

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 book-keeper 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

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

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.

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

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-

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.

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.

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 AGRICULTURE & FISHERIES	10,856	15,048	783	2,079	19	192	—	9	—	1,211	—	—	—	—	—
2 FOOD & KINDRED PRODUCTS	2,378	4,910	15	60	9	*	*	30	*	685	—	—	—	—	—
3 TOBACCO MANUFACTURES	—	—	828	—	—	—	—	—	—	—	—	—	—	—	—
4 TEXTILE MILL PRODUCTS	64	2	—	1,303	3,882	3	285	43	25	13	—	—	—	—	—
5 APPAREL	44	204	—	—	1,963	—	5	20	—	30	—	—	—	—	—
6 LUMBER & WOOD PRODUCTS	148	81	18	18	2	1,094	385	267	1	45	—	—	—	—	—
7 FURNITURE & FIXTURES	—	—	—	12	—	—	7	5	—	—	—	—	—	—	—
8 PAPER & ALLIED PRODUCTS	2	453	65	78	25	5	15	2,597	1,081	331	—	—	—	—	—
9 PRINTING & PUBLISHING	—	39	—	2	—	—	—	—	—	767	16	—	—	—	—
0 CHEMICALS	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
40 MEDICAL, EDUC. & NONPROFIT ORG'S	—	—	—	—	—	—	—	—	—	—	—
41 AMUSEMENTS	—	—	—	24	—	—	—	250	—	110	—
42 SCRAP & MISCELLANEOUS INDUSTRIES	—	—	—	—	—	—	—	—	—	—	—
43 UNDISTRIBUTED	—	2,059	132	438	1,310	880	329	201	610	1,740	—
44 EATING & DRINKING PLACES	—	—	—	—	—	—	—	—	2	—	—
45 NEW CONSTRUCTION & MAINTENANCE	199	117	1	39	16	12	7	42	15	36	—
46 INVENTORY CHANGE (depletions)	2,660	402	1	120	185	*	14	87	26	140	—
47 FOREIGN COUNTRIES (imports from)	690	2,001	104	208	279	183	6	621	8	594	—
48 GOVERNMENT	813	1,134	104	639	376	338	112	497	335	762	—
49 GROSS PRIVATE CAPITAL FORMATION	—	—	—	—	—	—	—	—	—	—	—
50 HOUSEHOLDS	19,166	6,262	387	3,286	4,013	2,564	1,063	2,161	3,034	3,431	—
TOTAL GROSS OUTLAYS	44,263	37,636	2,663	9,838	13,321	6,002	2,892	7,899	6,447	14,050	—

	42	43	44	45	46	47	48	49	50
	SCRAP & MISCELLANEOUS INDUSTRIES	UNDISTRIBUTED	EATING & DRINKING PLACES	NEW CONSTRUCTION & MAINTENANCE	INVENTORY CHANGE (additions)	FOREIGN COUNTRIES (exports to)	GOVERNMENT	GROSS PRIVATE CAPITAL FORMATION	HOUSEHOLDS
42 SCRAP & MISCELLANEOUS INDUSTRIES	—	—	2	251	*	9	134	3,469	2
43 UNDISTRIBUTED	—	—	—	—	—	7	45	—	—
44 EATING & DRINKING PLACES	—	*	29	4	—	15	580	—	47
45 NEW CONSTRUCTION & MAINTENANCE	—	—	20	16	*	12	150	21	1
46 INVENTORY CHANGE (additions)	135	1	*	1	—	17	444	5	2,330
47 FOREIGN COUNTRIES (exports to)	78	—	—	4	—	199	—	198	78
48 GOVERNMENT	—	2	62	26	—	145	836	57	170
49 GROSS PRIVATE CAPITAL FORMATION	—	2,234	27	173	13	321	585	30	*
50 HOUSEHOLDS	—	7	198	222	2	30	1,181	42	635
TOTAL GROSS OUTPUT	—	—	—	—	—	—	—	—	—

