	100
1941	61	25	5	9	100
1942	65	23	4	8	100
1943	67	22	4	7	100
1944	69	20	4	7	100
1945	70	19	4	7	100
1946	66	21	5	8	100
1947	65	22	5	8	100
1948	64	23	5	8	100
1949	62	24	6	8	100
1950	62	24	6	8	100
1951	62	23	7	8	100
1952	61	24	7	8	100
1953	60	24	8	8	100
1954	58	24	9	9	100
1955	57	25	10	8	100
1956	55	25	11	9	100

Source: Computed from data in Table I.

TABLE III
PRINCIPAL LIABILITIES OF (CLAIMS AGAINST) MAJOR FINANCIAL INSTITUTIONS
(MILLIONS OF DOLLARS)

End of year*	Commercial Banks			Life Insurance Companies	Savings and Loan Associations	Mutual Savings Banks	Total
	Demand Deposits (adjusted)	Time Deposits	Total Deposits	Policy Reserves less Policy Loans	Share Accounts of Individuals	Total Deposits	
1910	8,254	3,636	11,890	2,731	759	3,392	18,772
1911	8,668	3,928	12,596	2,931	n.a.	3,526	n.a.
1912	9,156	4,313	13,469	3,107	n.a.	3,687	n.a.
1913	9,140	4,606	13,746	3,276	n.a.	3,833	n.a.
1914	10,082	4,441	14,523	3,431	n.a.	3,919	n.a.
1915	9,828	5,264	15,092	3,619	1,190	4,044	23,945
1916	11,973	6,088	18,061	3,909	n.a.	4,327	n.a.
1917	13,501	7,038	20,539	4,223	n.a.	4,417	n.a.
1918	14,843	7,207	22,050	4,590	n.a.	4,533	n.a.
1919	17,624	8,522	26,146	5,025	n.a.	4,940	n.a.
1920	19,616	10,509	30,125	5,479	1,741	5,395	42,740
1921	17,113	10,917	28,030	5,845	1,965	5,642	41,482
1922	18,045	11,592	29,637	6,308	2,210	6,002	44,157
1923	19,144	13,871	33,015	6,932	2,626	6,378	48,951
1924	20,898	15,280	36,178	7,616	3,153	6,820	53,767
1925	22,288	16,570	38,858	8,481	3,811	7,219	58,369
1926	21,721	17,508	39,229	9,462	4,378	7,683	60,752
1927	22,730	18,962	41,692	10,494	5,027	8,265	65,478
1928	23,081	19,761	42,842	11,596	5,762	8,770	68,970
1929	22,809	19,192	42,001	12,569	6,237	8,838	69,645
1930	20,967	19,012	39,979	13,424	6,296	9,424	69,123
1931	17,412	15,366	32,778	14,015	5,916	10,012	62,721
1932	15,728	13,631	29,359	14,033	5,326	9,929	58,647
1933	15,035	11,019	26,054	14,308	4,750	9,488	54,600
1934	18,459	12,213	30,672	15,372	4,458	9,738	60,240
1935	22,115	13,170	35,285	16,864	4,254	9,871	66,274
1936	25,483	14,046	39,529	18,389	4,194	10,056	72,168
1937	23,959	14,779	38,738	19,803	4,080	10,170	72,791
1938	25,986	14,766	40,752	21,106	4,077	10,278	76,213
1939	29,793	15,258	45,051	22,579	4,118	10,523	82,271
1940	34,945	15,777	50,722	24,147	4,322	10,658	89,849
1941	38,992	15,884	54,876	26,026	4,682	10,532	96,116
1942	48,922	16,352	65,274	28,114	4,941	10,641	108,970
1943	60,803	19,224	80,027	30,676	5,494	11,717	127,914
1944	66,930	24,074	91,004	33,443	6,305	13,351	144,103
1945	75,851	30,135	105,986	36,705	7,365	15,385	165,441
1946	83,314	33,808	117,122	39,805	8,548	16,835	182,310
1947	87,121	35,249	122,370	42,945	9,753	17,763	192,831
1948	85,520	35,804	121,324	46,101	10,964	18,405	196,794
1949	85,750	36,146	121,896	49,258	12,471	19,293	202,918
1950	92,272	36,314	128,586	52,533	13,992	20,031	215,142
1951	98,234	37,859	136,093	55,957	16,107	20,915	229,072
1952	101,508	40,666	142,174	59,866	19,195	22,586	243,821
1953	102,451	43,659	146,110	63,709	22,846	24,398	257,063
1954	106,650	46,844	153,494	67,776	27,334	26,359	274,963
1955	109,914	48,359	158,273	72,069	32,192	28,187	290,721
1956**	105,410	50,590	156,000	76,000	37,302	30,026	299,328

* June 30 from 1910 through 1922.

** Preliminary or estimated.

n.a. Not available.

