

Monthly Review Index—1957

FEDERAL RESERVE BANK OF ST. LOUIS

PAGE NUMBER GUIDE			
Month of Issue	Pages	Month of Issue	Pages
January.....	1-16	July.....	85-96
February.....	17-32	August.....	97-108
March.....	33-48	September.....	109-120
April.....	49-60	October.....	121-132
May.....	61-72	November.....	133-144
June.....	73-84	December.....	145-156

Agriculture*	Pages	Business Conditions, Income, Population*	Pages
Farm Production and Income 1956— Eighth District.....	12	Business Activity 1956—Eighth District.....	8
<i>More Production with Fewer Farmers</i>	49-57	Construction Activity 1956—Eighth District.....	9-12
Banking and Finance*		Consumer Spending 1956—Eighth District.....	14
Bank Credit 1956—Eighth District.....	14, 15	District Income 1956.....	14
Demand for Money and Capital 1956—National.....	6	Economic Development of Southwest Missouri.....	17-24
Directors and Officers of the Federal Reserve Bank of St. Louis, February 1957.....	28	<i>Eighth District Income and Its Changing Geographic Pattern</i>	121-129
<i>District Member Bank Earnings in 1956</i>	44, 45	Federal Highway Legislation 1956, Major Provisions.....	37
Federal Reserve Policy 1956.....	7	<i>Impact of the Federal Highway Program on the Nation and the Eighth District</i>	33-43
<i>Financing Local Government Expenditures</i> 145, 147-152		Map and Geologic Cross Section of Southeast Missouri Mining Region.....	101
<i>Liquidity of Eighth District Banks</i>	85, 87-93	National System of Interstate and Defense Highways (map).....	36
<i>Operations of the Federal Reserve Bank of St. Louis, 1956</i>	25-27, 29	New Manufacturing Plants and Expansions in the Eighth District in 1956 (map).....	11
Principal Liabilities of Major Financial Institutions, 1910-1956 (tables).....	65, 67	<i>Restraining the Boom: 1956 in Review</i>	1-15
<i>Residential Mortgage Market Changes, 1955-57</i>	73-80	<i>The Changing Ozarks</i>	17-24
<i>The Commercial Banking System and Competing Nonmonetary Intermediaries</i>	61-69	<i>The Southeast Missouri Mining Region</i>	97-104
Total Assets of Major Financial Institutions, 1910-1956 (tables).....	63, 64	District Business Statistics	
		<i>The District Record</i> (monthly tables on district agriculture, banking, construction, industry and trade) 16, 32, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156	

*See, also, *District Business Statistics* and *Survey of Current Business Conditions*

MONTHLY REVIEW INDEX

Industry*	Pages		Pages
<i>Current and Prospective Pulpwood Production in Eighth District States</i>	109, 111-117	Principal Types of Timber in Eighth District States	114, 115
District Manufacturing Trends 1956.....	10	Pulpwood Production, Current and Prospective, in Eighth District States.....	109, 111-117
Employment 1956—Eighth District.....	12	Survey of Current Business Conditions	
Employment and Earnings 1956—National.....	4	Survey of Current Business Conditions as of:	
Employment in Various District Areas 1956.....	13	February 1.....	30-31
Gross National Product 1956.....	3	March 1.....	46-47
<i>Industrial Growth of the Eighth District</i>	133, 135-141	April 1.....	58-59
Industrial Production 1956—Eighth District.....	8, 9	May 1.....	70-71
Industrial Production 1956—National.....	3, 4	June 1.....	82-83
Investment in Plant and Equipment 1956—National	2, 3	July 1.....	94-95
Manufacturing Data for Selected Metropolitan Areas in Eighth District, 1954 (table).....	141	Trade*	
Manufacturing Trends 1956, District.....	10	<i>Revised Indexes of Department Store Sales and Stocks</i>	153
		Sales of Goods and Services 1956—National.....	5

ARTICLES

Title	Author	Pages
Restraining the Boom: 1956 in Review.....	(Staff)	1-15
The Changing Ozarks.....	A. J. Meigs	17-24
1956 Operations of the Federal Reserve Bank of St. Louis.....		25-29
Impact of the Federal Highway Program on the Nation and the Eighth District.....	D. C. Hastings	33-43
District Member Bank Earnings in 1956.....	Norman N. Bowsher	44-45
More Production with Fewer Farmers.....	Clifton B. Luttrell	49-57
The Commercial Banking System and Competing Nonmonetary Intermediaries.....	Ross M. Robertson	61-69
Residential Mortgage Market Changes: 1955-1957.....	Ross M. Robertson	73-80
Liquidity of Eighth District Banks.....	Norman N. Bowsher Marie Wahlig	85, 87-93
The Southeast Missouri Mining Region.....	Harry B. Kircher	97-104
Current and Prospective Pulpwood Production in Eighth District States.....	Clifton B. Luttrell A. J. Meigs	109, 111-117
Eighth District Income and Its Changing Geographic Pattern.....	Werner Hochwald A. J. Meigs	121-129
Industrial Growth of the Eighth District.....	William H. Kester	133, 135-141
Financing Local Government Expenditures.....	Norman N. Bowsher	145, 147-152
Revised Indexes of Department Store Sales and Stocks.....		153

*See, also, *District Business Statistics* and *Survey of Current Business Conditions*

Monthly Review

May 1957

Volume XXXIX

Number 5

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 non-monetary 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

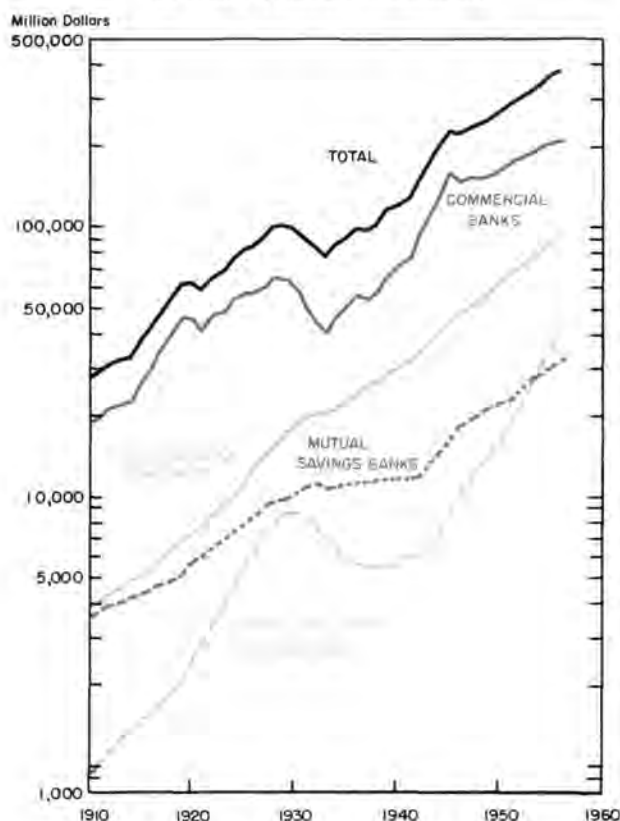
¹ See especially J. G. Gurley and E. S. Shaw, "Financial Aspects of Economic Development," *American Economic Review*, September 1955, pp. 515-538 and "Financial Intermediaries and the Savings-Investment Process," *The Journal of Finance*, May 1956, pp. 257-276.

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.

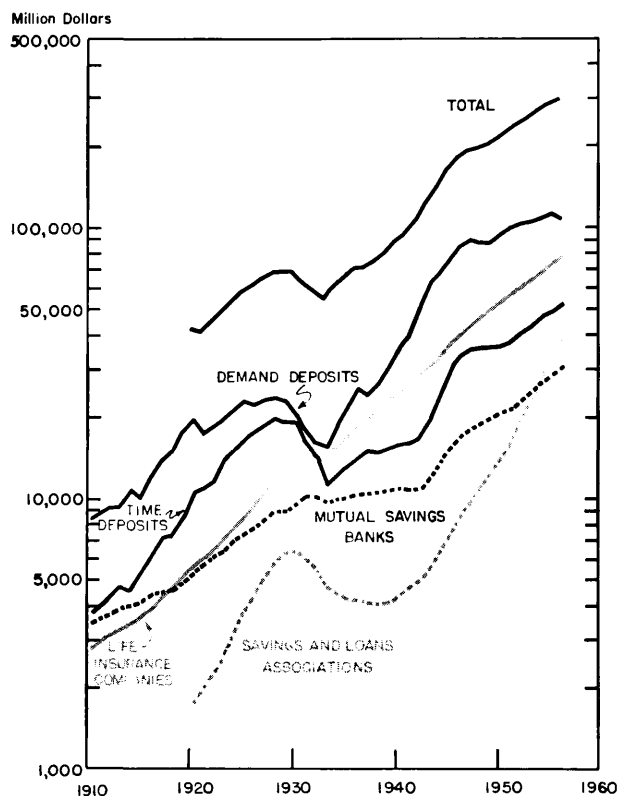
Sources: *Banking and Monetary Statistics, Federal Reserve Bulletin, Annual Report, Comptroller of the Currency, 1956 Life Insurance Fact Book, Savings and Home Financing Source Book, 1956, National Association of Mutual Savings Banks Statistical Bulletin, Federal Home Loan Bank Board releases, Savings 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 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	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.

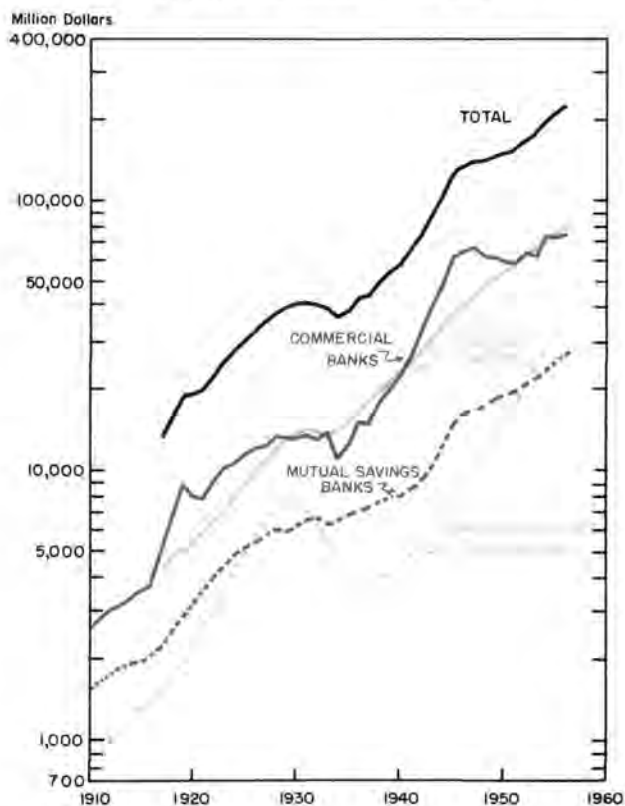
At this point it becomes necessary to pay attention to the possibility of massive liquidation of the great volume of assets which the intermediaries hold. If intermediaries were ordinarily uninhibited in the liquidation of their assets, as was the case of the life insurance companies with respect to 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 out-standing	Total debt out-standing	Long-term debt holdings of the major financial institutions as a per cent of	
				Long-term debt out-standing	Total debt out-standing
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, 1936, 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.

VARIOUS INDICATORS OF INDUSTRIAL ACTIVITY

Industrial Use of Electric Power (Thousands of KWH per working day, selected industrial firms in 6 district cities)
 Steel Ingot Rate, St. Louis area (Operating rate, per cent of capacity)
 Coal Production Index—8th Dist. (Seasonally adjusted, 1947-49=100)
 Crude Oil Production—8th Dist. (Daily average in thousands of bbls.)
 Freight Interchanges at RRs—St. Louis. (Thousands of cars—25 railroads—Terminal R. R. Assn.)
 Livestock Slaughter—St. Louis area. (Thousands of head—weekly average)
 Lumber Production—S. Pine (Average weekly production—thousands of bd. ft.)
 Lumber Production—S. Hardwoods. (Operating rate, per cent of capacity)

Mar. 1957	Mar. 1957* compared with Feb. 1957 Mar. 1956	
	n.a.	n.a.
n.a.	n.a.	n.a.
98	-0-	-4
89.7 p	+1	-6
395.1	-0-	+3
110.4	+11	-4
126.0	+8	-4
202.3	+2	-5
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.	Feb.
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

(In thousands of dollars)	Feb. 1957	Percentage Change	
		Feb.'57 from Feb.'56	Jan. thru Feb. 1957 compared with 1955
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-	+ 4
7 States	438,102	+15	+12
8th District ¹	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*

	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	
	Assets	Change from Mar. 20, 1957	Mar. 27, 1957	Change from Feb. 27, 1957
	Apr. 17, 1957			
Assets				
Loans ¹	\$1,631	\$-10	\$2,636	\$+26
Business and Agricultural	859	-24		
Security	52	+ 4		
Real Estate	279	+ 5		
Other (largely consumer)	467	+ 5		
U. S. Government Securities	866	-30	1,794	-46
Other Securities	220	+ 4	491	+ 4
Loans to Banks	25	+11		
Cash Assets	921	+26	1,440	+22
Other Assets	43	-0-	74	- 1
Total Assets	\$3,706	\$+61	\$6,435	\$+ 5
Liabilities and Capital				
Demand Deposits of Banks	\$ 698	\$+46	\$ 722	\$+25
Other Demand Deposits	2,074	+44	3,791	-39
Time Deposits	595	+ 2	1,329	+19
Borrowings and Other Liabilities	53	-32	84	- 2
Total Capital Accounts	286	+ 1	509	+ 2
Total Liabilities and Capital	\$3,706	\$+61	\$6,435	\$+ 5

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	Mar., '57	3 mos.'57 period '56			Instal. Accounts	Excl. Instalment Accounts
8th F.R. District Total	+20%	-11%	- 4%			16	47
Fort Smith Area, Ark.	+29	-18	- 8			13	40
Little Rock Area, Ark.	+ 7	-17	- 7				44
Quincy, Ill.	+21	-22	-13			19	43
Evansville Area, Ind.	+40	- 8	- 1				
Louisville Area, Ky., Ind.	+24	-12	- 6				
Louisville (City)	+22	-15	-10				
Paducah, Ky.	+35	-13	-0-				
St. Louis Area, Mo., Ill.	+19	-10	- 4			16	54
St. Louis (City)	+16	-12	- 6				
Springfield Area, Mo.	+27	- 6	+ 2				
Memphis Area, Tenn.	+19	-10	- 3			17	34
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.

RETAIL FURNITURE STORES

	Net Sales	
	March, 1957 compared with Feb.'57	Mar.'56
8th Dist. Total ¹	+13%	- 3%
St. Louis Area	+12	- 7
Louisville Area	+ 5	- 4
Memphis Area	+ 2	-14
Little Rock Area	-31	- 6
Springfield Area	+98	+15

* 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%

Monthly Review

September 1957

Volume XXXIX

Number 9

Current and Prospective Pulpwood Production in Eighth District States

PULPWOOD has a diversity of uses and its markets are expanding. Eighth Federal Reserve District States are sharing in this expansion.

District state resources can support a still greater pulpwood output. Improvements in forest management will be required, however, especially on the smaller landholdings.

Pulpwood production fits in well with other forest enterprises. Bankers may have an important role in developing forest resources.

**Federal Reserve Bank
of St. Louis**

Survey of Current Conditions—p. 118

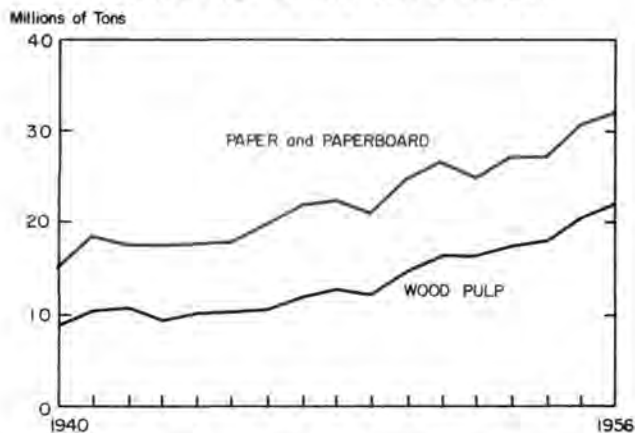
Current and Prospective Pulpwood Production in Eighth District States

Pulpwood has a diversity of uses and its markets are expanding.

A VISITOR from abroad is quickly impressed with the "paper-mindedness" of Americans when he first buys a Sunday paper or sees the racks of artfully packaged wares in a supermarket. The casual way in which an American family uses hundreds of pounds of paper products each year is in striking contrast to practices in some countries where customers are expected to bring their own wrapping paper to the store. "Paper-mindedness" has stimulated a phenomenal increase in the consumption of pulpwood in this country since the turn of the century. From less than 2 million cords in 1899, the nation's use of pulpwood grew to 7 million cords in 1930, and to nearly 36 million cords in 1956.

Paper, which requires over half of all wood pulp

PRODUCTION OF PAPER AND PAPERBOARD AND WOOD PULP IN THE UNITED STATES



Source: United States Department of Commerce, Bureau of the Census, *Facts for Industry*, Series M 14A.

consumed, has more than doubled in use during the past quarter-century.