	42	43	44	45	46	47	48	49	50
	SCRAP & MISCELLANEOUS INDUSTRIES	UNDISTRIBUTED	EATING & DRINKING PLACES	NEW CONSTRUCTION & MAINTENANCE	INVENTORY CHANGE (additions)	FOREIGN COUNTRIES (exports to)	GOVERNMENT	GROSS PRIVATE CAPITAL FORMATION	HOUSEHOLDS
42 SCRAP & MISCELLANEOUS INDUSTRIES	—	—	—	85	—	—	—	—	5,078
43 UNDISTRIBUTED	—	—	7	392	—	14	—	—	2,403
44 EATING & DRINKING PLACES	34	20	1	13	—	12	—	—	30
45 NEW CONSTRUCTION & MAINTENANCE	547	575	1,303	960	269	—	536	—	—
46 INVENTORY CHANGE (additions)	—	—	152	—	—	1,030	—	—	—
47 FOREIGN COUNTRIES (exports to)	4,084	3	56	342	25	—	73	7	—
48 GOVERNMENT	—	—	—	—	—	—	—	—	22
49 GROSS PRIVATE CAPITAL FORMATION	—	—	—	—	—	—	—	—	1,313
50 HOUSEHOLDS	3,997	212	503	170	318	74	2,176	1,410	470
TOTAL GROSS OUTPUT	14,003	1,044	7,951	9,199	1,456	1,801	4,254	1,492	—
TOTAL GROSS OUTLAYS	28,855	5,097	14,301	13,385	2,944	2,233	24,711	13,270	28,704

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.

Flow of Funds Accounts

The flow of funds accounts provide still another view of the economic process. As we have seen, the national income and product accounts and the input-output accounts focus on flows of goods and services, measured in money terms. The flow of funds accounts add to the picture of the economy by recording flows of money and other financial instruments, as well as these "real" flows. Despite the availability of the other accounts and the many other statistical resources of the economy, there was not available until a comparatively short time ago "... a sweeping organization of data that would demonstrate the primary fact that, in a market economy, the flow of credit and money affects all activities and, in turn, all activities affect the flow of credit and money."¹⁰

Soon after World War II, the Federal Reserve System joined in studies leading to the development of a national accounting system which would incorporate flows of credit and money. In 1948, after exploratory work of Professor

¹⁰ Ralph A. Young, "The Federal Reserve Flow of Funds Accounts," address delivered at Eleventh Annual Meeting of the Board of Governors of the International Monetary Fund, September 25, 1956.

Morris A. Copeland had demonstrated its feasibility, the staff of the Board of Governors began to develop a system of accounts which could be maintained on a regular basis. Annual accounts for the years 1939-1953 were first published in 1955 with a comprehensive explanation of concepts and methods. The system has been modified substantially since 1955 in the light of experience in maintaining and using the accounts. As flow of funds accounting may be considered to be still at a relatively early stage in its development, additional improvements can be expected.

A principal objective of the flow of funds system, as compared to the other systems of accounts, is to reveal influences of monetary and other financial variables upon behavior of the economy. This objective is the source of several differences between the flow of funds accounts and the national income and product system. For one, the number of full sectors into which the economy is divided is larger in the flow of funds accounts, partly because in a system recording financial flows, it is important to separate financial institutions from nonfinancial businesses. Secondly, a general rule of the flow of funds system is that

SUMMARY OF FLOW-OF-FUNDS ACCOUNTS FOR 1956

S= SOURCES OF FUNDS, U= USES OF FUNDS

[Annual flows, in billions of dollars]