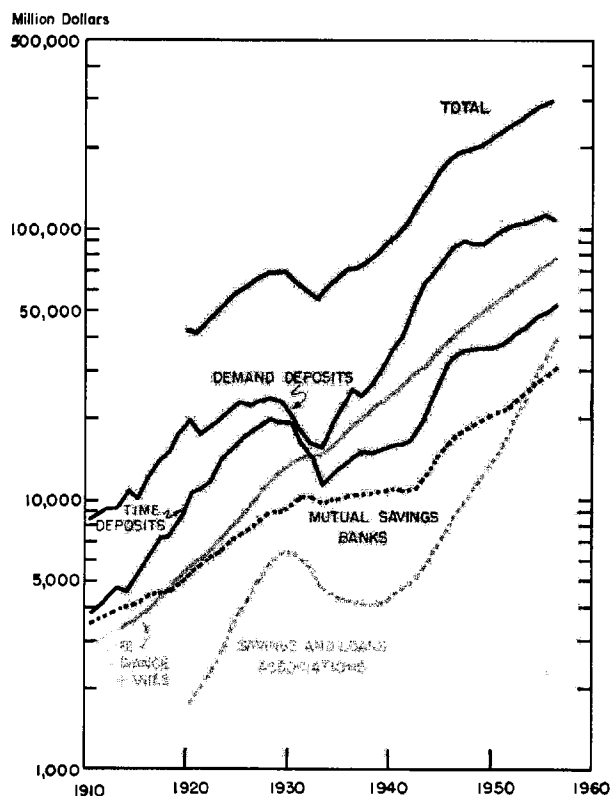
Sources: *Banking and Monetary Statistics*, Federal Reserve Bulletin, Annual Report, Comptroller of the Currency, 1956 *Life Insurance Fact Book*, Savings and Home Financing Source Book, 1956, National Association of Mutual Savings Banks Statistical Bulletin, Federal Home Loan Bank Board releases, *Savings and Mortgage Statistics*, American Bankers Association, and Goldsmith, Raymond W., *A Study of Savings in the United States*.

war years deposits of mutual savings banks and policy reserves less policy loans of life insurance companies have been quite steady, whereas savings accounts of individuals with savings and loan associations have increased rapidly.

As measured in terms of a proportion of principal liabilities of the major financial institutions studied,

the commercial banking system appears to have held its own very well indeed. At the end of 1956 demand deposits as a portion of the total were actually higher than they were in the late 1920's. Total deposits of commercial banks at the end of 1956 were eight percentage points below their position in 1929, the fall in the relative position of time deposits accounting

Chart II
Growth of Principal Liabilities
of Major Financial Institutions



Source: From Table III

for more than the difference. A drop in the proportion of mutual savings banks' deposits was more than offset by a rise in the proportions of share accounts with savings and loan associations and cash values of life insurance policies.

It is apparent that the inclusion of other private intermediaries in the comparison would reduce the percentages of assets and principal liabilities accounted for by the commercial banks. Credit unions and private noninsured pension funds, for example, have had a remarkable growth in recent years. Credit unions at the end of World War II had less than \$0.5 billion of assets, which by the end of 1956 exceeded \$3 billion. Assets of noninsured pension plans rose from \$2.7 billion at the end of 1945 to more than \$16 billion at the end of 1956.⁵ If present rates of growth continue private pension funds may, within a gener-

⁵ Insured plans administered by insurance companies had more than \$12 billion of assets at the end of 1956, so that the assets of all private pension plans were approaching \$28 billion and were believed to be growing at the rate of \$2.5 billion to \$3 billion a year.

ation or two, have assets exceeding those of some of the institutions selected for comparison.

Over the period studied a reading of the historical record reveals both increases and decreases in the relative position of the commercial banks' demand deposits, but little in the way of a persistent trend in either direction. This fact, coupled with the relative stability in the position of time deposits over the last two decades, has resulted in no sharp change in the position of the commercial banking system as against the chief nonmonetary intermediaries. It is not impossible, or even unlikely, that the assets and liabilities of commercial banks, taken as a percentage of the total owned and owed by financial institutions, may once again be restored to their historic highs, particularly in the event of Governmental deficit financing on a large scale.

The Responsiveness of Nonmonetary Intermediaries to Monetary Controls

But even if intermediaries, old and new, should continue to grow relative to the banking system, monetary policy may well remain as effective as it has even been. In the first place, commercial banks retain their unique functions of holding most of the country's money supply on their books and of participating with the central bank in the expansion and contraction of the money supply. The nonmonetary intermediaries, on the other hand, are simply the customers of banks, like any other business firm or any individual. Like any business or household unit the intermediaries may create liabilities against themselves, and in some instances, as in the case of savings and loan shares or deposits with mutual savings banks, these liabilities may serve as substitutes for money. But only as substitutes.