More versatile and better quality paper and multi-color printing have contributed to this expansion. The most rapid increase in paper use has occurred in the shipping and packaging industries. Wax-coated paper containers for milk and frozen foods are examples of recent trends in the use of pulp products for merchandising. Bulk materials, such as sugar, flour, cement and chemical fertilizer, are now being shipped and stored in paper bags, whereas formerly burlap or cotton bags were used. The introduction of waterproof paper, practical convenience and better advertising possibilities are given as some of the reasons for the shift to paper bags. There has been a large increase in the use of tar impregnated paper for wrapping pipe and other items to retard corrosion. The use of sanitary and tissue paper has also increased rapidly during the past quarter-century.

The consumption of paperboard has been increasing even more rapidly than that of paper, trebling during the past twenty-five years. Wooden boxes have been replaced by shipping cartons made of paperboard. Such cartons are lighter than wooden boxes and can be folded for shipment and storage. Moreover, they are suitable for automatic packaging machines which are in general use at most manufacturing plants.

Wood pulp products are of increasing importance in the construction of perforated pulpboard, which is used as acoustical tile, and the use of pulpboard for insulating purposes has been growing very rapidly. Saturated felt, another pulp product used in floors and roofs, also has an expanding market.

Estimated United States demand for paper and board will total 43.8 million tons by 1965, according to a comprehensive report, *Pulp, Paper and Board Supply-Demand*, recently published by the Committee on Interstate and Foreign Commerce of the 85th Congress.¹ By these estimates, paper grade wood pulp consumption for 1965 is expected to total 32.3 million tons, and dissolving pulp, used in rayon and plastics, an additional 1.7 million tons. Total wood pulp consumption would thus be 34 million tons, 42 per cent greater than actual consumption in 1956.

Nearly 53 million cords of pulpwood would be required, 47 per cent more than in 1956. Although the consumption of waste paper and other fibrous materials is expected to increase, their rate of increase will probably be somewhat less than that of pulpwood.

While the consumption of wood pulp for purposes other than paper, paperboard and building materials is small relative to total consumption, that going into rayon and acetate has been growing rapidly.

Much of the expansion in markets for pulpwood has been made possible by technological advances in processing. A few years ago spruce and fir were the only trees that could be economically used. The development of new processes has made it feasible to use southern pines, western hemlock, fir, jackpine and many hardwoods. These new processes opened up large new producing areas, including the Eighth

District states. Growth of pulpwood production in district states and the southeastern United States began in the 1920 decade and has continued with increasing tempo in the 1950's.

Eighth Federal Reserve District States are sharing in this expansion.

The spectacular increase in pulpwood production during recent years in Eighth Federal Reserve District States tends to belie the old adage, "Money doesn't grow on trees." Located astride the dividing line between the Central Hardwood Forest region and the Southern Forest, district states contain about one-ninth of the nation's land area and one-sixth of

TABLE 1
TOTAL LAND AREA AND FOREST LAND
IN EIGHTH DISTRICT STATES, 1953
(IN THOUSANDS OF ACRES)

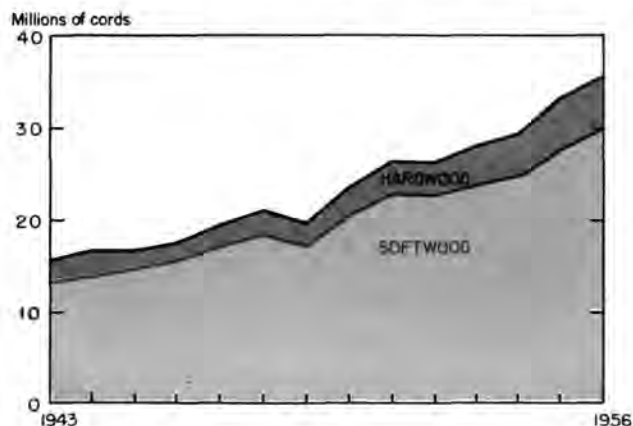
Eighth District States	Total Land Area ¹	Total Forest Land Area ²	Commercial Forest Land Area ²	Non-Commercial Forest Land
Arkansas.....	52,675	19,346	19,292	54
Illinois.....	55,935	3,993	3,938	55
Indiana.....	36,205	4,103	4,045	58
Kentucky.....	39,864	11,497	11,446	51
Mississippi.....	47,248	16,473	16,440	33
Missouri.....	69,226	15,177	15,064	113
Tennessee.....	41,797	12,558	12,301	257
Total.....	342,950	83,147	82,526	621
United States...	2,974,726	647,686	484,340	163,346

¹ *Statistical Abstract of the United States, 1956.*
² *Timber Resource Review, September, 1955.*

its commercial forest land. When use of southern pine for pulp began in the 1920's decade the pine belt portion of the area was opened for production. By 1940, total production of pulpwood in these states exceeded a million cords per year (see Table 2). Output doubled from 1940 to 1952 and continued to grow through 1956 at the rate of about 250,000 cords per year. The rate of increase during the sixteen-year period, 1940-1956, was slightly greater than that of the nation.

More than half of the pulpwood produced in the district states comes from Mississippi, about 30 per cent from Arkansas and 10 per cent from Tennessee. These states contain nearly 60 per cent of the district states' commercial forest land and a considerably greater share of the pine forest. The recent increase in use of hardwoods for pulp has made the forests of the entire district states area potentially valuable as a pulpwood source. Production of pulp from hardwoods is increasing rapidly in Illinois,

CONSUMPTION OF PULPWOOD IN THE UNITED STATES



Source: United States Department of Commerce, Bureau of the Census, *Facts for Industry, Series M 14A.*

TABLE 2

PULPWOOD PRODUCTION, EIGHTH DISTRICT STATES
(THOUSAND CORDS OF ALL PULPWOOD, INCLUDING RESIDUES)

	1956 ¹			1952 ²			1940
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total
Arkansas.....	1,075.2	139.7	935.5	620.2	86.2	533.9	486
Illinois.....	80.1	80.0	0.1	45.0	45.0	—	4
Indiana.....	22.0	22.0	0.0	12.0	12.0	—	4
Kentucky.....	53.3	28.3	25.0	30.0	27.9	2.1	4
Mississippi.....	2,135.7	938.0	1,197.8	1,867.3	482.3	1,385.0	630
Missouri.....	2.4	1.4	1.0	12.0	8.5	3.5	4
Tennessee.....	398.8	153.9	244.8	268.4	153.9	114.5	131
Total.....	3,767.5	1,363.3	2,404.1	2,854.9	815.8	2,039.0	1,247
United States.....	35,196 ²	6,104	29,092	25,065	3,657	21,408	12,307 ³

Note: Detail will not necessarily add to totals because of rounding.

¹ Illinois, Indiana, Kentucky Missouri—*Station Note No. 104*, Central States Forest Experiment Station, Columbus, Ohio, July, 1957.
Arkansas, Mississippi and Tennessee—*1956 Pulpwood Production in the South*, Southern Forest Experiment Station, New Orleans, La., August, 1957.

² *Pulp, Paper, and Board Supply Demand*, Report of the Committee on Interstate and Foreign Commerce, 85th Congress, 1957.

³ *Timber Resource Review*, U. S. Department of Agriculture, Forest Service, 1955.

⁴ No records available. Estimated to be an insignificant amount.

⁵ *Report of the Forest Resource Appraisal*, The American Forestry Association, 1947.

Indiana and Kentucky. Output almost doubled in these states during the four years 1952 to 1956. Hardwoods are used almost exclusively in Indiana and Illinois, whereas Kentucky produces pulpwood from both pine and hardwood.

Although not as large an income producer as cotton, hogs or soybeans in the district, pulpwood has become an important source of income especially in the southern district states. The value of pulpwood delivered to concentration points in Mississippi and Arkansas in 1955 was estimated at approximately \$50 million. This was approximately 5 per cent as much as the combined sales of all crops and livestock products in these two largely agricultural states. In particular counties pulpwood is of much greater relative importance than in the district as a whole. In Union County, Arkansas, for example, the value of pulpwood produced in 1954 was about equal to the value of all crops and livestock products sold.

Of further importance to the district states' economy is the influence of pulpwood production upon the location of pulp and paper plants. There were 13 mills operating in district states in 1956; two more are scheduled for completion in 1957; and at least three more are planned.

District state resources can support a still greater pulpwood output.

The soils, climate and topography of district states

are favorable for pulpwood production. Rainfall is generally adequate the year-around for rapid tree growth and long warm summers provide an ample growing season. New seedlings often spring up on abandoned crop land and in openings where mature trees have been harvested.

Although the average volume of standing timber per acre is relatively low in this area, net annual growth is above the national average (see Table 3).

TABLE 3

GROWTH, CUT AND VOLUME OF GROWING STOCK
PER ACRE OF COMMERCIAL FOREST LAND, 1952.

Eighth District States	Net Annual Growth	Net Annual Cut	Net Volume Growing Stock
	(Cubic Feet Per Acre)	(Cubic Feet Per Acre)	Jan. 1, 1953 (Cubic Feet Per Acre)
Arkansas.....	29.7	19.7	609.7
Illinois.....	34.3	9.6	774.5
Indiana.....	34.4	12.9	751.8
Kentucky.....	31.9	14.2	684.4
Mississippi.....	43.6	34.7	585.6
Missouri.....	17.9	5.6	365.3
Tennessee.....	19.8	20.5	469.1
District State Average..	29.6	18.6	564.5
United States Average..	29.3	22.2	1,029.1

Source: Basic data from *Timber Resource Review*, September, 1955.

Principal Types of Timber in Eighth District States

THE MAP OPPOSITE shows areas characterized by major forest types in the seven states which include the Eighth Federal Reserve District.

Pine areas, which supply most of the district states pulpwood, are concentrated in southern district states. Loblolly-shortleaf pine forest predominates in Mississippi, excepting the Delta and river-bottom areas and the low coastal lands; in Arkansas, particularly south of the Arkansas River; and in the eastern, Appalachian, sections of Kentucky and Tennessee.

An area of longleaf-slash pine characterizes the coastal region of Mississippi. White-red-jack pine forest occurs only in a very small area in eastern Tennessee.

Hardwood forests, which are becoming more important as a source of pulpwood, are more extensive in these states than softwood types. The oak-hickory forest is typical of most of Missouri, southern Illinois, considerable parts of Indiana both north and south, the greater portion of Kentucky and the western two-thirds of Tennessee and most of Northwestern Arkansas.

The second most extensive area of hardwoods is the swamp and bottom-land forest. This type is found along the principal water courses with its greatest extent in the Mississippi River Basin, which includes the Bootheel of Missouri and the Arkansas and Mississippi Deltas. A maple-birch-beech forest type covers a considerable portion of southern Indiana.

This map is derived from one entitled *Areas Characterized by Major Forest Types in the United States* prepared by the United States Department of Agriculture, Forest Service, in 1949 and based on a national survey of forest resources. The Forest Service defines the six types of timber areas shown on the map as follows:

LONGLEAF-SLASH PINE: Forests in which 25 percent or more of the stand is longleaf or slash pine, singly or in combination.

LOBLOLLY-SHORTLEAF PINE: Forests in which 25 percent or more of the stand is loblolly pine, shortleaf pine, or other yellow pines, excepting longleaf or slash, singly or in combination.

WHITE-RED-JACK PINE: Forests in which 50 percent or more of the stand is eastern white pine, red pine or Jack pine, singly or in combination.

MAPLE-BIRCH-BEECH: (northern hardwoods): Forests in which 50 percent or more of the stand is sugar maple, yellow birch, beech or basswood, singly or in combination.

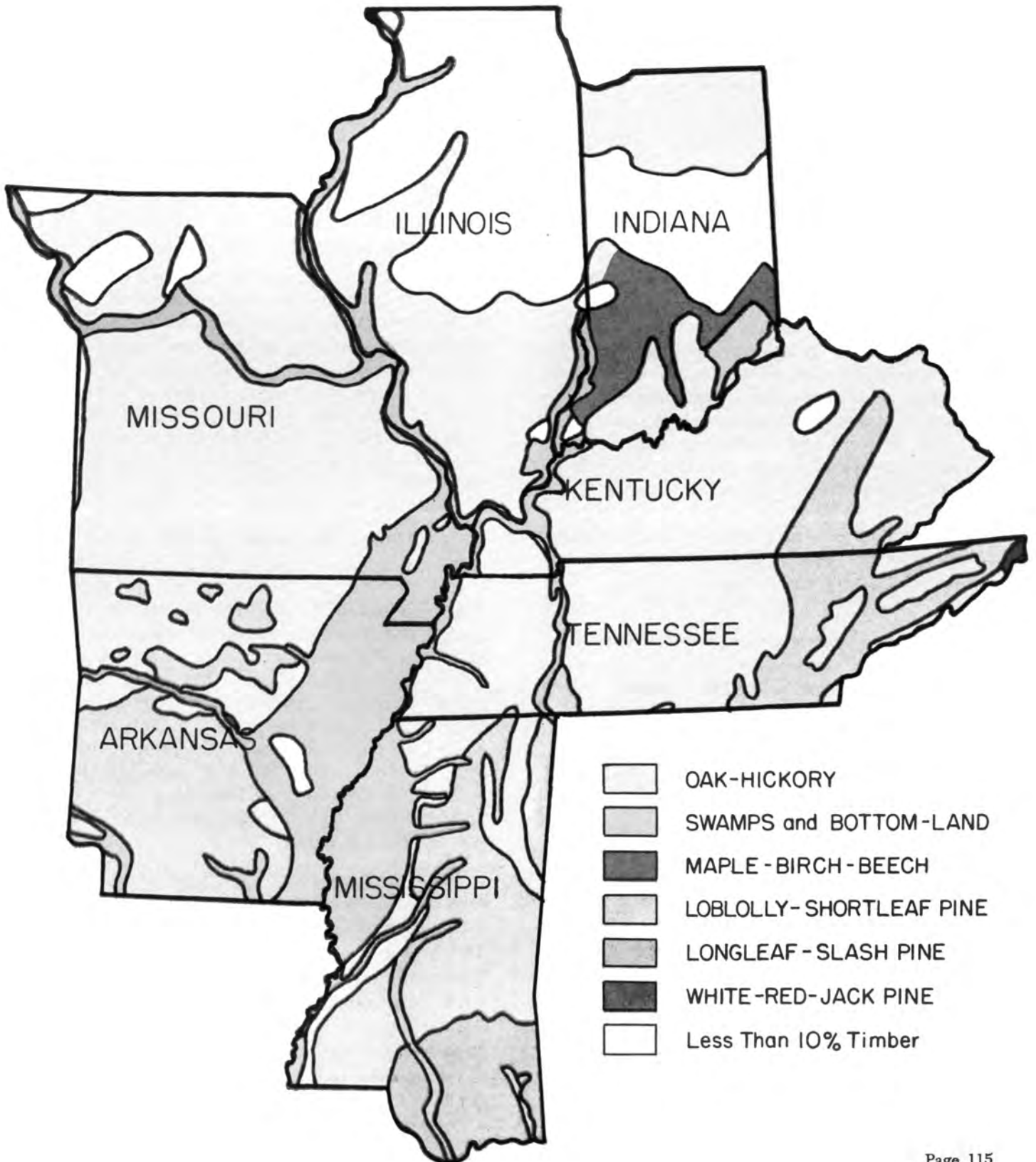
OAK-HICKORY: Forests in which 50 percent or more of the stand is upland oaks, hickories, yellow poplar,

or gums, singly or in combination, except where longleaf and/or slash pine comprises 25 percent, or where loblolly, shortleaf, Virginia and/or pitch pine comprises 25 percent, singly or in combination, in which cases the stands would be classified respectively as longleaf-slash pine or loblolly-shortleaf pine.

SWAMP AND BOTTOM-LAND FORESTS: Forests on characteristically moist to wet sites primarily identified by water tupelo, black gum, sweet gum, southern cypress, ash, oak, pine, elm, cottonwood, and red maple, making up 50 percent or more of the stand, singly or in combination, except where longleaf and/or slash pine comprises 25 percent, or where loblolly and/or shortleaf pine comprises 25 percent, in which cases the stands would be classified respectively as longleaf-slash pine or loblolly-shortleaf pine.

The area not typed may have some timber, usually covering less than 10 percent of the land.

Map of Principal Types of Timber in Eighth District States



Very favorable growing conditions here have apparently offset the effects of understocking. Furthermore, growth rates in the district states exceed the rate of cutting by a considerable margin. The annual net cut was less than two-thirds of net growth in 1953, while for the same year the nation as a whole cut approximately three-fourths of the growth. The favorable ratio of growth rates to cutting in the seven states should permit improvement in the timber stands and provide the base for expanding output in the future.

Unfortunately, the old growth of sawtimber is about gone in the area. In 1953 the district states had only about one-fourteenth of the nation's standing sawtimber and the greater part of that was in second growth stands. The current era of improvement in forests follows a long period in which timber resources were drawn down. Lumber production in the area was at its zenith during the first two decades of this century, when "Cut and get out" was the policy of most operators. A large per cent of the timber that remained after the sawtimber harvests was unmarketable or of low value. Furthermore, inferior trees were occupying space where high quality trees could be growing and forest fires often curtailed natural restocking processes. Another factor in the drain on timber resources in the past was the lack of knowledge in erosion control methods which led to abandonment of eroded farmland and the clearing of new lands that, in many cases, were not topographically suited to crop production.

Improvements in forest management will be required, however, . . .

One of the first major attempts to assure a permanent timber supply in the area was establishment of the Ouachita National Forest in Arkansas in 1907. Soon thereafter, a number of lumber companies began to acquire second growth pine lands in the southern district states after the old growth had been exhausted. Owners of the larger holdings were showing interest in scientific forest management by the early thirties. More recently, substantial advances have been made in the management of timber on many smaller holdings.