The central fact remains that the nonmonetary intermediaries can by no means add to the amount of money that there is at a moment of time. As the word "intermediary" implies, they are go-betweens in the credit-extending process. They receive money, largely from households, in the form of cash or of checks drawn on commercial banks; except for till money, the cash or checks are deposited again in commercial banks until such time as the funds are lent or "invested."⁶ In any period of time an intermediary can,

⁶ The present discussion is concerned only with private intermediaries. The same reasoning applies, however, to the Federal financial institutions such as the Federal Home Loan Banks, the Federal National Mortgage Association, the Export-Import Bank, and numerous other go-betweens. They cannot create money. New money results from their lending activities only when expenditures resulting from appropriations to them create a Treasury deficit and the deficit is met by Treasury borrowing from commercial banks or from the central bank.

TABLE IV
PRINCIPAL LIABILITIES OF (CLAIMS AGAINST) MAJOR FINANCIAL INSTITUTIONS
PERCENTAGE DISTRIBUTION

End of year	Commercial Banks			Life Insurance	Savings and Loan	Mutual Savings	Total
	Demand Deposits (adjusted)	Time Deposits	Total Deposits	Companies Policy Reserves less Policy Loans	Associations Share Accounts of Individuals	Banks Total Deposits	
1910	44	19	63	15	4	18	100
1915	41	22	63	15	5	17	100
1920	46	25	71	13	4	12	100
1921	41	26	67	14	5	14	100
1922	41	26	67	14	5	14	100
1923	39	29	68	14	5	13	100
1924	39	28	67	14	6	13	100
1925	38	28	66	15	7	12	100
1926	36	29	65	15	7	13	100
1927	35	29	64	16	7	13	100
1928	33	29	62	17	8	13	100
1929	33	27	60	18	9	13	100
1930	30	28	58	19	9	14	100
1931	28	24	52	22	10	16	100
1932	27	23	50	24	9	17	100
1933	28	20	48	26	9	17	100
1934	31	20	51	26	7	16	100
1935	33	20	53	26	6	15	100
1936	35	20	55	25	6	14	100
1937	33	20	53	27	6	14	100
1938	34	19	53	28	5	14	100
1939	36	19	55	27	5	13	100
1940	39	17	56	27	5	12	100
1941	41	16	57	27	5	11	100
1942	45	15	60	25	5	10	100
1943	48	15	63	24	4	9	100
1944	46	17	63	23	5	9	100
1945	46	18	64	22	5	9	100
1946	46	18	64	22	5	9	100
1947	45	19	64	22	5	9	100
1948	44	18	62	23	6	9	100
1949	42	18	60	24	6	10	100
1950	43	17	60	24	7	9	100
1951	43	17	60	24	7	9	100
1952	41	17	58	25	8	9	100
1953	40	17	57	25	9	9	100
1954	39	17	56	25	10	9	100
1955	38	16	54	25	11	10	100
1956	35	17	52	25	13	10	100

Source: Computed from data in Table III.

of course, lend or invest the receipts of that period less reserves that it wishes to keep as a bank deposit for any purpose. In addition, an intermediary may sell any of its assets previously acquired in order to make new (and presumably more profitable) loans.

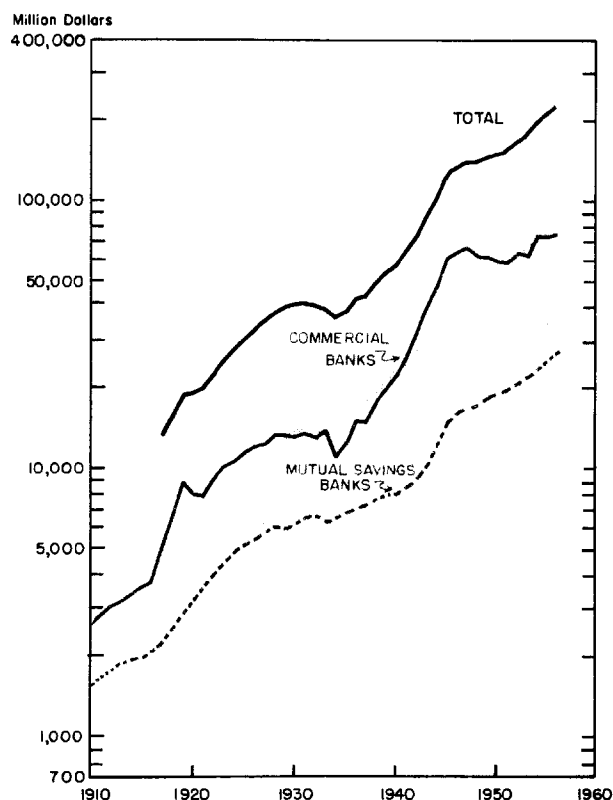
At this point it becomes necessary to pay attention to the possibility of massive liquidation of the great volume of assets which the intermediaries hold. If intermediaries were ordinarily uninhibited in the liquidation of their assets, as was the case of the life insurance companies with respect to their holdings of government securities during the six years after World War II, their lending power would be but little influenced by central bank restraints. But one of the objectives of a restrictive monetary policy is to provide such inhibitions.

It is not the purpose of the present article to treat theoretical questions. Nor is it intended to describe the full impact of monetary controls on the banking system and nonmonetary intermediaries. It is appropriate, though, to recall that monetary controls affect lenders as well as borrowers, and a case can be made for the assertion that the lender effect is more important than the borrower effect.⁷

In times of restrictive monetary policy, when interest rates are rising, prices of fixed income securities fall. This is so because securities are valued in the marketplace on the basis of anticipated returns,

⁷ For an official Federal Reserve statement see "Influence of Credit and Monetary Measures on Economic Stability," *Federal Reserve Bulletin*, March 1953, esp. pp. 221-24. See also, Robert V. Roosa, "Interest Rates and the Central Bank," in *Money, Trade, and Economic Growth*, New York: The MacMillan Company, 1951, pp. 270-295.

Chart III

Growth of Chief Long-Term Debt Holdings
of Major Financial Institutions

Source: From Table V

capitalization being at current yields including allowance for risk. As prices of fixed income securities, particularly bonds and mortgages, continue to decline, losses which sellers must take in the event of liquidation increase. There is no such thing, of course, as an absolute "lock in," but in times of rising yields lenders repeatedly demonstrate their reluctance to sell depreciated, low-yielding securities in order to obtain newly issued higher yielding ones.

Moreover, the major intermediaries have developed techniques of making forward commitments of funds to corporate, mortgage and other borrowers. But if interest rates are rising, nonbank lenders are increasingly hesitant about making advance commitments, particularly if they anticipate further rises in yields on securities. The effect of rising rates on the willingness of lenders to make forward commitments on mortgage loans has been especially notable within the past two years.

Contrariwise, as interest rates decline, nonbank lenders in the long-term market find their positions increasingly liquid. As prices of securities in their

portfolios continue to rise, lenders are willing and sometimes eager to take profits and make new loans before interest rates fall any further. Anticipation of a continuing fall in rates makes them also more willing to make advance commitments to lend, particularly in the mortgage market, at current rates of return.

The nonbank intermediaries previously discussed, as well as the commercial banking system, have the major part of their investments in long-term securities, chiefly debt instruments.⁸ As Table V shows, commercial banks, life insurance companies, savings and loan associations, and mutual savings banks at the end of 1956 held in their portfolios about 28 per cent of total public and private debt outstanding or approximately 45 per cent of long-term debt outstanding. These percentages have remained almost constant for a decade and a half. Moreover, as Chart III suggests, the growth of total long-term debt holdings of these institutions has been rapidly and steadily upward in recent years.

At the end of 1956, 84 per cent of the assets of life insurance companies consisted of securities of business and industry (almost entirely bonds), mortgages, state and local bonds, and United States Government securities. At the same time, mutual savings banks had invested 82 per cent of their total resources in mortgages and United States Government securities.

TABLE V

RELATIONSHIP OF THE LONG-TERM DEBT HOLDINGS
OF THE FOUR MAJOR FINANCIAL INSTITUTIONS
TO TOTAL DEBT OUTSTANDING, 1930-1956

End of year	Long-term debt holdings ¹	Long-term debt outstanding	Total debt outstanding	Long-term debt holdings of the major financial institutions as a per cent of	
				Long-term debt outstanding	Total debt outstanding
1930	41.3	133.9	214.3	31%	19%
1935	38.8	118.8	200.2	33%	19%
1940	58.0	140.7	215.8	41%	27%
1945	122.2	282.5	463.3	43%	26%
1950	149.2	347.8	566.8	43%	26%
1955	211.3	467.3	768.5	45%	27%
1956 ²	221.2	490.0	801.5	45%	28%

¹ Except for 1930, an adjustment was made for short-term United States Government securities held by commercial banks. Short-term government securities held by other institutions constitute a small part of the totals.

² 1956 data are preliminary or estimated.

Sources: *Banking and Monetary Statistics, Federal Reserve Bulletin, Annual Report, Comptroller of the Currency, Savings and Loan Fact book, 1956, National Association of Mutual Savings Banks Statistical Bulletin, 1956 Life Insurance Fact Book, Reports of Federal Deposit Insurance Corporation, Survey of Current Business, and Goldsmith, Raymond W., A Study of Savings in the United States.*

⁸ The expression of "long-term" as used here and in Table V refers to instruments which had maturities of five years or more at time of issue. A large percentage of such instruments, particularly those held by commercial banks, at any given time will mature in less than five years.

Savings and loan associations carried 90 per cent of their assets in the form of mortgages and United States Government securities, the latter being relatively unimportant. Over the long pull, there has been a tendency for life insurance companies and mutual savings banks to keep ever larger portions of their total assets in long-term debt instruments, whereas savings and loan associations have kept their long-term debt holdings approximately constant at the 90 per cent figure.