In 1953, according to the *Timber Resource Review*, pulp manufacturers were apparently doing the best job of forest management of all the private ownership groups in the nation.² Almost two-fifths of the total land area held by pulp manufacturers was in ownerships on which some timber stand improvement work

was being done. By contrast, only about 3 per cent of the land in farms was in units undergoing improvement. The level of timber management practiced by pulp manufacturers is especially high in the South. Holdings of lumber manufacturers, other wood manufacturers and other private investors fall between these two extremes.

When land holdings were classified in the *Timber Resource Review* according to size, the quality of timber management increased with each larger size-classification. For the nation, only 2 per cent of the area in holdings of less than 100 acres reported any improvement work, as compared to 45 per cent of the area in units of 50,000 acres or more.

. . . especially on the smaller landholdings.

Small farm forest properties have long been recognized as the crux of the forest management problem in the district states and in the nation. Low income and inability to save or wait for capital to be replenished have made it difficult for small farmers to develop their woodlands. Tenants, who frequently moved from place to place, were generally given wide latitude in their use of timber resources with unhappy results so far as good forestry practices are concerned.

Fortunately, the problem of small farms is being alleviated both in the district and in the nation. Total number of farms has declined consistently since World War II. With this decline has gone a persistent growth in size of farms. The greatest increase in average size of farms in the district states occurred in Arkansas and Mississippi where farms were small and a great concentration of sawtimber exists. These resource changes in agriculture have resulted in more efficient performance on farms. In turn higher incomes have relieved some of the pressure to clear land for crops which is better suited for timber. Similarly, as farm incomes improve, pressure to cut timber on farm land without leaving a good stock of growing trees is reduced.

Good forest management pays. According to the Missouri Conservation Commission, timberlands in that state could produce five times as much timber if they were properly managed.³ Furthermore, in the case of the small landholders, most of the management work could be done by the owners without the necessity for cash outlays. The United States Forest Service has estimated that a moderate level of management in Mississippi would eventually raise

² *Timber Resource Review*, United States Department of Agriculture, Forest Service, 1955, Chapter IX.

³ *Forest Fires in Missouri*, Missouri Conservation Commission, 1951.

current annual growth in board feet by two-thirds.⁴ Such a level of management entails state-wide fire protection, cutting practices which would maintain full production capacity on land held by forest-product firms and public agencies, and cutting practices on the rest of the forest land designed to improve productivity.

A case study in 1954 points up the increase in returns from an individual farm woodlot that can be attained by improving forest management practices.⁵ Using constant prices for calculating returns, net gains from the ninety-two-acre woodlot on a farm in Tippah County, Mississippi, over three decades could be increased from \$3,639 to \$15,322 with the installation of a planned forestry program.

Pulpwood production fits in well with other forest enterprises.

Despite its excellent prospects in the district states pulpwood is not likely to become the only product marketed from most district forest lands. Good quality saw logs still sell at a substantial premium for lumber or veneer compared to the price paid for pulpwood. Pulpwood provides a market primarily for smaller trees which must be thinned out in good forestry practice. The pulp market also provides an outlet for slow-growing and cull trees that should be eliminated from timber stands. Portions of trees that cannot be used for lumber or higher-priced products may also be used for pulp.

In recent years, wastes from wood-working plants, such as slabs and edgings from sawmills, have been used for making pulp. Sawmills equipped with de-barkers and chippers can sell as a valuable by-product waste material that they used to burn. Wood residues chipped for pulp in 12 southern states increased from 126,000 cords in 1954 to 659,000 in 1956, or more than 3 per cent of total southern pulpwood production. The use of wood residues for pulp has been developed further in Arkansas than in any other southern state, supplying 13 per cent of the state's pulpwood production in 1956.

⁴ *Mississippi's Forest Resources and Industries*, United States Department of Agriculture, Forest Service, 1951.

⁵ "The Covington Farm, A Case Study in Planning and Financing Farm Woodlot Production", *Monthly Review*, Federal Reserve Bank of St. Louis, December 1954.

Bankers may play an important role in developing forest resources.

The future prospects of the pulpwood industry are of special concern to bankers located near forested lands. Whether pulpwood production in the district states gains 47 per cent with the estimated national increase by 1965, or shows no gain, will make a substantial difference in the level of operations of many banks in the forested areas.

Fortunately, the banker is not completely passive in determining which of these alternatives is to be experienced. Many forest owners need to be convinced of the importance of good woodland management. Small owners have been especially slow to adopt practices designed to keep woodlands productive. If bankers can encourage such owners to do a better job substantial benefits may result.

Commercial bank lending for planting trees on unstocked lands is probably out of the question. It usually takes twelve to twenty years for newly planted trees to reach the thinning stage for pulpwood in the district states. This is obviously too long to be an attractive credit business for banks. However, bank credit has many other uses in forest products businesses. For example, loans to finance the purchase of marketable timber or to manufacture forest products are quite common.

In 1953 the Federal Reserve Act was amended to permit national banks to make real estate loans secured by first liens upon properly managed forest tracts. Before the amendment timberland was not considered to be improved real property which could be used as security. The change may facilitate forest improvement in several ways and reduce the premature and excessive cutting of timber which has been such a problem with farm woodlands.

Bankers are just one of many groups helping to improve the capacity of district forests to supply national markets for wood products. A greater output of pulpwood as a result of development efforts now being made will mean not only increased income to holders of timber tracts but will enhance the prospects for establishing additional pulp and paper mills in the district. Careful management of forest resources should thus yield widespread benefits in employment and income.

CLIFTON B. LUTTRELL
A. J. MEIGS

Survey

OF CURRENT CONDITIONS

Released for Publication September 1

WHILE THE AMERICAN ECONOMY continued to give strong evidence of over-all prosperity during the past few months, a disquiet persists which has not been dispelled by the most recently available statistics. After allowing for the significant upward drift in prices these figures indicate that the economy is continuing its sidewise movement with most activities changed but slightly when compared with the recent past. To a public which has been conditioned by the substantial rate of growth during 1955 and 1956, this loss of forward momentum has been the subject of some greater impatience and concern than the current high level of business vitality would seem to warrant.

No doubt some of the anxiety regarding the nation's economic future involves the existence of perceptible soft spots. However, a conjuncture of offsetting developments has served to maintain prosperity. These include the rise in consumer outlays for nondurables and services, the increased levels of government expenditures, and inventory accumulation.

During July the Federal Reserve Board index of industrial production held steady at the June rate of 144 per cent. Total employment in nonagricultural establishments was 52.8 million (seasonally adjusted) in July, virtually unchanged from the revised June figure. However, increased wage and salary disbursements in the trade and service industries, as well as in government, were the basis for a slight 0.2 per cent rise in personal income in July. The level of unemployment, approximating 4 per cent of the labor force, was little changed from a year ago. Continued high levels of employment and income also seemed to maintain consumers' spending as reflected in a 1 per cent rise in retail sales. While it is clear that the growth of general business activity has slowed to a considerable extent, the continued increases in consumer prices and interest rates indicate that inflationary pressures have not entirely abated. The index of consumer prices moved up $\frac{1}{2}$ of 1 per cent during July and the entire pattern of interest rates advanced during August. However, even in this area the gen-

eral picture was alloyed by sporadic price declines in individual commodities and some bearishness in common stock prices.

This general picture of over-all stability is also evident in the Eighth District. Business at large changed little during August as compared with July. Individual activities are manifesting some differences in behavior and, although the order of magnitude of month-to-month changes is modest in most cases, comparisons with last year are sometimes quite revealing.

Steel production in the St. Louis area continued the decline which began in April of this year. This contraction in output has been interrupted only by the brief upturn in July which was associated with a return to normal operations after the flood conditions in June. Currently, steel plants in the St. Louis area are operating at about 77 per cent of capacity and production is down a substantial 18 per cent below last year.

Livestock slaughtering in the St. Louis area was also lower in August than in July with the bulk of the decrease coming in hog and sheep processing.

Cross currents were apparent in the business picture, however. Southern pine output was almost 12 per cent higher during August than it was in July, and was up about 6 per cent when compared with last year's figures. Freight car interchanges in the St. Louis area in early August were 18 per cent above July. Commercial failures in July were down somewhat from June and considerably below the level of a year ago. In general, business failures have been at a somewhat lower rate in 1957 than in 1956.

The major district labor markets, like their national counterparts, reflected both the overall stability of business in the aggregate and minor shifts in individual activities. Total nonagricultural employment evidenced a small seasonal drop, while manufacturing employment was off slightly more than usual in July. Typically there were some differences among reporting centers in the district. Unemployment de-

clined from June to July throughout the district, but was over year ago levels in Louisville, Little Rock and Memphis.

Loans at Eighth District weekly reporting banks expanded \$50 million (about 3 per cent) during the four weeks ending August 21, somewhat more than is usual for the period. The strength was largely in business borrowing. Perhaps a third of the increase, however, was unrelated to the business situation, arising from the reclassification of certain security holdings into the category of loans to brokers and dealers. Loans to commodity dealers rose sharply in conjunction with the August 16th deadline for Commodity Credit Corporation cotton payments, which created large flows of money through district banks, especially at Memphis. Food and textile manufacturers added to loans, as did public utilities and to a lesser extent construction contractors. Partially offsetting these gains were net repayments of loans by metal manufacturers, trade concerns and sales finance companies. "Other" (largely consumer) loans rose moderately in the four-week period.

Some of the changes in security holdings of reporting member banks in the period were associated with Treasury financing. While certificate holdings increased following the pattern of the Treasury's August 1st refunding, the volume of Treasury notes declined. Later in the month the Treasury's seasonally depleted demand deposit balances were replenished by sales of special 237-day bills, some of which were added to bill holdings of the banks.

Developments in agriculture were seasonal in nature, with crops continuing to grow well, except for some areas which received too much rainfall. Cotton picking began in the southern part of the district in the latter part of the month. Because of delayed spring planting, corn and soybeans are expected to mature somewhat later than normal. United States Department of Agriculture production estimates reveal that output of cotton, corn, and soybeans will be substantially below 1956 volumes both for the nation and for the Eighth District farms. The regional drop is considerably more severe. The table below contains the estimates for the major district crops.

PRODUCTION OF SELECTED EIGHTH DISTRICT CROPS
1956 AND AUGUST 1, 1957 ESTIMATES

	Cotton			Corn			Soybeans			All Hay		
	1956	Aug. 1, 1957 Estimate	Per cent Change	1956	Aug. 1, 1957 Estimate	Per cent Change	1956	Aug. 1, 1957 Estimate	Per cent Change	1956	Aug. 1, 1957 Estimate	Per cent Change
	(Thousands 50-lb. Bales)			(Thousand Bushels)			(Thousand Bushels)			(Thousand Tons)		
Arkansas	1,426	1,120	-21%	18,090	12,788	-29%	27,162	22,402	-18%	949	1,017	+ 7%
Illinois	—	—	—	598,672	430,352	-28	134,948	107,436	-20	4,998	4,717	- 6
Indiana	—	—	—	296,546	226,356	-24	52,128	49,245	- 6	2,723	2,662	- 2
Kentucky	—	—	—	84,456	59,318	-30	2,992	2,466	-18	2,431	2,320	- 5
Mississippi	1,609	1,340	-17	39,150	39,432	+ 1	11,712	10,215	-13	908	952	+ 5
Missouri	448	245	-45	189,408	127,021	-33	39,120	31,680	-19	3,523	3,990	+13
Tennessee	552	480	-13	55,770	41,804	-25	3,960	3,400	-14	1,754	1,767	+ 1
Total Eighth Dist. States	4,035	3,185	-21	1,282,092	937,071	-27	272,022	226,844	-17	17,286	17,425	+ 1
Total United States	13,310	11,897	-11	3,451,292	3,065,771	-11	455,869	428,356	- 6	108,708	118,897	+ 9



VARIOUS INDICATORS OF INDUSTRIAL ACTIVITY

	July 1957	July 1957* compared with	
		June 1957	July 1956
Steel Ingot Rate, St. Louis area (Operating rate, per cent of capacity).....	81	+14%	-11%
Coal Production Index—8th Dist. (Seasonally adjusted, 1947-49=100).....	76.7 p	-21	-11
Crude Oil Production—8th Dist. (Daily average in thousands of bbls.).....	309.5	-13	-19
Freight Interchanges at RR—St. Louis (Thousands of cars—25 railroads—Terminal R. R. Assn.).....	99.7	+ 3	+ 3
Livestock Slaughter—St. Louis area (Thousands of head—weekly average).....	99.3	- 3	+ 1
Lumber Production—S. Pine (Average weekly production—thousands of bd. ft.)....	201.7	- 3	+ 2
Lumber Production—S. Hardwoods (Operating rate, per cent of capacity).....	74	+ 3	-20

* 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.

Banking

BANK DEBITS¹

	July, 1957 compared with		
	July 1957 (in millions)	June 1957	July 1956
Six Largest Centers:			
East St. Louis—			
National Stock Yards, Ill.	\$ 155.2	+12%	+12%
Evansville, Ind.	198.1	+10	+ 2
Little Rock, Ark.	212.9	+ 5	+ 7
Louisville, Ky.	936.5	+11	+ 7
Memphis, Tenn.	767.2	+ 8	+ 7
St. Louis, Mo.	2,559.1	+10	+10
Total—Six Largest Centers.....	\$4,829.0	+10%	+ 9%
Other Reporting Centers:			
Alton, Ill.	\$ 40.8	+ 2%	+ 9%
Cape Girardeau, Mo.	18.4	+12	+ 6
El Dorado, Ark.	32.8	+ 4	+ 9
Fort Smith, Ark.	59.9	+ 5	+ 4
Greenville, Miss.	27.4	+ 7	+ 6
Hannibal, Mo.	12.2	+ 5	+13
Helena, Ark.	9.2	+ 3	+18
Jackson, Tenn.	25.2	+10	+ 9
Jefferson City, Mo.	112.7	+75	+26
Owensboro, Ky.	46.9	+ 8	+ 2
Paducah, Ky.	30.2	- 3	+16
Pine Bluff, Ark.	43.0	+ 4	+27
Quincy, Ill.	44.9	+ 6	+13
Sedalia, Mo.	16.6	+ 7	+ 5
Springfield, Mo.	102.0	+16	+ 6
Texarkana, Ark.	22.6	+ 7	+ 5
Total—Other Centers.....	\$ 644.8	+13%	+10%
Total—22 Centers.....	\$5,473.8	+10%	+ 9%

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

	1957		1956
	July	June	July
	186.6	162.6	171.1

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

Agriculture

CASH FARM INCOME

(In thousands of dollars)	June 1957	Percentage Change	
		June '56	Jan. thru June 1957 compared with 1956
Arkansas .. \$ 29,774	+15%	-18%	+15%
Illinois 118,739	+ 1	+10	+23
Indiana 64,039	+ 7	+ 6	+ 4
Kentucky ... 26,209	+ 3	+ 7	+ 4
Mississippi. 27,100	+28	-19	+11
Missouri ... 81,315	+ 5	+ 4	+15
Tennessee. 25,968	+ 5	- 4	+13
7 States ... 373,144	+ 6	+ 3	+13
8th District ¹ 169,538	+ 8	- 2	+12

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)

	June 1957	May 1957	June 1956
Total	\$111,818	\$156,559	\$165,310
Residential	45,295	64,841	53,052
Nonresidential	44,202	49,984	50,826
Public Works and Utilities	22,321	41,734	61,432

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

EIGHTH DISTRICT WEEKLY REPORTING MEMBER BANKS

(In millions of dollars)

Assets	Aug. 21, 1957	Change from July 24, 1957	Principal Changes in Commercial and Industrial Loans ²	
			Business of Borrower	Net Change During 4 Weeks Ended 8-21-57
Loans ¹	\$1,672	+\$50	Manufacturing and Mining:	
Business and Agricultural.....	881	+34	Food, liquor and tobacco	\$+ 9
Security.....	65	+13	Textiles, apparel and leather	+ 5
Real Estate.....	279	-0-	Metals and metal products.....	+ 7
Other (largely consumer).....	473	+ 3	Petroleum, coal, chemicals and rubber.....	- 1
U.S. Gov't. Securities.....	841	+ 2	Other.....	+ 1
Other Securities.....	223	- 1	Trade Concerns:	
Loans to Banks.....	28	+11	Wholesale.....	- 2
Cash Assets.....	841	-26	Retail.....	- 2
Other Assets.....	42	+ 1	Commodity dealers.....	+30
Total Assets.....	\$3,647	+\$37	Sales finance companies.....	- 3
Liabilities and Capital			Public Utilities (including transportation).....	+ 3
Demand Deposits of Banks.....	\$ 662	+\$ 6	Construction.....	+ 1
Other Demand Deposits.....	2,002	- 3	All Other.....	+ 2
Time Deposits.....	602	+ 2	Total.....	+\$36
Borrowings and Other Liab.....	89	+30		
Total Capital Accounts.....	292	+ 2		
Total Liab. and Capital.....	\$3,647	+\$37		

¹ Loans are adjusted to exclude loans to banks; the total is reported net; breakdowns are reported gross.

² Changes in business loans by industry classification from a sample of banks holding roughly 90% of the total commercial and industrial loans outstanding at Eighth District weekly reporting member banks.

Trade

DEPARTMENT STORES

	Net Sales		Percentage of Accounts and Notes Receivable Outstanding July 1, '57, collected during June.		
	July, 1957 compared with June, '57	July, '56	7 mos. '57 to same period '56	Instal. Accounts	Excluding Instalment Accounts
8th F.R. District Total	- 8%	+ 5%	-0-%	16%	50%
Fort Smith Area, Ark.	- 2	+ 2	- 2	39	43
Little Rock Area, Ark.	+ 3	+ 3	- 2	13	43
Quincy, Ill.	-10	+ 2	- 5	—	—
Evansville Area, Ind.	-16	+ 1	-0-	—	—
Louisville Area, Ky., Ind.	- 6	+ 3	- 1	15	42
Louisville (City)	- 4	+ 2	- 6	—	—
Paducah, Ky. ¹	- 6	+10	+ 6	—	—
St. Louis Area, Mo., Ill.	-13	+ 7	+ 1	16	59
St. Louis (City)	-11	+ 2	- 3	—	—
Springfield Area, Mo.	+ 3	+ 9	+ 4	—	—
Memphis Area, Tenn.	+ 4	-0-	- 1	15	35
All Other Cities ²	+ 3	+ 4	- 1	—	—

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 July 1957, were 5 per cent higher than on the corresponding date a year ago.

RETAIL FURNITURE STORES

	Net Sales	
	July, 1957 compared with June, '57	July, '56
8th Dist. Total ¹	+ 7%	+10%
St. Louis Area	+18	+18
Louisville Area	- 9	- 8
Memphis Area	+ 3	-15
Little Rock Area	+ 4	+ 6
Springfield Area	+ 5	+10

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

Note: Figures shown are preliminary and subject to revision.

INDEXES OF SALES AND STOCKS—8TH DISTRICT

	July 1957	June 1957	May 1957	July 1956
Sales (daily average), unadjusted ³	104	116	127	104
Sales (daily average), seasonally adjusted ³	135	119	127	135
Stocks, unadjusted ⁴	n.a.	128	138	128
Stocks, seasonally adjusted ⁴	n.a.	139	138	139

³ Daily average 1947-49=100

⁴ End of Month average 1947-49=100

Trading days: July, 1957—26; June, 1957—25; July, 1956—25.




1958

Monthly Review

January 1958

Volume XXXX

Number 1



What's in Store for Farmers in 1958

In order to provide farmers and others with latest information on prospects for agriculture, the United States Department of Agriculture holds an Annual Outlook Conference in Washington, D. C.

This report is a summary of the outlook for farmers in 1958 as viewed by the department at the thirty-fifth annual conference held November 18-22, 1957.

1958 FARM OUTLOOK IN BRIEF AS SEEN BY THE UNITED STATES DEPARTMENT OF AGRICULTURE

Prices received by farmers will probably average about the same as in 1957.

Production expenses are apt to work up, but net realized income from farming will probably remain about the same as in 1957.

A slight increase in per capita income of farm people is in prospect.

The standard of living on farms will probably continue to improve, partially because of increased income from nonfarm sources.

Farm output is expected to remain high and may even set a new record, depending on the weather.

Exports of farm products will likely continue high but will probably be somewhat less than during the fiscal year ending June 30, 1957.

Carryover of feed grains is expected to increase, but stocks of wheat and cotton may decline again.

National food consumption will likely remain at a high level.

Marketing charges may increase and push retail food prices higher.

Government price supports, Soil Bank payments and export program costs will probably remain large, but land in the acreage reserve program is expected to be reduced.

Farm debts and farm asset values will likely continue upward.

Specific conditions which are assumed will prevail during the ensuing year are: (1) the domestic business situation will continue fairly strong with no substantial letdown in production, prices or employment; (2) war will be avoided, and the international situation will not touch off a burst of inflation; and (3) there will be no major changes in Governmental programs affecting 1958 farm income.



Federal Reserve Bank of St. Louis

Survey of Current Conditions—p. 9

What's in Store for Farmers in 1958

Average farm commodity prices and net realized farm income are expected to be about the same in 1958 as last year.

THE AVERAGE LEVEL of prices received by farmers has gone up a little for two successive years. For the first ten months of 1957 prices averaged about 3 per cent above the same months of 1956. With domestic demand and exports expected to continue strong during 1958, no great change from average prices received in 1957 is expected.

The somewhat higher level of farm output expected in 1958, coupled with the same average prices, points to a modest increase in gross farm income. Higher production costs, however, may cancel out the increase, leaving net realized income at about the 1957 level. Estimates of realized net farm income in 1957 are slightly above the \$12.1 billion received in 1956 and well above the 1955 total.¹ When the increased aggregate net realized farm income is divided by a reduced number of farms, it means a greater increase in realized net accruing to each farm. The number of farms is declining about 2 per cent per year. Moreover, as farm population is declining at an even faster rate than the number of farms, there will probably be a somewhat greater increase during 1958 in average realized net income per person living on farms.

Production costs will probably continue to rise.

Department of Agriculture economists expect farm costs to continue upward in 1958, although at a slower rate of increase than occurred during 1957.

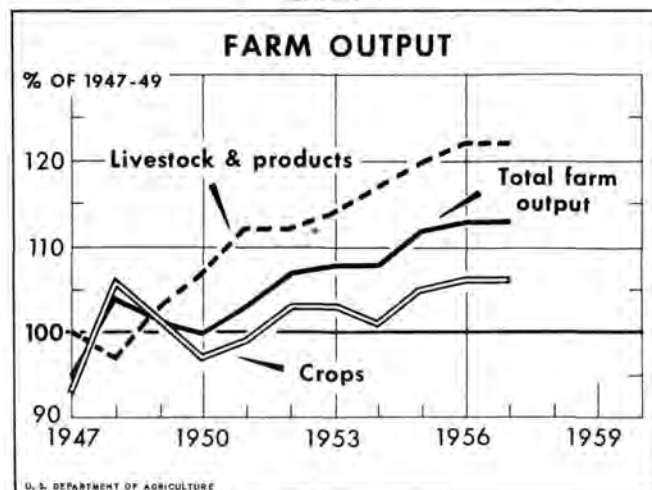
¹ Realized net farm income in the Eighth District in 1957 was probably less than in 1956 because of poor weather for planting and harvesting, especially in the southern part of the district. Cash farm receipts in the district during the first ten months of 1957 were down 11 per cent from the same months of 1956.

Average prices paid by farmers for goods and services used in production during the first nine months of 1957 were 4 per cent higher than in the same months of 1956. This upturn was attributed to a general increase in the prices of industrial products used by farmers and a substantial rise in feeder livestock prices. Machinery, equipment, building and fencing materials averaged about 4 per cent higher. Prices of such factory-produced goods are expected to increase less in 1958 than last year.

Supplies of farm products will be abundant.

Supplies of farm products in 1958 are expected to exceed the more than adequate supplies of recent years. Output in 1957 of both crops and livestock held near the record levels of 1956 (Chart I) and stocks of feed grain continued to rise. However, some progress was made in reducing burdensome inventories of wheat, cotton and rice. Prospects for an overall reduction in carryover at the end of 1958 are not promising.

CHART I



The nation's farms are expected to set new production records, despite acreage allotments and the Soil Bank Program. The Soil Bank Program was credited with reducing crop acreage from 354 million acres in 1955 to 338 million acres in 1957, but crop production remained at record levels. In 1958 fewer acres are expected to be placed in the acreage reserve program. The expected increase in crop acres and the upward trend in yields may again raise total crop output. Furthermore, large feed supplies, coupled with expanding hog and broiler output, point to increased production of livestock and livestock products.

... reflecting technological advances which boost output per acre and per animal unit.

Another supply factor, difficult to measure but of increasing importance during the last quarter century, is the change in farm technology. Today's farm worker produces on the average as much in one hour as a farm worker produced in two hours in 1940, or in three hours in 1910.

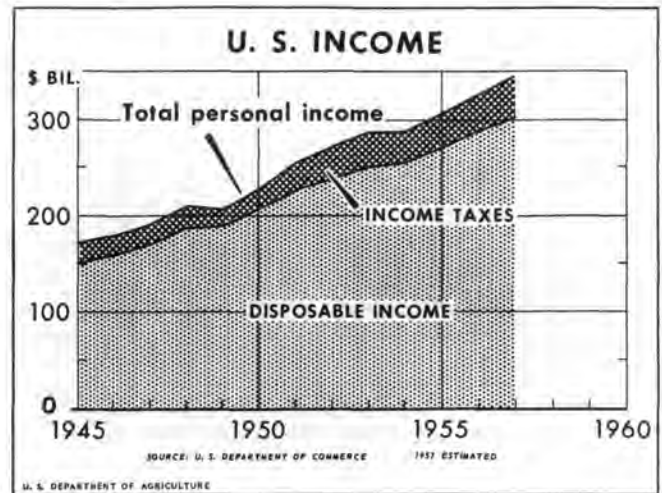
Acreage of cropland used on the nation's farms in 1957 was slightly smaller than in 1940, but total production was 24 per cent greater. Markedly increased yields have been obtained for the major crops of wheat, corn, cotton and tobacco.

Production of livestock and livestock products per breeding unit has also shown equally impressive gains. The number of milk cows has been the lowest on record during the past few years, while production of milk has been near record levels. Egg production per laying hen has similarly increased. Total livestock production in 1957 is estimated at 40 per cent above 1940; however, the number of breeding units was up only 8 per cent. These basic trends are expected to continue in 1958.

Domestic consumption of farm products will remain at high levels...

Consumer expenditures for food and other farm products, at record levels throughout 1957, are expected to remain high in 1958 reflecting the increase in population and disposable income of consumers. Disposable income of consumers was about 5 per cent higher in 1957 than a year earlier, and is expected to

CHART II



remain high in 1958 (Chart II). Expenditures for food have gone up at about the same rate as consumer income. However, much of the food expenditure increase has been absorbed by additional services and higher cost of food distribution (Chart III).

... but exports may decline slightly.

Exports of American farm products are expected to be high in fiscal 1958, but possibly somewhat below that of the previous fiscal year (Chart IV). In the 1957 year over one-half the production of wheat, cotton and rice, and one-third the production of soybeans and tobacco was shipped to other countries.

Approximately 40 per cent of 1957 exports can be traced to various Government programs which involve

CHART III

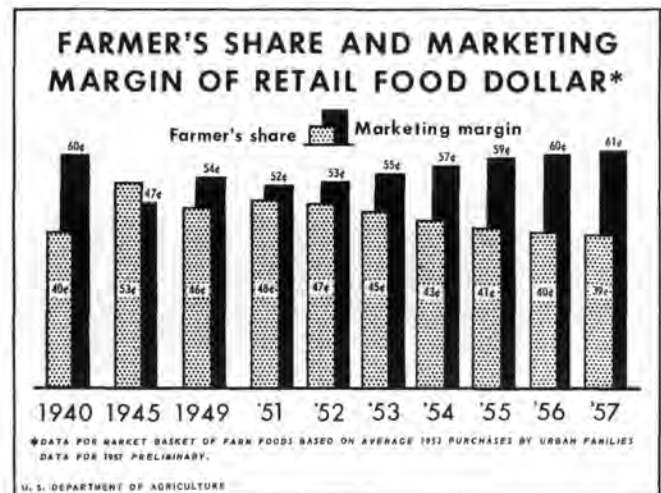
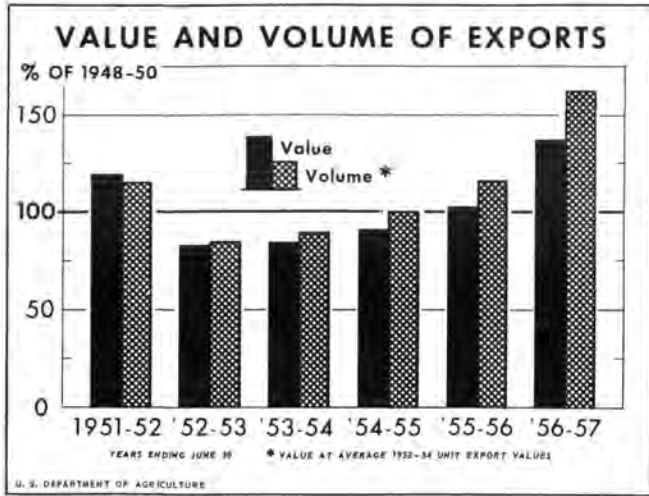


CHART IV

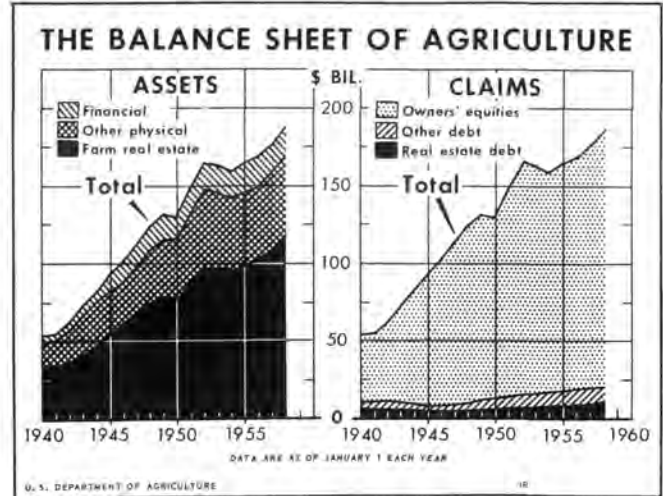


barter, charitable donations or sales of surplus commodities for foreign currencies. Also, a portion of the remaining 60 per cent was financed by the Government through the Commodity Credit Corporation or other Government agencies. During the past fiscal year, however, our agricultural exports which sold for dollars reached \$2.8 billion, the second highest since World War II.

...reflecting a reduction in the availability of dollars of some major importing countries.

One important factor in the outlook for exports this year is the financial condition of those nations which pay in dollars for American farm products. Some of those customers suffered important declines in their liquid assets last year. Their efforts in the year ahead to increase gold and dollar holdings may cause a reduction in purchases from us. If their export markets are inadequate, they will be forced to produce increasing quantities of farm products at home and reduce imports from the United States.

CHART V



The financial outlook for farmers in 1958 is much the same as last year.

Generally strong net worth positions are expected to be maintained by many farmers in 1958. Farm land and most other farm capital items are expected to continue upward in value. A further rise in debt is also anticipated, although the increase may be at a slower rate than in recent years. It was estimated that owners' equities at the beginning of 1958 would total \$168 billion, or nearly 7 per cent above that of the previous year.² Farm real estate accounted for a large percentage of this estimated increase (Chart V). Little change is expected in the amount of financial assets held by farmers. Cash bank deposits and other liquid financial assets remain approximately the same as a year ago.

² Net worth positions of farmers in the Cotton Belt portion of the Eighth District probably deteriorated in 1957. Excessive rainfall reduced the quality and quantity of the cotton crop and prevented the harvest of a considerable acreage of soybeans. Farmers in this area probably had a heavy carryover of debts on January 1, 1958, and equities somewhat below those of the previous year.

CONDENSED SUMMARY OF 1958 OUTLOOK FOR MAJOR EIGHTH DISTRICT
FARM COMMODITIES AS SEEN BY THE DEPARTMENT OF AGRICULTURE

Prices of finished cattle are expected to average a little higher than last year.

Average pork prices may be about the same as last year during the first half of 1958, but in the second half are expected to move appreciably lower than in the second half of the past two years.

Milk prices are not expected to change much from the 1957 average.

Somewhat higher egg prices are in prospect, but the outlook for broilers is less optimistic.

Large supplies generally dominate the outlook for all major Eighth District crops.

The supply of feed concentrates has reached a record of 214 million tons for the current feeding season. High protein feed supplies are expected to equal those of last year.

Wheat carryover may be less next July 1. Price is expected to average near the support level.

Supplies of food fats and oils are up. A carryover of 50 million bushels of soybeans is expected.

Rice carryover may be down in 1958 for the second successive year.

Supplies of cotton are down from last year and a further reduction in carryover in 1958 is expected.

Somewhat higher average prices are expected in 1958 for cattle.

Prices of fed cattle are expected to average a little higher during the current feeding season than last year. Until late 1957, cattle producers withheld few cattle from slaughter. In 1958 the number withheld for breeding is expected to increase, reducing total cattle slaughter and beef output. The estimated supply of all kinds of meat in 1958 is about 158 pounds per person, or 1 pound less than the estimated consumption in 1957. Higher prices were paid for feeder stock last fall than the previous year, but feed cost will be lower, and experience has shown that when cattle prices turn upward the rise generally exceeds expectations.

Pork prices may decline appreciably during the second half of the year.

Hog prices may equal 1957 prices during the first half of the year but are expected to decline after midyear. Supplies of pork per person during the first part of the year will be at about the same level as last year. A larger spring pig crop is anticipated, which will increase supplies when marketed later in the season. This increase is expected to be sufficient to cause a rather sharp decline in prices.³

³ More recently the Department of Agriculture has estimated that the spring pig crop will be smaller than was predicted during the Outlook Conference. If the later estimates are borne out, the price decline may not be so sharp.

Not much change is expected in the price of milk.

Relative stability in milk prices is in prospect again this year.⁴ Milk prices changed very little during the past year except for some seasonal variation and the April 1 increase in the support level. Fluid milk prices were up in a few markets as a result of premiums established over minimum levels. The United States average price for the year was \$4.20 per hundred pounds compared to \$4.13 in 1956.

Total milk production in 1957 was about 127 billion pounds, or about 1.3 billion pounds more than in 1956. Large supplies of feed concentrates and roughages, plus relatively favorable price relationships, point to a further increase in milk production in 1958. Output will probably be up by one to two billion pounds.