Thus, on the basis of the rather clearly demonstrated historical fact that monetary policy bears on owners of long-term debt instruments by bringing about a change in the market value of their assets, it seems safe to conclude that the nonmonetary intermediaries cannot escape the influence of monetary management. Of course, these institutions can freely lend their current receipts; it is simply pointed out here that during episodes of monetary restriction they are deterred from shifting out of assets already in their portfolios. Since current receipts largely represent current savings including debt repayment, loans from current receipts do not present much of a problem to the central bank.

Monetary Controls Mean Financial Controls

For some purposes it is necessary to view the nonmonetary intermediaries as customers of commercial banks. It is undeniable, though, that particular intermediaries may be competitors of individual commercial banks, both for funds and for loans. Recently, banks have viewed the competition for funds as the more serious, but the competition on the lending side may become of more concern in the future.

Earlier in this article it was argued that, although many commercial banks have felt the competition of intermediaries in terms of a diminished rate of increase of time deposits, funds received by the intermediaries are almost at once transferred as demand deposits to commercial banks. In a previous *Monthly Review* the changing nature of the lending competition among banks and nonmonetary intermediaries was sketched.⁹

⁹ *op. cit.*, pp. 117-120.

Commercial banks in the United States have been in competition with life insurance companies, fraternal life insurance organizations and property insurance companies from the very beginning. By the middle of the 19th century mutual savings banks and savings and loan associations had entered the competition, and mortgage companies were in existence by the fourth quarter of the 19th century. By 1910 the Postal Savings system, credit unions, small loan companies, sales finance companies, and local pension funds were beginning to grow, and investment companies and private pension funds were started by 1925. The rise of the Federal intermediaries, particularly Federal social security funds, began in the 1930's.

It is almost an arithmetic truism that as new intermediaries are introduced and old ones thrive the relative importance of the commercial banks, measured by the ratio of their assets to the total assets of financial institutions, will decline. It is evident from the present study, however, that the commercial banking system has not fared badly; it has great vitality and in times of rapid money creation gains in relative size.

But even a retrogression in the relative size of the commercial banking system may not have serious implications for monetary policy. The rapid increase in the volume of assets of nonmonetary institutions does not necessarily make them less amenable to a flexible monetary policy. Indeed, because of the nature of their assets, it is probably through the nonmonetary intermediaries as well as the commercial banking system that monetary policy is made effective. In short, "tight money" means "tight finance," and "easy money" means "easy finance."

Anyone interested in economics and finance will find it rewarding to observe the changing, shifting nature of competition among financial institutions over the coming decades. It may even be that fundamental structural change is in the offing. At the moment, though, there is little reason to think that coming changes will weaken central bank controls.

ROSS M. ROBERTSON



Survey

OF CURRENT CONDITIONS

BUSINESS CONDITIONS in the Eighth Federal Reserve District in April remained about the same as in the first quarter of the year, after allowance for seasonal movements. While economic activity was generally high, it was apparently not as great as a year ago, judging from employment reports. As a result of the inflation in prices in the past year, however, dollar measures of economic activity showed more favorable records.

In the nation economic activity also continued at a fairly constant pace. Most of the available measures of physical volume of economic activity showed little change from fourth quarter 1956 to first quarter 1957 on a seasonally adjusted basis. Total industrial production and employment in nonagricultural establishments remained virtually unchanged. Wage rates, however, continued to rise and, with the advance in labor income, total personal income climbed further. The increase in prices, however, absorbed much of the gain in income. In the first quarter of 1957 per capita disposable income was about 3½ per cent higher than a year earlier, but when adjusted for price change it was at about the same level. The gross national product in the first quarter of 1957 rose about \$3 billion from the fourth quarter of 1956, on a seasonally adjusted annual rate basis. Here, too, the increase largely reflected the advance in prices and wages. In physical terms there was very little, if any, increase.

The leveling in business activity in recent months reflected primarily the shift from inventory accumulation to no net additions to inventories. As a result of this shift, gross private domestic investment declined \$4 billion on a seasonally adjusted annual rate basis from the last quarter of 1956 to the first quarter of 1957. The drop offset, in part, the continued increases in personal consumption expenditures, government purchases of goods and services, and net foreign investment. Consumer expenditures for goods and services advanced \$4 billion. Government purchases of goods and services rose \$2½ billion as Federal outlays for national security purposes and state and local expenditures continued to advance.

Industry

Industrial production in the Eighth District was relatively steady in April. Changes were small and,

except for declines in automobiles and lumber, were largely in keeping with the season. Steel mills in the St. Louis area operated at or above capacity in the first two weeks of the month, dropping to near 90 per cent in the last two weeks. While operating rates averaged the same as in April a year ago, owing to capacity increases the mills turned out a fraction more steel this April. Operations at district mills have exceeded national rates from February on; in April St. Louis area mills averaged 97 per cent of capacity versus 91 per cent in the nation.