Supplies of milk continue to exceed available outlets at existing prices, pointing to a continued surplus milk production this year of about 5 billion pounds. In recent years consumption of non-fat-solids (all milk solids excluding butterfat) have been around 48 pounds per person compared to 46 pounds in 1950 and 40 pounds during the 1920 and 1930 decades. Consumption of milkfat, however, has been 27 pounds per person during the past few years compared to 29

⁴ The Secretary of Agriculture recently announced a reduction in price supports for dairy products effective April 1, 1958. Whole milk may go down ½ cent per quart.

pounds in 1950 and 31 to 32 pounds during the 1920 and 1930 decades. At the current consumption rate, the prospective increase in population next year will little more than offset the expected increase in production.

Egg prices are expected to be higher, but the outlook for broilers is less optimistic.

Somewhat higher egg prices are in prospect for early 1958, according to Department economists. At the beginning of 1958, there were about 5 per cent fewer layers than a year ago. Higher production per bird may partially offset the reduction in layers over the full year, but during the flush spring laying season egg output will probably be down. This would result in reduced egg consumption per person, or fewer eggs for storage, or a combination of the two. In any case, egg prices received by farmers during the first half of 1958 are expected to average about 5 cents per dozen higher than the first half of 1957. Higher egg prices combined with cheaper feed will provide egg producers with a more favorable situation through the 1958 hatching season.

The outlook for broiler prices is less optimistic. Production in 1957 was probably about 6 per cent above the 1,345 million birds produced in 1956. About the same percentage increase is expected again this year. Broiler prices will probably average about 19 cents per pound, in view of increased supplies of poultry but with the slight decline expected in other meat production per person.

Large supplies dominate outlook for major Eighth District crops.

Total supplies of feed concentrates have reached a record of 214 million tons for the current feeding season. This is 7 per cent above the 200-million-ton record of last year, and the fourth successive year of record supplies. All increases in stocks have been held under Government support programs, "free" stocks remaining comparatively stable.

Production of feed grains has exceeded consumption plus exports during the past five years by an average of five million tons, or 4 per cent per year, and a sixth consecutive increase is expected this year in the carryover stocks.

Corn has accounted for much of the increase in feed grain supplies. Despite declining acreage, pro-

FEED GRAIN SUPPLY DISAPPEARANCE AND CARRYOVER ESTIMATES FOR 1956-1957 AND 1957-1958

	1956-1957	1957-1958
	(millions of tons)	
Production	130	140
Carryover from previous year	43	47
Imports	1	1
Total supplies	174	188
Total disappearance	127	130
Carryover into following year	47	58

duction has exceeded disappearance in each of the last five years. Although acreage for harvest in 1957 was about 10 per cent less than in 1955, last year's crop of 3.3 billion bushels was the third largest on record and about 100 million bushels in excess of 1955 production.

A carryover of 1.4 billion bushels of corn into the 1958-1959 season is expected. This is approximately 100 million bushels in excess of last year's carryover. Most of the carryover will be under loan or owned by the Commodity Credit Corporation.

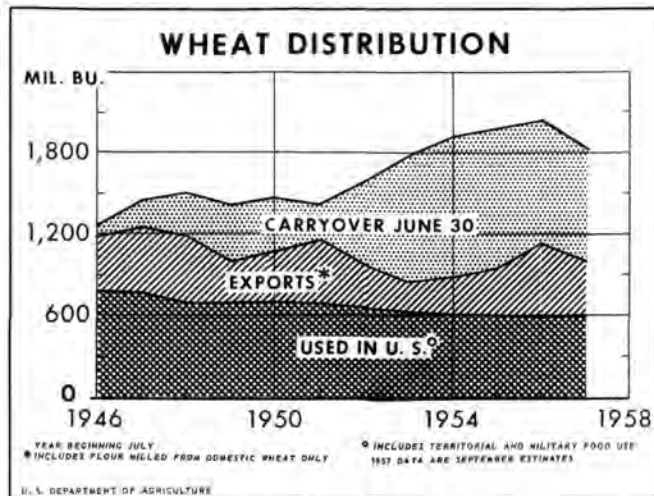
Supplies of other major feed grains, particularly sorghum grain and barley, increased from 1956 to 1957. The big crop of sorghum grain in 1957 reflects a record acreage harvested, use of improved varieties and a favorable growing season. Large quantities of sorghum grain and barley are being placed under the price support program, and a large carryover into next year is expected. Oats are the only feed grain not in record supply this year.

The level of feed grain prices is expected to continue lower than last year, at least through the winter and spring. The October 1957 prices were about 12 per cent below October prices of the previous year. Practically no seasonal price gains were made last year, and less than normal seasonal increases are expected this year. Winter and spring corn prices are expected to average lower than the \$1.21 per bushel average of last winter and spring.

ESTIMATES OF PRODUCTION, SUPPLY AND DISAPPEARANCE OF WHEAT FOR THE MARKETING YEARS OF 1956-1957 AND 1957-1958

	1956-1957	1957-1958
	(millions of bushels)	
Production	997	927
Carryover from previous year	1,033	908
Imports	8	8
Total supply	2,038	1,843
Exports	549	400
Domestic consumption	581	592
Total disappearance	1,130	992
Carryover into following year	908	851

CHART VI



Wheat carryover is expected to be down again next July 1. The 1957 decline was the first significant reduction since the buildup began in 1952 (Chart VI). Record exports of 549 million bushels were the main factor in the decline. The previous export record of 504 million bushels in 1948-1949 was exceeded by almost 10 per cent.

A large part of the 1956-1957 wheat exports moved under Government foreign aid programs or by export subsidies. The cost of all the Government programs to stabilize wheat prices and incomes was \$827 million, or about one-fourth of the total spent on all commodities for price stabilization purposes.

Increasing yields per acre have been an important factor in excessive wheat supplies. In 1957, yields reached a record of 18.7 bushels per seeded acre, 50 per cent above the five-year prewar average.

The average price to farmers for wheat in 1957-1958 is expected again to be near the national support level.

The carryover of rice on August 1, 1958 is expected to be down about 15 per cent from last year. On August 1, 1957 carryover totaled 20.1 million hundredweight compared to the record carryover of 36.6 million hundredweight on August 1, 1956. Record exports of 37.7 million hundredweight under Government foreign aid programs was the main factor contributing to the sharp carryover decline in 1957.

Under provisions of existing legislation, a crop of 45.0 million hundredweight of rice may be produced in 1958. Prices of rice for the 1957-1958 marketing year are expected to average slightly above the support rate of \$4.72 with the exception of certain varieties and qualities.

Hay supplies for the 1957-1958 season are also at record levels. Good weather for production of hay and pastures prevailed over most of the nation during the past summer and fall. Drouth areas were comparatively small and confined largely to the eastern states and to local areas in the Southwest.

High protein feed supplies have increased steadily during the past twenty years. Expanded soybean meal production, which now accounts for over half the supply of such feeds, is the major factor in the increase. Total supplies of high protein feed during the current feeding season are expected to equal those of last year. Production of soybean meal and cake may be a little larger than last year's record, but a reduced output of cottonseed and linseed meal is expected.

Soybean meal prices are expected to average about the same as last year. High protein feed prices, particularly soybean meal, have declined more rapidly during the past two or three years than grains. This decline has significantly reduced the difference between the price of soybean meal and corn. This more favorable competitive factor, plus the expected increase in livestock production, should help maintain soybean meal prices at approximately 1957 levels.

Food fats and oils (primarily soybean, cottonseed, linseed, and tung oils and lard), like other crops, are beset by generally larger supplies than a year earlier. The total supply of food fats in 1957-1958 is expected to be about 11.8 billion pounds compared to slightly less than 11.7 billion pounds last year. An additional fifty million bushels of soybeans (equivalent to 550 million pounds of oil) are likely to remain on hand next September 30.

Exports are an increasingly important part of the market for food fats and oils. Such exports were equal to 27 per cent of the 1956-1957 domestic production. Indications are that exports during the current marketing season will be somewhat less than last year. Lower prices will probably prevail, but exports will be dependent largely on Government programs which enable foreign nations to make purchases with their own currencies. Exports of fats and oils are estimated at about 1,100 million pounds for the current marketing year compared with 1,230 million pounds in 1957.

Supplies of soybeans for 1957-1958 are estimated at 500 million bushels, or 40 million more than last year's record. Production last year was estimated at 491 million bushels, 8 per cent higher than in 1956. A crush of about 325 million bushels is anticipated. Exports may total about ninety million bushels. With seed requirements of thirty-five million bushels, about fifty

million bushels would be carried over into the following season. In view of heavy supplies, any seasonal upswing in price will be limited.

Cottonseed output in 1957 was estimated at nearly 11 per cent less than in 1956, and the lowest since 1950. Prices of cottonseed meal and oil, however, will probably reflect the large supplies of soybean meal and oil. No significant rise in cottonseed oil prices is expected, and cottonseed meal prices may average somewhat lower than last year.

The total supply of burley tobacco is slightly below that of last year, and 4 or 5 per cent below the record high of three years ago. Supply is about 3.5 times estimated disappearance compared with a high of 3.6 during 1954-1955 and a range of 2.7 to 3.3 for several years prior to that. Carryover is the third largest on record. The 1957 burley crop is expected to be 5 per cent below that of the previous year, and the second smallest since 1943. The Soil Bank Program, combined with acreage allotments, brought about a slight reduction in acres. Yields per acre were also down from the previous year's levels.

Supplies of cotton are down from last year's record high. On August 1, 1956, cotton producers were faced with a record carryover of 14.5 million bales which, added to 1956 production and imports, resulted in record supplies of 27.6 million bales. But carryover on August 1, 1957 was down by more than three million

bales because of an increase in exports to 7.6 million bales, the highest since 1932. Domestic consumption of 8.6 million bales was slightly below the previous year's level. Much of the increase in exports can be credited to lower export prices. Domestic and export prices were the same until the 1956-1957 marketing season, when export prices on cotton held by the Commodity Credit Corporation were reduced to permit the selling of United States-produced cotton on the world market. It is believed that this reduction affected foreign production, foreign consumption and stocks of cotton.

Carryover on August 1, 1958, is expected to be down another 2.3 million bales. Exports during the current season are estimated to be about 5.5 million bales, the difference between foreign production and consumption. This is smaller than exports last year when foreign stocks were built up. Such stocks are expected to remain fairly stable this year. Domestic mill consumption of cotton is not expected to increase. Consumption per capita has been trending downward since the end of World War II. Concomitant with this downward trend has been an upward trend in consumption of man-made fibers. However, no additional substitution of man-made fibers for cotton was apparent from 1955 to 1957. Use of both types of fibers was down about 9 per cent over the two years.

CLIFTON B. LUTTRELL



Survey

OF CURRENT CONDITIONS

Released for publication January 5

AS 1957 DREW TO A CLOSE, business conditions were somewhat less sanguine than earlier. The trend of activity was downward in manufacturing, and unemployment was rising more than the usual amount. Yet there were some brighter aspects on the economic scene. Department store sales picked up more than seasonally in the first three weeks of December, prospects for home building improved and greater outlays for defense purposes appeared to be in the offing.

While the old year ended with a declining trend, economic activity in 1957 averaged higher than in 1956. Gross national product, personal income and spending were all about 5 per cent higher, according to the latest available information. But the greater part of the increase reflected higher prices and the gain in real terms was nominal. Total employment and the physical volume of industrial output, for example, probably exceeded 1956, but by less than one per cent. With the growth in population, income available for spending by each person, when adjusted for higher prices, was actually slightly less than in 1956.

The capital investment boom, which was a major force in the expansion of economic activity during 1956 and early 1957, apparently reached a peak during the year. According to the survey taken by the Department of Commerce and the Securities Exchange Commission, planned outlays by business on new plant and equipment in the first quarter of 1958 are 5 per cent below those of the fourth quarter of 1957. The decline follows the substantial expansion of plant capacity in recent years. With some manufacturing firms operating at less than desired rates of capacity, the pressure for additional plant facilities has been reduced. According to the Commerce-SEC Survey all major groups of industries intend to reduce capital outlays in the first quarter of the year more than is normal for that season. The largest decline, both relatively and in dollar amount, is anticipated by manufacturers.

With the weakening of inflationary tendencies and the declines in new orders received, a more cautious

attitude toward inventories has become apparent. Business inventories had been augmented moderately during the first three quarters of 1957, but in October stocks were reduced substantially. Inventory liquidation probably continued in November and early December as evidenced by the contraseasonal decline in bank loans to business.

Another factor in the decline of business activity has been the reduction in Government spending for military goods. In the third quarter of 1957, outlays for national security purposes were slightly less than in the preceding quarter and military ordering was substantially reduced. However, following recent developments in the international situation, the rate of military spending may be increased in the months ahead. There may also be a shift in emphasis on the type of weapons, machines and techniques, resulting in reduced activity for some producers and increases for others. Shifts in defense needs have already been felt in the Eighth District in reduced employment at ordnance and aircraft plants in the St. Louis and Louisville areas.

The decline in the demand for military and industrial equipment has been felt most severely in the nation by the metal and metal-fabricating industries. Largely reflecting the reduction in output of durable goods, total industrial production declined in October and November and a further decrease was indicated in December. In November industrial production, as measured by the Federal Reserve index, was about 5 per cent less than a year earlier. Weakness was evident in the automobile industry, and output was cut back in December as dealers' inventories rose sharply. Producers were reported to be scheduling output for the first quarter of 1958 at less than a year ago, reflecting the slower sales pace of the 1958 models.

The decline in industrial production in the past year is also apparent in the major metropolitan areas of the Eighth District. In November, manufacturing employment in these areas averaged 4 per cent less than a year ago, with declines occurring in St. Louis,

Louisville, Memphis and Evansville. In Little Rock, however, manufacturing employment was virtually unchanged from the year-earlier level.

The easing of production apparently continued in December. Steel ingot production in the St. Louis area declined substantially from November to December and was about a third less than a year earlier. Lumber output, livestock slaughter, coal production and freight carloadings likewise fell below year-earlier levels. Crude oil production, however, was at about the same pace.

While manufacturing activity declined, construction activity in the district continued at a high level. The total value of construction contracts awarded in the first ten months of the year was 4 per cent larger than in the corresponding period of 1956. The district gain continued to result entirely from greater residential construction. Nonresidential, public works and utilities construction contracts fell below year-earlier levels. Residential construction contracts in the first ten months of the year totaled \$525 million, an increase of \$76 million over the corresponding period of 1956. The increase was approximately equal to the value of large residential projects at military installations and other publicly owned housing included in contracts awarded in 1957.

Recently, there has been some upturn of private residential activity in the district. The value of contracts for housing in the district averaged about the same in the August-October period as in the first seven months of the year. However, in the three months ending in October nearly all of the contract value was for privately owned housing whereas in the first seven months publicly owned housing constituted about one-fifth of the total.

The outlook for residential construction has been enhanced by recent developments and the Departments of Labor and Commerce have forecast a 6 per cent increase in such expenditures in 1958. Greater availability of mortgage funds and continuing population growth may combine to bring increased residential building in 1958. The recent decline in bond yields has made mortgages more attractive and the prospective decline in business capital outlays may reduce the pressure for investment funds.

The decline in business activity has been reflected in reduced demands for labor. Nonfarm employment in the nation, which usually rises between October and November, dropped by 300,000 and, for the first time in almost three years, fell below year-ago levels. Manufacturing jobs, which declined generally during

1957, numbered 625,000 below a year ago. The average workweek of factory production workers also declined and in November was at the lowest level for that month since 1949. Employment in nonmanufacturing industries also edged downward in November after about three years of consistent gains (allowing for seasonal variations). Employment in construction and transportation was less than a year earlier, but in other nonmanufacturing industries employment continued above year-ago levels.

As demands for labor were reduced, unemployment turned upward more than seasonally in November and early December. In the week ended November 16 there were an estimated 3.2 million unemployed, 5 per cent of the labor force (after seasonal adjustment) and 526,000 more than a year earlier. Insured unemployment continued to mount more rapidly than usual in November and early December.

In the St. Louis, Louisville, Memphis and Evansville areas, total nonfarm employment in November was slightly less than a year earlier. Preliminary indicators in December show unemployment in these cities was larger than a year earlier. In the four weeks ending December 21 unemployment insurance claims rose somewhat in St. Louis and Evansville, in contrast to declines in the corresponding period last year. In Memphis the increase was greater than a year ago, but in Louisville it was substantially less.

With employment leveling off and the average workweek being reduced, personal income declined slightly from August through November. Reflecting this decline and more cautious attitudes, consumers spent at a slower pace in the last few months of 1957. Retail sales, after allowance for seasonal variations, declined through November from the peak reached in August. In the first part of December new automobile sales were less than a year earlier. Department store sales in both district and nation, however, gained more than seasonally in the first three weeks of December and were about the same as a year earlier.

The easing of economic activity has been accompanied by some reduction in the upward pressures on commodity prices and by actual price declines for some important commodities. Average wholesale prices have shown only minor variations since July, primarily as a result of seasonal movements in prices of farm products and processed foods. Average industrial commodity prices have shown little change. The upward pressure on consumer prices has also eased, and the index of consumer prices showed little change from August through October. In November the index

increased slightly, reflecting primarily the higher prices (and lower discounts) on new models of automobiles. Government officials, however, expected a leveling off of the index in subsequent months.

Loan demand at district banks was heavier than usual during December. Total loans (except inter-bank) at weekly reporting banks in the district rose \$34 million or 2 per cent during the four weeks ended December 18. Businesses and consumers accounted for the bulk of the loan expansion. In the business sector, sales finance companies and commodity dealers added \$18 million and \$13 million respectively to their outstanding indebtedness. On the other hand,

manufacturers of textiles, apparel and leather made larger net repayments of bank loans in the four weeks than the average net reductions in the like period of recent years. "Other" (largely consumer) loans rose \$12 million or over 2 per cent. The expansion in these loans centered in banks at St. Louis, Louisville and Memphis.

On balance, district banks increased their investment holdings \$38 million during the four weeks. The increase was in all types of United States Government securities, stemming in large part from net purchases of the Treasury's new certificates, notes and bonds in early December.





Industry

VARIOUS INDICATORS OF INDUSTRIAL ACTIVITY

	Nov. 1957	Oct. 1957	Nov. 1956*
Steel Ingot Rate, St. Louis area (Operating rate, per cent of capacity)	87	-4%	-16%
Coal Production Index—8th Dist. (Seasonally adjusted, 1947-49=100)	76.2 p	-10	-8
Crude Oil Production—8th Dist. (Daily average in thousands of bbls.)	389.2	-1	-1
Freight Interchanges at RR—St. Louis (Thousands of cars—25 railroads—Terminal R. R. Assn.)	95.9	-4	-7
Livestock Slaughter—St. Louis area (Thousands of head—weekly average)	107.6	-11	-24
Lumber Production—S. Pine (Average weekly production—thousands of bd. ft.)	202.7	-8	-3
Lumber Production—S. Hardwoods (Operating rate, per cent of capacity)	71	-12	-20

* 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 change in index points or in percents of capacity.

p—Preliminary.

Banking

BANK DEBITS¹

Six Largest Centers:	Nov. 1957 (in millions)	Nov. 1957 compared with Oct. 1957	Nov. 1956
East St. Louis—National Stock Yards, Ill.	\$ 140.4	-15%	-8%
Evansville, Ind.	177.2	-5	-0
Little Rock, Ark.	200.3	-13	+1
Louisville, Ky.	863.3	-5	+2
Memphis, Tenn.	886.3	-3	-2
St. Louis, Mo.	2,277.9	-10	-2
Total—Six Largest Centers	\$4,545.4	-8%	-2%
Other Reporting Centers:			
Alton, Ill.	\$ 35.9	-7%	-7%
Cape Girardeau, Mo.	16.9	-10	-8
El Dorado, Ark.	27.6	-14	+2
Fort Smith, Ark.	60.4	-4	+8
Greenville, Miss.	32.7	+5	-0
Hannibal, Mo.	11.6	-8	+10
Helena, Ark.	16.2	+8	+9
Jackson, Tenn.	29.1	-7	-12
Jefferson City, Mo.	92.9	-16	+23
Owensboro, Ky.	50.9	-0	+2
Paducah, Ky.	30.4	-0	+9
Pine Bluff, Ark.	58.0	-13	-5
Quincy, Ill.	43.1	-13	+3
Sedalia, Mo.	17.1	-3	+10
Springfield, Mo.	89.5	-15	-1
Texarkana, Ark.	20.3	-6	-4
Total—Other Centers	\$ 632.6	-9%	+3%
Total—22 Centers	\$5,178.0	-8%	-2%

INDEX OF BANK DEBITS—22 Centers

Seasonally Adjusted (1947-1949=100)	1957		1956
	Nov.	Oct.	Nov.
	166.1	169.2	168.9

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

EIGHTH DISTRICT WEEKLY REPORTING MEMBER BANKS (In millions of dollars)

Assets	Change from		Principal Changes in Commercial and Industrial Loans ²	
	Dec. 18, 1957	Nov. 20, 1957	Net Change During 4 Weeks Ended 12-18-57	
Loans¹	\$1,710	\$+34	Business of Borrower	
Business and Agricultural	915	+23	Manufacturing and Mining:	
Security	48	+1	Food, liquor and tobacco \$ -0-	
Real Estate	279	-2	Textiles, apparel and leather -7	
Other (largely consumer)	494	+12	Metals and metal products -0-	
U.S. Gov't. Securities	883	+40	Petroleum, coal, chemicals and rubber +1	
Other Securities	225	-2	Other -1	
Loans to Banks	37	+17	Trade Concerns:	
Cash Assets	954	+29	Wholesale -2	
Other Assets	46	-0-	Retail -1	
Total Assets	\$3,855	\$+118	Commodity dealers +13	
Liabilities and Capital			Sales finance companies +18	
Demand Deposits of Banks	\$ 804	\$+78	Public Utilities (including transportation) +2	
Other Demand Deposits	2,072	+57	Construction -1	
Time Deposits	602	-2	All Other +1	
Borrowings and Other Liab.	80	-15	Total \$+23	
Total Capital Accounts	297	-0-		
Total Liab. and Capital	\$3,855	\$+118		

¹ Loans are adjusted to exclude loans to banks; the total is reported net; breakdowns are reported gross.

² Changes in business loans by industry classification from a sample of banks holding roughly 90% of the total commercial and industrial loans outstanding at Eighth District weekly reporting member banks.

Agriculture

CASH FARM INCOME

(In thousands of dollars)	Oct. 1957	Percentage Change	
		Oct. '57 compared with Oct. '56	Jan. thru Oct. 1957 compared with 1956
Arkansas	\$100,067	-26%	-2%
Illinois	222,496	-4	+13
Indiana	118,210	-0	+3
Kentucky	35,736	-2	+3
Mississippi	80,985	-3	-18
Missouri	115,505	-14	-4
Tennessee	61,922	-12	-11
7 States	\$734,921	-13	-5
8th District ¹	\$362,248	-20	-11

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)		
	Oct. 1957	Sept. 1957	Oct. 1956
Total	\$102,690	\$105,979	\$99,574
Residential	49,553	50,813	38,241
Nonresidential	36,017	30,355	36,250
Public Works and Utilities	17,120	24,811	25,083

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

Trade

DEPARTMENT STORES

	Net Sales			Percentage of Accounts and Notes Receivable Outstanding Oct. 31, '57 collected during Nov.	
	Nov. 1957 compared with Oct. '57	Nov. '56	11 mos. '57 to same period '56	Instal. Accounts	Excluding Instalment Accounts
8th F.R. District Total	+9%	-7%	-1%	16	55
Fort Smith Area, Ark. ¹	+14	-4	-1		41
Little Rock Area, Ark.	+10	-0	-3		28
Quincy, Ill.	+7	-6	-4		
Evansville Area, Ind.	+18	-17	-3		
Louisville Area, Ky., Ind.	+9	-10	-3	14	42
Louisville (City)	+8	-12	-6		
Paducah, Ky. ¹	+2	-5	+4		
St. Louis Area, Mo., Ill.	+11	-5	+1	17	67
St. Louis (City)	+12	-8	-3		
Springfield Area, Mo.	+10	+1	+3		
Memphis Area, Tenn.	+6	-14	-4	13	36
All Other Cities ²	-8	-16	-5		

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 November 1957 were three per cent less than on the corresponding date a year ago.

INDEXES OF SALES AND STOCKS—8TH DISTRICT

	Nov. 1957	Oct. 1957	Sept. 1957	Nov. 1956
Sales (daily average), unadjusted ³	163	138	144	175
Sales (daily average), seasonally adjusted ³	135	126	145	145
Stocks, unadjusted ⁴	n.a.	169	158	168
Stocks, seasonally adjusted ⁴	n.a.	151	151	150

n.a. Not available.
³ Daily average 1947-49=100
⁴ End of Month average 1947-49=100

Trading days: November 1957—25; October 1957—27; November 1956—25.

RETAIL FURNITURE STORES

	Net Sales	
	Nov. 1957 compared with Oct. '57	Nov. '56
8th Dist. Total ¹	-0%	-3%
St. Louis Area	-0-	-0-
Louisville Area	-7	-7
Memphis Area	+41	-11
Little Rock Area	+19	+6
Springfield Area	-20	-12

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

Note: Figures shown are preliminary and subject to revision.

Monthly Review

May 1958

Volume XXXX

Number 5

The Nation's Economic Accounts

ACCOUNTING, an age-old business discipline, has within recent years become a tool of great usefulness for analyzing the entire economy.

Some of the purposes and principles of economic accounting, or social accounting, are illustrated in this article by reviewing four major systems of national economic accounts. The four are: The National Income and Product Accounts, Input-Output Accounts, Flow of Funds Accounts, and a National Balance Sheet.

The countless transactions involved in the operation of the national economy may be summarized in these accounts into a record open to anyone wanting to know what happened in the economy during a particular period. As the user becomes familiar with the accounts he will appreciate their adaptability and the great wealth of information they contain.



Federal Reserve Bank
of St. Louis



Survey of Current Conditions—p. 66

The Nation's Economic Accounts

The Nation's Economic Accounts, Products of an Age-old Discipline

"Did they earn their dividend?" This is a question many an investor has asked himself in recent weeks as he scanned the published reports of corporations. At the same time he and countless others have been concerned about the course of the whole economy in the current recession. What is declining in the economy? What is going up? Some answers to these and other crucial questions about the performance of businesses and the economy are produced through use of one of the oldest logical disciplines, double entry accounting, a powerful tool for organizing and analyzing economic information.

Accounting in business has been with us a long time. Merchants and bankers of Genoa were well versed in its essential principles as early as 1340. And today the average person, whether or not he can remember the difference between a debit and a credit, has some appreciation of the value of accounting as a guide for business decision-making. He knows that a profit and loss statement, for example, should show him the amounts paid out for labor, materials, interest, and taxes, how much was set aside for replacement of the firm's equipment, and the amount left over as net income for the owners. He might also be interested in the firm's balance sheet for a view of what the firm owns, what it owes, what the owners' net interest amounts to, and how these various items may have changed from time to time. He probably understands that the term "double entry" simply means that a given transaction is reflected in the accounts of a firm twice; that a sale of goods, for instance, is recorded as an increase in a firm's cash (or in the amount owed to the firm) and also as a reduction in the stock of goods. The requirement of a balance, that sometimes elusive goal of the tired bookkeeper or teller, he may remember as an ingenious internal check for accuracy.

What is not so generally understood is the way accounting methods which have been useful as an aid to business judgment have been extended to analysis of economic behavior of whole nations. The wider application, called economic or social accounting, rests upon two assumptions: (1) All economic events of relevance to an economic unit, such as a family or business or unit of government, can be reflected in a set of double entry accounts.¹ (2) The accounts of economic units can be combined into groups or national totals to provide figures useful for analysis of the economic process.² In a way this is like considering individual units of the economy as branches of a few

¹ It is not necessary that every economic unit actually keep such a set of accounts. There are ways of estimating many of the accounting entries that would have been made if accounting records had been kept.

² Raymond W. Goldsmith, *A Study of Saving in the United States*, Princeton University Press, 1955, Volume II, p. 5.

very large corporations or "sectors." Thus, just as business accountants set up accounts for individual corporations, the social accountant prepares combined income statements or balance sheets for all corporations. Similarly, combined accounts for all consumers or for all units of government may be derived.

The underlying logic of applying accounting methods to a national economy may seem obvious enough but why this should be done and how it is done are not so clear. This article therefore reviews briefly some of the major purposes of social accounting, and four systems of accounts which are currently or potentially maintained for the United States economy. Each of the four systems illuminates a particular aspect of the economy, and the four together provide material for a wide variety of analytical approaches. The descriptions of the accounts are meant to illustrate a few major characteristics or principles of social accounting and hence pass over a host of conceptual and statistical details. For the reader who would like a more complete description of the accounts, the references listed on page 65 should be helpful.

Social accounting was not invented all at once by some gifted person. Instead, it has been fashioned slowly over the years by a long succession of practical men trying to find answers to serious problems. As far back as 1696 an early practitioner of "Political Arithmetick" named Gregory King made estimates of national income for England, France, and Holland partly to appraise their relative strength for the interminable wars of that era.³ King applied his rudimentary system of social accounts to questions which have remained of interest to this day: Is the nation growing in wealth and power? How do some nations afford a more bountiful life for their people than do others?

Although much of the pioneering was done long ago, social accounting has come into widespread use only within the last thirty years or so. Furthermore, it is now undergoing rapid development the world over. Among the reasons for the upsurge of interest have been the depression of the thirties, World War II, the striving of underdeveloped nations to accelerate their growth, and the recurring inflations and recessions of the postwar years. All of these have raised problems of public policy.

In their efforts to cope with economic problems governments have set up systems of national accounts that can be used as guides. But more and more businesses and individuals have found uses for the accounts also. In the

³ *Two Tracts by Gregory King*, Reprint of *Economic Tracts*, Edited by Jacob H. Hollander, The Johns Hopkins Press, 1936. In a truly remarkable foreshadowing of today's income and product accounts, King recorded what he called Yearly Income of the Nation; Expense of the Nation; Increase of Wealth; Rent of Lands; Produce of Trade, Arts and Labor; Ordinary Revenue of the Crown; and Extraordinary Taxes. Expense (consumption expenditures) he divided into Diet, Apparel, and Incidental Charges. Expenditures for food he further subdivided into eight major types. He also divided his income and expense estimates by population to obtain per capita measures, just as often is done today for making welfare comparisons.

current recession, for instance, businessmen are watching such national accounting measures as personal income, consumer expenditures, business purchases of durable equipment, and changes in business inventories, in order to decide upon production schedules, sales campaigns, or construction plans. Public agencies and legislators look at the same measures in deciding what should be done to counteract the recession or to ameliorate its effects.

It is apparent that social accounting has been devised as a tool but one may well ask what it does, or how it works. To answer these questions, three of its main functions have been outlined as, "... to provide a running, historical record of the community's economic operations; to measure the efficiency with which the community's economy operates; to provide a periodic inventory, i.e., an indication of the economic position of the community."⁴ These are also things business accounts are designed to do for a firm.

In both areas of use, the individual business or the community as a whole, accounting arranges a heterogeneous mass of facts according to some logically consistent scheme so their significance may be more easily comprehended. The countless transactions required for production and distribution of a nation's output are summarized into a record which can be consulted by anyone wanting to know what happened in the economy during a particular period. How the items are arranged, what is included, and what is left out depend largely upon what questions are expected to be asked by the users of the accounts, although other considerations such as the difficulty of obtaining certain information are important also.⁵

The national economic accounts of the United States represent such a complicated economy and serve such a wide variety of purposes that they may seem forbiddingly complex if viewed in their full detail. However, as the user becomes familiar with the basic principles of their construction and with the ways in which various systems of accounts are related, he will appreciate their adaptability and the great wealth of information they contain. Four principal systems of accounts discussed in this article are listed below. They are all systems actually or potentially maintained by public agencies for the United States.

1. The National Income and Product Accounts which provide dollar measures of total national output; the contribution made to the total by business, consumers and governments, and the incomes they receive; final uses of the total product; and certain transactions with the rest of the world. These accounts are the most familiar, and the longest-established of the four major systems discussed here.

2. The Input-Output or Inter-Industry Accounts, which present interrelations among a great many types of productive activity. In effect, these accounts record the sales

of each of the activities into which the economy has been divided to every other one and, conversely, the purchases of each activity from every other.

3. The Flow of Funds Accounts, which encompass all transactions in the economy that are made by transfers of credit or money. A major feature distinguishing them from the preceding two systems is their emphasis upon financial transactions.

4. The National Balance Sheet. While work on this type of accounting statement has not been attempted on a scale comparable to that devoted to the others, a listing of assets and liabilities for the nation as a whole and for various groups within it is conceptually possible and appears likely to be an outgrowth of the other systems at some time in the future.

The National Income and Product Accounts

The development of the National Income and Product Accounts illustrates very well the ways in which changes of emphasis on problems of pressing public interest influence the structure of a social accounting system. When the depression of the thirties began, many statistical tools which would have been useful for measuring its depth and impact simply were not in existence. To get a better idea of how serious the economic situation was, the Senate in 1932 passed a resolution requesting the Department of Commerce to prepare estimates of national income in cooperation with the National Bureau of Economic Research. The National Bureau, a private research organization with years of experience in studying business cycles, had developed national income estimates in the course of its studies. The first report of the Department of Commerce, "National Income 1929-32," was published in 1934 and was followed by others which gradually grew into the comprehensive set of accounts currently maintained by the National Income Division of the Department.

Originating as they did during a depression, the early national income estimates were in large part designed to indicate changes in the welfare of the people of this country through measures of the income available for their support. Interest centered on producing estimates of the totals for a few major categories of income rather than upon revealing relationships among them.

The traditional concern of economic accounting had been to measure the total value of the goods and services produced in a period which were available to be consumed or added to wealth. This measure was income; what the people of a country receive for their participation in production after allowance is made for replacement of tools and other capital used up. The annual addition to wealth (or saving) was considered to be one of the wellsprings of growth from the time of the earliest economic studies. The long concern with measures of total income and the use of these measures for comparisons of economic performance over time and from country to country thus resulted in emphasizing the second of the social accounting functions mentioned earlier; to measure the efficiency with which the community's economy operates.

⁴ Raymond W. Goldsmith, "Measuring National Wealth in a System of Social Accounting," *Studies in Income and Wealth*, Volume Twelve, National Bureau of Economic Research, 1950, p. 24.

⁵ See Stanley J. Sigel, "A Comparison of the Structures of Three Social Accounting Systems," in *Input-Output Analysis: An Appraisal, Studies in Income and Wealth*, Volume Eighteen, National Bureau of Economic Research, Princeton University Press, 1955.