Automobile production continued its slow decline as manufacturers sought to avoid inventory problems. One plant discontinued its second shift April 1, and another made minor layoffs. The district was little affected by strikes and Good Friday shut-downs which reduced output elsewhere in the nation. Preparations for production of a new make of automobile went forward at Louisville.

Operations in the lumber industry in the South sank to the lowest ebb in several years, paralleling the decline in residential construction. While output in the southern pine industry rallied slightly from February to March, a sag in early April brought operations to the lowest level since 1954. In the hardwood milling industry the continued decline brought operations in the first half of April to 75 per cent of capacity, lowest for the month since 1949.

Coal production in the district shared only slightly in the contra-seasonal rise in national output in March. In early April output continued to decline seasonally, lagging behind a year earlier. Crude petroleum output of some 395,000 barrels per day has been steady since November, after an almost continuous climb beginning in 1953.

Livestock slaughter in the St. Louis area dropped back to the February level in April, after a minor spurt in March. Slaughter was still slightly above a year earlier. Despite the temporary increase in March, meat packing in the district that month was below a year earlier, owing largely to variations in hog marketings.

The number of employees in manufacturing rose slightly from February to March in Evansville, Louisville, Memphis, St. Louis and Springfield, but did not change in Little Rock. Contributing to the slight

rise in manufacturing employment were increases in the food and aircraft industries in St. Louis, food and motor vehicles in Louisville and refrigerators in Evansville.

The manufacturing employment situation in district major cities this March compared with a year earlier varied greatly from city to city. Percentage-wise, Evansville and Springfield showed large increases, St. Louis and Memphis had slight gains, while Louisville and Little Rock had declines.

Labor Markets

Total nonagricultural employment in the district's six largest labor market areas increased less than 1 per cent from February to March. The percentage gain was about the same as in the nation. However, employment in the district areas has generally declined in the past year compared with an advance nationally. As shown in the table, four district areas had lower employment levels and considerably higher unemployment levels this March as compared with a year ago. The increase in employment in Evansville reflects the improvement from depressed conditions a year ago.

Unemployment declined 10 to 15 per cent from February to March in Little Rock, Evansville and Louisville, but remained at the same level in Memphis. However, district area unemployment apparently did not shrink further in April as evidenced by the volume of insured unemployment. In the four weeks ended April 20 unemployment insurance claims rose slightly in the Louisville area and considerably in the St. Louis and Evansville areas.

DISTRICT EMPLOYMENT AND UNEMPLOYMENT
(Numbers in thousands)

Metropolitan Area	Total Nonagricultural Employment			Unemployment		
	March 1957	March 1956	Per Cent Change	March 1957	March 1956	Per Cent Change
Evansville...	72.5	68.4	+6.0	5.2	7.6	-31.6
Little Rock...	69.7	71.9	-3.1	4.7	3.4	+38.2
Louisville...	248.6	252.7	-1.6	17.3	14.4	+20.1
Memphis...	186.1	187.3	-0.6	12.9	11.1	+16.2
St. Louis...	722.7	723.6	-0.1	38.3	34.6	+10.7
Springfield...	36.0	34.6	+4.0	3.1	3.2	-3.1
Total...	1335.6	1338.5	-0.2	81.5	74.3	+9.7

Source: State Employment Security Divisions.

Trade

Department store sales in the Eighth Federal Reserve District in March and the first three weeks of April were about the same as those of a year earlier. However, some increase had been expected in this period because of the later date of Easter this year than last. In March district sales fell 8 per cent short of sales in March 1956, after allowance for the difference in the number of trading days. Sales in the first three weeks of April were about 10 per cent greater than a year earlier.

New automobile sales in the first part of April continued at a lower level than a year earlier and failed to match the early March rate. March sales of new cars had improved about seasonally from February, but were still less than a year earlier even after allowance for one more trading day in March 1956. In the first 10 days of April sales were about 12 per cent less than a year earlier.

Banking

Further demonstration of the level course of business activity was apparent in the trend of loans at weekly reporting member banks. Business loans declined about as much as usual and other loans rose moderately in the four weeks ended April 17. The changes in business loans by major industry classification varied from the pattern established in the corresponding weeks of recent years. Loans to commodity dealers, which normally decline at this time, rose moderately; whereas loans to sales finance companies, which have been rising, declined substantially in the four weeks, as these firms apparently obtained financing from nonbank sources.

Investment holdings of the weekly reporting banks rose in the period primarily as a result of net purchases of the new issues of Treasury certificates of indebtedness and notes.

Total deposits at the weekly reporting district banks rose more than \$90 million in the four weeks under review. Most of the deposit growth was in demand accounts of individuals, businesses and other banks, offset in part by net withdrawals of Government deposits. With the inflow of funds these banks made reductions in borrowings in the period.

Agriculture

Early spring farming operations over most of the district were delayed during April by muddy fields. Corn planting and land preparation for cotton in the southern part of the district were almost at a standstill in early April. Spring oat seeding was delayed in Illinois, Indiana and Missouri. Farmers in these states will probably divert some intended oat acreage to other crops which can be planted later. Winter grains in the district are generally in good to excellent condition, except in some lowlands.

Prices received by district farmers for cattle, hogs and eggs rose slightly during the four weeks ending April 12. The increases were offset, however, by slightly lower prices received for milk, broilers, corn and wheat. Prices averaged higher than a year earlier. Largely as a result of the advance in prices, district farm income for the first two months of 1957 was approximately 7 per cent above that of the previous year. All district states except Missouri showed some increase.

The District Record

Industry

VARIOUS INDICATORS OF INDUSTRIAL ACTIVITY

	Mar. 1957	Mar. 1957* compared with Feb. 1957	Mar. 1956
Industrial Use of Electric Power (Thousands of KWH per working day, selected industrial firms in 8 district cities)	n.a.	n.a.	n.a.
Steel Ingot Rate, St. Louis area (Operating rate, per cent of capacity)	98	-0-	4
Coal Production Index—8th Dist. (Seasonally adjusted, 1947-49=100)	99.7 p	+1	6
Crude Oil Production—8th Dist. (Daily average in thousands of bbls.)	395.1	-0-	3
Freight Interchanges at RRs—St. Louis. (Thousands of cars—25 railroads—Terminal R. R. Assn.)	110.4	+11	4
Livestock Slaughter—St. Louis area. (Thousands of head—weekly average)	126.0	+8	4
Lumber Production—S. Pine (Average weekly production—thousands of bd. ft.)	202.3	+2	5
Lumber Production—S. Hardwoods. (Operating rate, per cent of capacity)	81	-4	8

* Percentage change is shown in each case. Figures for the steel ingot rate, Southern hardwood rate, and the coal production index, show the relative percentage change in production, not the drop in index points or in percents of capacity.

p Preliminary. n.a. Not available.

Banking BANK DEBITS¹

	March 1957 (In millions)	March, 1957 compared with February 1957	March 1956
Six Largest Centers:			
East St. Louis—National Stock Yards, Ill.	\$ 142.9	+ 8%	+10%
Evansville, Ind.	189.2	+ 9	+15
Little Rock, Ark.	195.0	+ 8	+ 1
Louisville, Ky.	848.1	+ 1	- 5
Memphis, Tenn.	771.4	+ 5	+11
St. Louis, Mo.	2,541.6	+17	+ 2
Total—Six Largest Centers	\$4,688.2	+11%	+ 3%

Other Reporting Centers:

Alton, Ill.	\$ 39.1	+19%	-10%
Cape Girardeau, Mo.	17.5	+ 6	+10
El Dorado, Ark.	31.1	+15	+ 1
Fort Smith, Ark.	54.7	+ 7	- 7
Greenville, Miss.	26.9	+ 2	- 2
Hannibal, Mo.	11.2	+14	+ 3
Helena, Ark.	8.1	-0-	-12
Jackson, Tenn.	25.8	+ 9	- 8
Jefferson City, Mo.	76.8	+ 8	+21
Owensboro, Ky.	46.0	- 7	- 1
Paducah, Ky.	28.8	+12	+ 5
Pine Bluff, Ark.	40.7	+ 9	+ 3
Quincy, Ill.	40.2	+10	+ 4
Sedalia, Mo.	15.5	+ 9	+ 1
Springfield, Mo.	90.0	+14	+ 5
Texarkana, Ark.	19.3	+10	-10
Total—Other Centers	\$ 571.7	+ 9%	+ 2%
Total—22 Centers	\$5,259.9	+11%	+ 2%

INDEX OF BANK DEBITS—22 Centers Seasonally Adjusted (1947-1949=100)

	1957	1956
Mar.	Feb.	Mar.
167.2	175.0	163.1

¹ Debits to demand deposit accounts of individuals, partnerships and corporations and states and political subdivisions.

Agriculture

CASH FARM INCOME

	Feb. '57 from Feb. '56	Percentage Change	Jan. thru Feb. 1957 compared with 1956
(In thousands of dollars)			
Arkansas	\$ 31,502	+34%	+14%
Illinois	177,803	+18	+22
Indiana	87,600	+ 7	+12
Kentucky	23,641	+ 2	+10
Mississippi	37,073	+82	+ 7
Missouri	54,693	- 4	- 4
Tennessee	25,790	-0-	+15
7 States	438,102	+15	+12
8th District	172,358	+16	+ 7

Source: State data from USDA preliminary estimates unless otherwise indicated.

¹ Estimates for Eighth District revised based on 1954 Census of Agriculture.