In the years following the initial publication of national income estimates by the Department of Commerce two things happened which tended to increase the demand for a comprehensive set of accounts which would supplement the total income measures with additional detail in order to reveal interrelationships of various segments of the economy. The first was the natural swing of public concern toward determining the causes of the depression and in finding a way out of it. The second was World War II.

Theories advanced to explain the depression and to support policies to combat it placed increasing stress upon relationships among investment, consumption and income, and government spending as determinants of income and employment. Therefore, the demand for measures of these pivotal activities became more pressing. To determine public policy it was necessary to estimate the effectiveness of alternative plans for construction projects, relief payments, changes in tax rates, lending programs and other measures. In connection with all of these efforts there was a need for more information about the sources of consumers' incomes and how the incomes were used.

When this country entered World War II it became evident that two new problems had to be faced. One was to determine how large a war effort the nation's economy could provide. The second was whether there would be an inflation with the people and their government trying to buy more goods than could be produced. The income and product accounts were expanded to help answer both questions⁶. It is interesting to note that Gregory King used his accounts to answer similar questions in the 1690's when he estimated how long England could sustain herself in war and indicated which activities must be restrained or augmented in order to meet the strain.

To meet the needs of war planning, data were developed on total current production of the economy and

⁶ For a good account of the war expansion of income and product accounting, see Milton Gilbert and George Jaszi, "National Product and Income Statistics as an Aid in Economic Problems," *Dun's Review*, February, 1944. Reprinted in *Readings in the Theory of Income Distribution*. The Blakiston Company, 1946, pp. 44-57.

the shares of it which flowed to consumers, the government and to business (for new facilities and for replacement of equipment wearing out). The new over-all measure of total output was called Gross National Product, and the entire set of accounts could be summarized in a table like the one for 1956 shown below. On the right hand side are four major uses of the total product and on the other side are measures of the payments made to factors of production, other charges and an allowance for the value of the capital used up during the period in producing the total output.

By 1947 the national income and product accounts had assumed substantially their present form, although refinements have been made since then. In these accounts the economy is divided into four major sectors: individuals, businesses, government (Federal, state and local), and foreign. The expenditures and receipts of the sectors are recorded in such a way that the portions of total national output produced and used by each sector can be identified and relationships among the sectors can be clearly discerned. The accounts focus upon flows of currently produced goods and services.

The *Survey of Current Business* is the principal outlet for the published work of the National Income Division relating to the national income and product accounts. Gross national product and other elements of the accounts appear quarterly in the February, May, August and November issues. The greatest amount of detail is provided annually in the *National Income Number* which customarily appears in July. Special supplements provide revised estimates for all of the years covered by the accounts and a detailed description of conceptual and statistical foundations. The most recent of these supplements was published in 1954 and another one is now in preparation.

One of the best ways to gain an appreciation of the usefulness of the income and product accounts is to use them for tracing through an episode such as the current recession. In the third quarter of 1957 the total gross national product was at a seasonally adjusted annual rate

NATIONAL INCOME AND PRODUCT ACCOUNTS, 1956¹

(Millions of dollars)

Compensation of employees	241,372	Personal consumption expenditures	267,160
Wages and salaries	227,237	Durable goods	33,948
Supplements	14,135	Nondurable goods	133,337
Income of unincorporated enterprises and inventory valuation adjustment	39,617	Services	99,875
Rental income of persons	10,322	Gross private domestic investment	65,923
Corporate profits and inventory valuation adjustment	40,449	New construction	33,276
Corporate profits tax liability	21,959	Producers' durable equipment	28,093
Dividends	11,874	Change in business inventories	4,554
Undistributed profits	9,175	Net foreign investment	1,376
Inventory valuation adjustment	-2,559	Government purchases of goods and services	80,227
Net interest	11,860	Federal	47,199
Capital consumption allowances	34,266	National security	42,405
Other charges against gross national product ²	36,800	Other	5,192
CHARGES AGAINST GROSS NATIONAL PRODUCT	414,686	Less: Government sales	398
		State and local	33,028
		GROSS NATIONAL PRODUCT	414,686

Source: *Survey of Current Business*, July, 1957.

¹ Arrangement of items has been altered from the *Survey of Current Business* presentation.

² Indirect business tax and nontax liability, business transfer payments, statistical discrepancy, and adjustment for subsidies and current surplus of Government enterprises.

of \$440 billion.⁷ In the first quarter of this year total output was at a \$424 billion rate, \$16 billion lower. What had happened between the two quarters? Looking at the four principal uses of the product one can see that gross private domestic investment had declined by \$13 billion. Within investment, the larger part of the drop was accounted for by a turnaround from accumulating business inventories at a \$3 billion rate in the third quarter to liquidating at a \$7.5 billion rate in the first quarter of this year. Purchases of producers' durable equipment were nearly \$3 billion lower. Changes in the other major uses of the total product can be similarly traced. How consumers have been affected is of immediate interest and for some indications of this one can turn to estimates of personal income. Here it can be seen that the drop of personal income was \$4.6 billion, much less than the decline in total gross national product. A decline of nearly \$7 billion in wages and salaries had been partially offset by a rise in unemployment compensation payments and other types of income. Total spending of consumers was only \$2.6 billion lower, with a decline of \$3.5 billion in purchases of durable goods and a \$1 billion decline in non-durable goods buying partly compensated for by an increase of nearly \$2 billion in spending for services.

Even a cursory inspection of the accounts such as this reveals much more about the nature of this recession than was apparent about declines such as the one in 1929 even after several years of study. With the data presented in the accounts themselves and other information such as business anticipations, the Federal Budget and construction contract awards, for example, public agencies and businesses can make analyses of many sorts in deciding how to react to the recession.

The national income and product accounts of the United States have widened in objective from the original one of supplying a measure of total income, or a sort of speedometer, for the economy, to one of accounting for changes in several broad types of activity, production, consumption, saving and investment. Consistent measures of these activities within the over-all totals are extremely useful for analyzing behavior of the economy and its major parts.

Input-Output Accounts

Input-output accounts also focus upon flows of goods and services measured in dollar terms and in a sense can be considered an extension of the income and product accounts. In the income and product system, interest centers on final products. Therefore, the value of intermediate products is excluded. To use an illustration from *National Income, 1954*, the production of bread involves production of wheat, milling of flour, and baking, but for adding up the national product the income and product accounts count only the full value of the bread, as the end product, and omit the value of the goods handed on from one stage of production to the next in order to prevent double counting. This is appropriate for many types of analysis, but there are other interesting prob-

⁷ All dollar estimates in this illustration will be expressed in seasonally adjusted annual rates. Third quarter 1957 estimates are those of the Department of Commerce. First quarter 1958 estimates are preliminary estimates by the Council of Economic Advisers.

lems in which it would be desirable to know what happens at each stage of production and the flows of goods between the stages as well as to know what the final output is. To supply detail on the intermediate stages is the essential contribution of a set of input-output accounts.

In construction of the basic accounting statement or table, such as the sample on the next page, the economy is divided into a number of economic activities or industries, defined by the nature of their "outputs" or products. The values of goods and services supplied by each industry to every other industry during a particular period are recorded and those sold to "final" users are shown as well. By consulting the table, one can find how much of the inputs of an industry were drawn from each of the others in the period as well as the value of services "purchased" from the basic factors of production. In other words, if one had a sufficiently detailed input-output table he could ascertain from it what materials and services the bread baking industry used in a period and from what industries they were purchased. He could also tell to whom the bread was sold. An input-output table, in addition to producing measures of final output of the economy as the income and product accounts do, reveals the volumes of raw materials and semifinished goods and the levels of activity of each industry stage that were required.

Problems of war mobilization and demobilization have been primary reasons for government participation in input-output accounting in the past, although a wide range of other uses has been suggested by other institutions and people concerned with development of the system. The first government-sponsored input-output table for this country was constructed for the year 1939 and was applied to the problem of estimating postwar employment.⁸ A larger scale effort based on data for 1947 was conducted by the Bureau of Labor Statistics and cooperating agencies in connection with mobilization planning but was discontinued in 1953.

Although preparation of national input-output accounts for public use is no longer the responsibility of any government agency, there is at least a possibility that some day work will be resumed. A recent review of the national economic accounts, by the National Bureau of Economic Research at the request of the Bureau of the Budget, recommended that an abbreviated table be constructed with 1954 census data and that a more detailed table be prepared utilizing data from the 1958 censuses. It was argued in the report that input-output work should be considered an important aspect of the national accounting system because of its potential value to business and government as a source of information for policy determination, and because of what it might contribute to improvement of other national accounts, notably the income and product accounts.⁹

⁸ This had been preceded by the work of W. W. Leontief who constructed input-output tables for the United States economy for 1919, and 1929, published in his book *The Structure of the American Economy, 1919-1939*, Oxford University Press, 1951.

⁹ *The National Economic Accounts of the United States Review, Appraisal, and Recommendations* by the National Accounts Review Committee of the National Bureau of Economic Research, Reprinted from *Hearings* before a subcommittee of the Joint Economic Committee, Eighty-fifth Congress, October 29 and 30, 1957, General Series 64, National Bureau of Economic Research, Inc.

Interindustry Flow of Goods and Services by Industry of Origin and Destination

(In millions of dollars)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AGRICULTURE & FISHERIES	FOOD & KINDRED PRODUCTS	TOBACCO MANUFACTURES	TEXTILE MILL PRODUCTS	APPAREL	LUMBER & WOOD PRODUCTS	FURNITURE & FIXTURES	PAPER & ALLIED PRODUCTS	PRINTING & PUBLISHING	CHEMICALS	PRODUCTS OF PETROLEUM & COAL	RUBBER PRODUCTS	LEATHER & LEATHER PRODUCTS	STONE, CLAY	IRON
1	10,856	15,048	783	2,079	19	192	-	9	-	-	-	9	-	1,211
2	2,378	4,910	15	60	9	*	*	30	*	-	-	30	*	685
3	-	-	828	-	-	-	-	-	-	-	-	-	-	1
4	64	2	-	1,303	3,882	3	285	43	25	13	-	-	-	-
5	44	204	-	-	1,963	-	5	20	-	30	-	-	-	-
6	148	81	18	18	2	1,094	385	267	1	45	-	-	-	-
7	-	-	-	12	-	7	5	-	-	-	-	-	-	-
8	2	453	65	78	25	5	15	2,597	1,081	331	-	-	-	-
9	-	39	-	2	-	-	-	-	-	767	16	-	-	-
0	830	1,451	25	800	142	26	63	183	97	2,655	-	-	-	-

40	41	42	43	44	45	46	47	48	49	50
MEDICAL, EDUC. & NONPROFIT ORG'S	AMUSEMENTS	SCRAP & MISCELLANEOUS INDUSTRIES	UNDISTRIBUTED	EATING & DRINKING PLACES	NEW CONSTRUCTION & MAINTENANCE	INVENTORY CHANGE (depletions)	FOREIGN COUNTRIES (imports from)	GOVERNMENT	GROSS PRIVATE CAPITAL FORMATION	HOUSEHOLDS
-	-	-	24	-	-	-	250	-	-	-
-	-	-	-	2	-	-	610	-	-	110
-	2,059	132	438	1,310	880	329	201	610	1,740	-
-	-	-	-	-	-	-	-	-	-	-
199	117	1	39	16	12	7	42	15	36	-
2,660	402	1	120	185	*	14	87	26	140	-
690	2,001	104	208	279	183	6	621	8	594	-
813	1,134	104	639	376	338	112	497	335	762	-
DEPRECIATION AND OTHER CAPITAL CONSUMPTION ALLOWANCE										
19,166	6,262	387	3,286	4,013	2,564	1,063	2,161	3,034	3,431	-
44,263	37,636	2,663	9,838	13,321	6,002	2,892	7,899	6,447	14,050	-

TOTAL GROSS OUTLAYS

FINAL DEMAND

42	43	44	45	46	47	48	49	50	TOTAL GROSS OUTPUT						
UNDISTRIBUTED	EATING & DRINKING PLACES	NEW CONSTRUCTION & MAINTENANCE	INVENTORY CHANGE (additions)	FOREIGN COUNTRIES (exports to)	GROSS PRIVATE CAPITAL FORMATION	HOUSEHOLDS	GROSS PRIVATE CAPITAL FORMATION	TOTAL GROSS OUTPUT	DEPRECIATION AND OTHER CAPITAL CONSUMPTION ALLOWANCE	HOUSEHOLDS					
-	-	116	-	-	250	865	92	1,008	1,276	569	21	9,785	44,263		
-	-	2	251	*	9	134	3,469	2	608	1,528	728	22,141	37,636		
-	-	-	-	-	7	45	-	-	77	217	3	1,485	2,663		
-	*	29	4	-	15	580	-	47	61	919	101	21	1,469	9,838	
-	-	20	16	*	12	150	21	1	214	301	193	1	9,987	13,321	
135	1	*	1	-	17	444	5	2,330	174	170	14	36	67	6,002	
78	-	-	4	-	-	199	-	-	198	78	35	52	569	1,459	2,892
-	2	62	26	-	145	836	57	170	44	154	59	-	344	7,899	
-	2,234	27	173	13	321	585	30	-	*	72	156	89	1,491	6,447	
-	-	7	198	222	2	30	1,181	42	635	305	812	186	-	1,964	14,050

40	41	42	43	44	45	46	47	48	49	50						
MEDICAL, EDUC. & NONPROFIT ORG'S	AMUSEMENTS	SCRAP & MISCELLANEOUS INDUSTRIES	UNDISTRIBUTED	EATING & DRINKING PLACES	NEW CONSTRUCTION & MAINTENANCE	INVENTORY CHANGE (depletions)	FOREIGN COUNTRIES (imports from)	GOVERNMENT	GROSS PRIVATE CAPITAL FORMATION	HOUSEHOLDS						
-	-	-	85	-	-	-	350	-	-	-	-	5,078	-	7,856	13,385	
-	-	-	7	392	-	-	14	-	-	-	128	-	-	2,403	2,944	
34	20	1	1	13	-	-	12	-	1	-	30	1	-	-	2,233	
547	575	1,303	960	269	-	-	-	536	-	-	-	-	-	-	24,711	
-	-	-	152	-	-	-	1,030	-	-	-	-	-	-	-	12,075	13,270
4,084	3	56	342	25	-	-	73	7	-	-	-	-	5,464	5,709	154	28,704
-	-	-	-	-	851	-	-	-	-	22	-	-	-	-	-	4,887
-	-	-	-	3	69	12	-	-	-	-	1,313	-	1,325	9,275	-	
3,997	212	503	170	318	74	2,176	1,410	470	73	831	3,458	216	31,308	63,685	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14,003	1,044	7,951	9,199	1,456	-	1,801	4,254	11,492	-	847	30,058	218	2,116	220,474	-	
28,855	5,097	14,301	13,385	2,944	2,233	24,711	13,270	28,704	4,802	17,320	51,060	33,514	191,625	769,248	-	

Source: Division of Interindustry Economics, U. S. Bureau of Labor Statistics, and W. D. Evans and Marvin Hoffenberg, "The Interindustry Relations Study for 1947," *The Review of Economics and Statistics*, Vol. XXXIV, No. 2, May 1952.

THIS BASIC input-output accounting statement for the United States has been condensed by removal of much of the central portion of the table, as indicated by the lines. However, enough of the table has been preserved to illustrate principles of construction. By reading across each row one can see how the output of the producing industry named at the left was distributed to each of the purchasing industries named across the top. If one reads down the columns he can find what each of the industries named at the top purchased from the industries listed on the left.

Industry number 1, Agriculture and Fisheries, for example, can be seen by reading across to have sold \$10,856 million of outputs to the Agriculture and Fisheries group. This reflects the feed and seed and other items produced in agriculture for agricultural use. Output valued at \$15,048 million was sold to Industry 2, Food and Kindred Products. Tobacco Manufacturers and Textile Mill Products purchased \$783 million and \$2,079 million of Agriculture and

Fisheries outputs, respectively. On the right at the top are five types of final demand, "Industries" 46, 47, 48, 49 and 50, which together absorbed \$12,659 million of Agriculture and Fisheries outputs. The difference between these final uses and the Total Gross Output in the last column to the right is a measure of the value of agricultural output that was used as inputs by agriculture and the other producing industries.

By reading down the first column, it can be seen that Agriculture and Fisheries used as inputs during the year \$10,856 million of its own product, \$2,378 million in products of the Food and Kindred Products, and so on. The purchase of \$19,166 million in labor services from households is recorded at the bottom of the column. Total Gross Outlays of the Agriculture and Fisheries sector, or the sum of all its inputs, amounted to \$44,263 million. This is the same as the Total Gross Output of the sector.

all transactions engaged in by a particular sector are recorded in a single sector account with a few exceptions.

The flow of funds sectors are defined as nearly as possible as groups of decision-making units. Therefore, all of a sector's transactions are kept together in order to display as much of the economic behavior of that group as can be measured and in order to highlight interrelations among all the kinds of transactions of a given group. In the income and product system, the accounts are defined largely, but not wholly, in terms of certain major activities such as consuming and investing. Therefore, some transactions of a given economic unit are recorded in one account while other transactions of the same institution are recorded in a different account. A family's purchases of food, for example, would be recorded in the personal account, while its purchase of a new house would be recorded in the savings and investment account as part of business investment. In the flow of funds system, by comparison, both purchases would be recorded in the consumer sector account.

The basic statement of the flow of funds system is the summary table on page 63. Although this particular form will be superseded as the result of revisions now being made, it is close enough to the new form to serve as an illustration. As can be seen from the table, for each sector, such as consumers or corporate business, there is a record of all receipts or sources of funds and of all outlays or uses of funds.

The financial transactions are of special interest, since they are the most significant addition of the flow of funds system to national economic accounting. Consumers, for instance, can be seen to have increased their mortgage debt by \$9.7 billion and their consumer credit \$3.2 billion during the year (sources of funds). On the other hand, they increased their holdings of time deposits, federal obligations, state and local obligations, corporate securities, mortgages, savings and loan shares, and credit union shares (uses of funds). The increase in their financial assets was \$5.5 billion greater than the increase in their debts. This may be of significance in two ways. First, the improvement in consumers' financial condition affects their ability and maybe their willingness to buy goods and services, an example of the relationship of transactions within a sector. And second, consumers were net lenders of \$5.5 billion to other sectors of the economy. The table indicates whom they borrowed from and whom they lent to and the forms of these financial flows. Other interesting implications of consumer behavior can be discerned when the accounts for 1956 are compared with those of other years.

The same kind of tracing through of flows can be done for the other sectors. For example, corporations can be seen to have been net borrowers from the other sectors of the economy in 1956. They increased their securities outstanding by \$7.2 billion. That is to say, the amount of money they obtained by issuing new stocks and bonds was \$7.2 billion greater than the amount they paid back to holders of their securities during the year. They increased their borrowing from banks by \$3.3 billion. They also reduced their holdings of government obligations by \$4.6 billion, as indicated by the negative entry. We can examine this financing pattern in terms of corporations' net current receipts and their capital expenditures on the one hand, and in terms of the purchasers of the securities and the impact on the financial markets on the other.

The flow of funds accounts have been published by the Board of Governors in *Flow of Funds in the United States, 1939-1953*, published in 1955, and the *Federal Reserve Bulletin* for April and October, 1957 for more recent years. Additional detail in mimeographed form for the more recent years has been furnished upon request. The *Flow of Funds* report provides also a detailed explanation of the structure of the accounts, the sources and treatment of data, and the ways in which the accounts differ from other accounting systems. The tables have been prepared only on an annual basis up to now, but a quarterly presentation is being developed. Substantial changes in organization of the accounts will be made when the quarterly reports are initiated. The changes have the general purpose of increasing the usefulness of the accounts by incorporating some items not included earlier, by regrouping items, and by making the system more manageable for the user. Because one of the areas of greatest usefulness of the flow of funds accounts will probably be in the analysis of relatively short-run fluctuations of business activity, the publication of quarterly reports will be a great step forward.

The National Balance Sheet

A national balance sheet would be a logical part of the nation's economic accounts, although one is not yet available. This would carry out the third function of accounting mentioned at the beginning; to provide a periodic inventory. From the very beginnings of organized inquiry into economic processes, changes in the wealth of institutions, individuals, or whole societies have been of great interest. Until 1922, the United States Census prepared decennial estimates of national wealth in some detail. Saving was recognized very early as a requirement for the growth of total output in an economy; hence the stress upon measuring the flow of product into investment in the national income and product accounts.

More recently changes in holdings of wealth in real or financial forms have been stressed as a major influence on the behavior of consumers and businesses. For example, consumers' financial condition and the size of their stock of durable goods are matters of keen interest to manufacturers.

Both the national income and product accounts and the flow of funds accounts now contribute measures of flows into and out of the various forms in which wealth can be held. The flow of funds accounts also present statements of certain financial assets and liabilities held by the various sectors. Other balance sheet data are compiled by the Department of Agriculture, the Securities and Exchange Commission, the Federal Trade Commission, and by several private institutions. Perhaps the final step of consolidating all of these and filling the gaps to produce regular estimates of the assets and liabilities by sectors of the economy will one day be assumed as a public responsibility like the other social accounts. The National Bureau review of the national accounts referred to earlier recommended that, ". . . as part of a long-range program of improvement and expansion of national accounts the development of comprehensive and consistent national and sectoral balance sheets on a regular periodic (if possible annual) basis should be taken in hand as soon as feasible."¹¹

¹¹ *The National Economic Accounts of the United States*, Hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee, Eighty-fifth Congress, October 29 and 30, 1957, p. 256.

Social Accounting, Still Unfolding

National economic accounting has developed in response to needs of governments, businesses, and individuals. These needs have changed through time and, no doubt, will continue to change. Facing the accountants have been two basic questions:

What kinds of activities do we want to measure?

How can we measure them and relate each of the parts to the whole?

These questions, as we have seen, admit of many answers, so various systems of accounts have been developed, of which four have been reviewed here. Others could have been included, notably the international balance of payments accounts which record economic interrelationships of nations and the accounting systems being developed for regions within countries. The fact that there are several systems rather than one has some disadvantages, and if it were now possible to start anew perhaps the nation's economic accounts would be somewhat different. However, similar criticisms can be made of any social institution. The form of any institution is the composite result of thousands of small decisions made through its lifetime, not all of which can be ideal for the conditions of some later time.

Each of the principal accounting systems focuses upon some major aspect of the economic process, some major grouping of kinds of activities, believed to be of special

relevance for understanding the behavior of the economy. Having these different aspects or windows through which the economy can be viewed may actually be of great benefit, for one of the great advantages of accounting is that it screens out the irrelevant. For a particular problem, one set of accounts may contain much less irrelevant information than another, making it more convenient to use. But what is irrelevant for one problem may be vitally needed for another.

The agencies charged with responsibility for the nation's accounts have gone remarkably far in making the accounts adaptable to many different uses. They have been generous with detail so that the user may sometimes recombine items from the accounts to suit his own analytical techniques and concepts. Bridges between the accounts are provided in the technical supplements so that the user who wishes to may translate concepts and data from one set of accounts to those of another. And as the accounts continue to develop, it is likely that they may converge at more and more points in order to increase the ease with which the various systems may be employed on the same problems.

Accounting is a discipline. To apply it one has to learn it as one learns mathematics or reading. And the more widely economic accounting is understood, the more useful it will be. For one of the greatest avenues toward improvement of the nation's economic accounts, as it has been all along, is the experience of the users.

A. J. MEIGS

SOME SUGGESTED REFERENCES

SOCIAL ACCOUNTING

Stone, Richard. *Definition and Measurement of the National Income and Related Totals*. Appendix to MEASUREMENT OF NATIONAL INCOME AND THE CONSTRUCTION OF SOCIAL ACCOUNTS. Studies and Reports on Statistical Methods No. 7, United Nations, Geneva, 1947.

Stone, Richard. *THE ROLE OF MEASUREMENT IN ECONOMICS*. Cambridge University Press, 1951.

PROBLEMS IN THE INTERNATIONAL COMPARISON OF ECONOMIC ACCOUNTS, STUDIES IN INCOME AND WEALTH, Volume Twenty. National Bureau of Economic Research. Princeton University Press, 1957.

THE NATIONAL ECONOMIC ACCOUNTS OF THE UNITED STATES. Hearings before the Subcommittee on Economic Statistics of the Joint Economic Committee. Eighty-fifth Congress, October 29 and 30, 1957.

INCOME AND PRODUCT ACCOUNTS

NATIONAL INCOME, 1954 EDITION. A SUPPLEMENT TO THE SURVEY OF CURRENT BUSINESS. United States Department of Commerce. Government Printing Office, Washington, 1954.

NATIONAL INCOME, 1958 EDITION. (In press)

STUDIES IN INCOME AND WEALTH, Volume Twenty-two. National Bureau of Economic Research, Princeton University Press. (In press)

INPUT-OUTPUT ACCOUNTS

Evans, W. Duane, and Hoffenberg, Marvin. *The Interindustry Relations Study for 1947*. THE REVIEW OF ECONOMICS AND STATISTICS, Volume Thirty-four, No. 2. May 1952.

Leontief, W. W. *THE STRUCTURE OF THE AMERICAN ECONOMY, 1919-1939*. Oxford University Press, 1951.

INPUT-OUTPUT ANALYSIS: AN APPRAISAL. STUDIES IN INCOME AND WEALTH, Volume Eighteen. National Bureau of Economic Research, Princeton University Press, 1955.

FLOW OF FUNDS ACCOUNTS

Copeland, Morris A. *A STUDY OF MONEY FLOWS IN THE UNITED STATES*. National Bureau of Economic Research, 1952.

FLOW OF FUNDS IN THE UNITED STATES, 1939-1953. Board of Governors of the Federal Reserve System, 1955.

Summary Flow-of-Funds Accounts 1950-55. FEDERAL RESERVE BULLETIN, April 1957.

NATIONAL BALANCE SHEET

Goldsmith, Raymond W. *A STUDY OF SAVING IN THE UNITED STATES*. Princeton University Press, Volume II, 1955.

STUDIES IN INCOME AND WEALTH, Volume Twelve, National Bureau of Economic Research, 1950.

THE NATIONAL ECONOMIC ACCOUNTS. (See reference listed above under social accounting.)

Survey

OF CURRENT CONDITIONS

Business activity continued to decline in the early months of 1958 both nationally and in the district. Gross national product was smaller in the first quarter. Latest data indicate that industrial production both in the nation and the district was down. Civilian employment in April rose about seasonally and unemployment declined only slightly.

In the Nation . . .

Gross national product shrank about 2 per cent between the fourth quarter of 1957 and the first quarter of 1958 on a seasonally adjusted basis, reflecting the general decline of economic activity since last fall.

Business inventories were further reduced in the first three months of this year at an annual rate of \$7.5 billion compared to the liquidation rate of \$2.7 billion in the fourth quarter of 1957.

Total government expenditures rose in the first quarter of 1958. State and local governments increased spending for goods and services. In addition, payments of unemployment benefits and other transfer payments increased.

The nation's consumers had less income to spend during the first quarter of 1958 than during the previous quarter. Total personal income has declined each month since last August. The seasonally adjusted annual rate of personal income in March at \$341.4 billion was \$2.2 billion less than January but \$1.2 billion greater than March 1957. Expenditures for personal consumption declined \$1.4 billion and \$1.5 billion less went into savings. Spending increased for services and nondurable goods but decreased \$2.9 billion for durable goods.

Farm income increased in early 1958 despite declining activity in other sectors of the economy. Sales of farm commodities, according to preliminary data, were \$4.85 billion in the first two months of this year compared to \$4.59 billion in January and February of 1957. Realized net income to farm operators in the first quarter of 1958 was estimated at the seasonally adjusted annual rate of \$13.0 billion, compared with \$11.5 billion in the fourth quarter of last year.

Labor income (wages and salaries) of \$241.0 billion in March was \$3.9 billion less than in January and \$4.0 billion under the March level of last year. A balancing factor has been the increase in unemployment compensation and other transfer payments, such as old age pensions. Average weekly earnings of factory workers in March were down from January, although average hourly earnings were the same. Weekly earnings were less the first quarter this year than in either the last quarter of 1957 or the same quarter a year ago largely because of the shortened work week.

Total civilian employment rose about seasonally between March and April, but April employment was 2 per cent, or 1.4 million less than a year ago.

Total unemployment at 5.1 million changed little between March and April, but on a seasonally adjusted basis it increased 8 per cent. Seven and one-half per cent of the labor force was unemployed this year (seasonally adjusted basis) compared to 4.0 per cent last April.

Output of the nation's factories and mines declined again in March. The industrial production index fell for the seventh consecutive month with only the foods, beverages and tobacco group (and probably lumber and products) showing any increase in output since the end of 1957.

Steel production in March fell for the sixth consecutive month but the February to March weekly average decline of 34 thousand net tons or 2 per cent was the smallest decline of any month since October 1957. Steel mills operated at 48 per cent of capacity in early April, compared to 52.9 per cent in early March and 90.5 per cent in early April 1957.

Crude oil production from January 1 through April 5, 1958, was about 11 per cent less than for the same period last year. Both crude oil and gasoline stocks were substantially higher in early April than last year levels, but in recent weeks gasoline stocks have declined.

Bituminous coal production changed little between February and March. But output in March was 26 per cent under that of a year earlier.

First quarter car and truck production was 29 per cent less this year than in the first quarter of 1957. Output in the four weeks ending April 28 was 39 per cent below that in the comparable period of a year ago.

Inventories, sales and new orders of manufacturing industries dropped from January to February. February inventories were about the same as a year ago, but orders and sales were considerably less this year. However, inventories were rising in early 1957 but have been declining in recent months.

The seasonally adjusted rate of private construction expenditures in March was down slightly from February and the same as in March of last year. Private nonfarm housing starts in March (seasonally adjusted) dropped slightly from

the previous month but were under starts of last year by 9 per cent or 8,000 units. Applications for FHA commitments increased by 4,400 (21 per cent) from February to March and requests for VA appraisals rose 3,100 (58 per cent).

Total retail sales dropped 5 per cent from January to March on a seasonally adjusted basis and March sales were 2 per cent under those of a year ago. Department store sales, seasonally adjusted, were about the same in March as in January, but were 5 per cent under March 1957 sales.

Consumer prices in March were 3.7 per cent higher than a year ago. Food prices increased as prices of farm commodities rose. Cost of medical care and recreation also rose. Wholesale prices of industrial products were about the same as in recent months.

The seasonally adjusted privately held demand deposits and currency of the country rose in March and probably again in April, primarily as a result of a considerable increase in commercial bank holdings of investments. Time deposits, likewise, have been rising rapidly, partly because funds formerly invested in short-term Governments were seeking more profitable outlets with the decline in yields on these and other marketable securities.

Required reserves were reduced in March and again in April enabling member banks to create more credit. Also, discount rates were marked down one per cent in the period to a level of 1.75 per cent, and open market operations were conducted so as to foster an easy tone in the money market.

Business loans expanded less than 1 per cent at weekly reporting banks in leading cities during March and the first half of April compared to a 4 per cent increase in the corresponding period last year. The lack of strength reflected in large measure a trimming of business inventories. Repayments of real estate and consumer credit were greater than new extensions. On the other hand, loans to purchase or carry securities increased.

In the District . . .

Nonfarm employment in the district's large metropolitan areas did not change much between February and March. A slight increase occurred in St. Louis, Memphis, Little Rock and Evansville, with no change in Louisville. Manufacturing employment was the same in Memphis and Evansville. A small decrease occurred in St. Louis and Louisville while Little Rock showed a small increase.

Unemployment in the district's large metropolitan areas was still rather high in March. As a per cent of the total labor force, unemployment amounted to 6.0 in Little Rock, 7.4 in Memphis, 8.5 in St. Louis, 9.5 in Louisville and 10.8 in Evansville. Two small labor market areas, Greenville, Mississippi, and Flat River-DeSoto-Festus, Missouri, were recently added to the list of surplus labor areas. The Greenville area produces building materials and the Missouri region produces lead, cement and glass products.

Construction picked up seasonally. The number of construction workers increased between February and March by 10 per cent or more in St. Louis, Little Rock and Memphis with smaller increases in Evansville and Louisville. District construction contract awards in the first two months of 1958 were down 15 per cent from awards in the same months last year. Nonresidential awards were up 33 per cent, but contracts awarded for public works and utilities were down 20 per cent, and residential awards were down 41 per cent.

Southern pine production increased considerably in March and early April from the January and February levels. Furthermore, production during the first quarter of 1958 was about one per cent greater than the same quarter of 1957. Southern hardwood mills were operating at the same capacity in March as in the two previous months but first quarter operations this year were only at 69 per cent of capacity compared to 83 per cent in the first quarter of 1957.

April meat processing activity in the St. Louis area declined 13 per cent from the March level and was 15 per cent less than in April 1957.

Illinois coal mines produced seven per cent less coal in March than in February and less than in the same month last year.

Crude oil production in the first quarter averaged about one per cent less than in the fourth quarter of 1957 and about two per cent less than in the first three months of 1957.

St. Louis area steel mills operated at 61 per cent of capacity in April compared to an average of 76 per cent in the first quarter of 1958, 79.3 in the last quarter of 1957 and 96.7 in the first quarter of 1957. These operations have exceeded the national average in recent months.

Motor vehicle and appliance production in the district was cut further in March and April as plants closed at various periods and more layoffs occurred. Manhours were also reduced during March and April in district plants which produce tires, auto frames, carburetors, head lights and other auto supplies. Production cuts in appliances and plumbing equipment particularly affected the Louisville area, and although a new refrigerator was scheduled for production in May at Evansville, it was not expected to require additional workers.

Commercial and industrial concerns paid off \$16 million of indebtedness at district weekly reporting member banks during the seven weeks ending April 16, despite large borrowing by some firms to meet income taxes. Normally business loans contract much less sharply at this time. Repayments reflected refinancing in the capital markets, primarily by public utilities, and inventory contraction.

Investment holdings of the reporting banks rose substantially (\$104 million or 9 per cent) during the seven weeks ended April 16. Deposits moved up abruptly as a result of both the movements of funds into the area and the large net purchase of securities.

District department store sales from January 1 through April 19 were down five per cent from the same period in 1957.

District weather conditions for farming vary from good or excellent in the North to poor in the Southern States. Field work increased in Missouri during the last half of April and farm work in Illinois was well advanced for the season. But, rain and somewhat colder than normal weather have retarded cotton planting in Tennessee, Arkansas and Mississippi.

District farm commodity sales were down 5 per cent in the first two months of 1958 compared to the first two months of 1957. Crop sales were down in all district states, but livestock sales were up. Prices of major district farm commodities continued upward in the four weeks ending April 11 and on April 11 averaged almost ten per cent above their level of the previous year.