Construction

CONSTRUCTION CONTRACTS AWARDED IN EIGHTH FEDERAL RESERVE DISTRICT *

(Value of contracts in thousands of dollars)

	Feb. 1957	Jan. 1957	Feb. 1956
Total	\$130,255	\$116,248	\$83,612
Residential	65,349	44,533	36,534
Nonresidential	26,315	39,969	32,091
Public Works and Utilities	38,591	31,746	14,987

* Based upon reports by F. W. Dodge Corporation.

ASSETS AND LIABILITIES OF EIGHTH DISTRICT MEMBER BANKS

(In Millions of Dollars)

	Weekly Reporting Banks	All Member Banks
	Apr. 17, 1957	Mar. 20, 1957
Assets		
Loans ¹	\$1,631	\$10
Business and Agricultural	859	-24
Security	52	+ 4
Real Estate	279	+ 5
Other (largely consumer)	467	+ 5
U. S. Government Securities	866	+30
Other Securities	220	+ 4
Loans to Banks	25	+11
Cash Assets	921	+26
Other Assets	43	-0-
Total Assets	\$3,706	\$4,611
Liabilities and Capital		
Demand Deposits of Banks	\$ 698	\$46
Other Demand Deposits	2,074	+44
Time Deposits	595	+ 2
Borrowings and Other Liabilities	53	-32
Total Capital Accounts	286	+ 1
Total Liabilities and Capital	\$3,706	\$4,611

¹ For weekly reporting banks, loans are adjusted to exclude loans to banks; the total is reported net; breakdowns are reported gross. For all member banks, loans are reported net and include loans to banks; breakdown of these loans is not available.

Trade

DEPARTMENT STORES

	Net Sales	Stocks on Hand	Stocks-Sales Ratio	Percentage of Accounts and Notes Receivable Outstanding Mar. 1, '57, collected during Feb.
	March, 1957 compared with Feb., '57	3 mos. '57 to same period '56		Instal. Accounts
8th F.R. District Total	+20%	-11%	- 4%	16
Fort Smith Area, Ark.	+29	-18	- 8	47
Little Rock Area, Ark.	+ 7	-17	- 7	40
Quincy, Ill.	+21	-22	-13	44
Evansville Area, Ind.	+40	- 8	- 1	19
Louisville Area, Ky., Ind.	+24	-12	- 6	43
Louisville (City)	+22	-15	-10	54
Paducah, Ky.	+35	-13	-0-	17
St. Louis Area, Mo., Ill.	+19	-10	- 4	34
St. Louis (City)	+16	-12	- 6	
Springfield Area, Mo.	+27	- 6	+ 2	
Memphis Area, Tenn.	+19	-10	+ 3	
All Other Cities ²	+35	-11	- 3	

¹ In order to permit publication of figures for this city (or area), a special sample has been constructed which is not confined exclusively to department stores. Figures for any such nondepartment stores, however, are not used in computing the district percentage changes or in computing department store indexes.

² Fayetteville, Pine Bluff, Arkansas; Harrisburg, Mt. Vernon, Illinois; Vincennes, Indiana; Danville, Hopkinsville, Mayfield, Owensboro, Kentucky; Chillicothe, Missouri; Greenville, Mississippi; and Jackson, Tennessee.

Outstanding orders of reporting stores at the end of March, 1957, were 2 per cent lower than on the corresponding date a year ago.

INDEXES OF SALES AND STOCKS—8TH DISTRICT

	Mar. 1957	Feb. 1957	Jan. 1957	Mar. 1956
Sales (daily average), unadjusted ³	107	98	94	116
Sales (daily average), seasonally adjusted ³	125	125	125	129
Stocks, unadjusted ⁴	n.a.	134	123	141
Stocks, seasonally adjusted ⁴	n.a.	141	141	133

³ Daily average 1947-49=100

⁴ End of Month average 1947-49=100

n.a. Not available.

Trading days: Mar., 1957—26; Feb., 1957—24; Mar., 1956—27.

RETAIL FURNITURE STORES

	Net Sales
	March, 1957 compared with Feb. '57
8th Dist. Total ¹	+13%
St. Louis Area	+12
Louisville Area	+ 5
Memphis Area	+ 2
Little Rock Area	-31
Springfield Area	+98

* Not shown separately due to insufficient coverage, but included in Eighth District totals.

¹ In addition to the areas shown separately in the table, the total includes stores in Blytheville, Fort Smith, Pine Bluff, Arkansas; Owensboro, Kentucky; Greenwood, Mississippi; and Cape Girardeau, Missouri.

Note: Figures shown are preliminary and subject to revision.

PERCENTAGE DISTRIBUTION OF FURNITURE SALES

	Mar.'57	Feb.'57	Mar.'56
Cash Sales	14%	14%	14%
Credit Sales	86	86	86
Total Sales	100%	100%	100%