Transaction category	Sector	Consumer		Business						Government				Financial institutions						Rest of the world		All sectors		
				Corporate		Non-corporate		Farm		Federal		St. and loc.		Banking		Insurance		Other investors						
		S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U			
NONFINANCIAL																								
A	Payroll	225.4	3.3		135.5		35.3		2.3		20.3		17.4		2.4		3.3		5.6		*	225.4	225.4	
B	Receipts from and payments on investment	71.1	20.4	11.4	24.9	20.6	46.8	1.0	14.2	1.3	6.2	1.0	1.4	8.0	2.8	4.8	.7	2.5	2.3	.6	2.7	122.4	122.4	
C	Insurance and grants	31.4	27.5	1.7	13.8	1.4	4.7	.7	.4	10.1	19.4	14.7	14.4	*	.3	34.2	21.3	6.4	1.5	2.6	.3	103.3	103.7	
D	Taxes and tax refunds		3.2		45.8		4		42.0		7.7		1.1		72.5		3.6		26.6				102.7	102.4
E	Capital acquisitions	30.8	80.7	.2	36.1	2.9	7.0	.4	2.7	*	2.8		.1	11.2		.3		.4		2.8		*	34.5	144.0
F	Net change in inventory				5.4		-.3		-.5														4.5	
G	New fixed capital ¹		46.9		30.7		7.3		3.2		2.8		10.0		.3		.1		2.8				104.1	
H	Other capital acquisitions	30.8	33.8	.2	.1	2.9	.4			*	.1	1.2					.2						34.5	35.3
I	Other purchases and sales		179.2	622.7	397.7	221.6	147.3	30.7	12.7	6.8	31.1	7.1	7.5	1.0	1.0	.1	4.2	6.3	4.5	19.0	20.5	915.3	805.8	
J	Total	362.1	356.9	636.5	649.9	246.4	248.8	32.8	33.5	90.6	83.5	49.5	52.0	9.0	7.9	39.1	30.8	15.3	16.8	22.2	23.5	1,503.6	1,503.7	
FINANCIAL ²																								
K	Currency and demand deposits		-.2		.7		.1				.3		.2	1.8		*		.3	.4	.2		1.8	1.2	
L	Time deposits		3.7				.1				*			3.8						-.1		3.8	3.8	
M	Federal obligations		2.3		-4.6		-.6			-6.0			.7		-3.8		-1.5		.9	.2	-6.0	-6.4		
N	State and local obligations		1.7		.1						*	3.4	.4		.2		.9		*			3.4	3.4	
O	Corporate securities		3.8	7.2			-.3						.5	.3	-.3		4.7	1.0	.2	.4	.3	8.9	8.9	
P	Mortgages	9.7	1.8	1.2	-.1	3.1		.7			.8		.1		4.0		3.7	.1	4.5			14.8	14.8	
Q	Consumer credit	3.2			1.0		.3								1.4			.5				3.2	3.2	
R	Other trade credit			3.2	6.5	-1.6	.4			.2	*						.1	.2				1.9	7.0	
S	Bank loans n.e.c.	*		3.3		1.4		-.3								4.8		*		.6		4.9	4.8	
T	Gold and Treasury currency									*	*					.4						*	.1	
U	Savings and loan and credit union shares		5.5							*	*						5.6	.1				5.6	5.6	
V	Other	.3	.2	*		.1	*	.3	*	.1	.2			.3	*	.3	.2	.3	.5	2.1	1.2	3.8	2.3	
W	Total	13.3	18.8	14.9	3.5	2.9	.1	.6	*	-5.7	1.4	3.4	1.9	6.1	6.8	.3	8.2	7.1	6.9	3.6	1.6	46.6	49.1	
X	Valuation adjustment and discrepancy	.5	.1		-1.9		.4				*		-1.0		.4		.5		-1.3		.7	.5	-2.1	
Y	Grand total	375.9	375.9	651.5	651.5	249.3	249.3	33.5	33.5	84.9	84.9	52.9	52.9	15.2	15.2	39.5	39.5	22.4	22.4	25.8	25.8	1,550.8	1,550.8	
Memoranda:																								
Z	GNP identifiable in J		250.9		40.0		8.1		4.7		46.8		32.0		2.0		.1		14.2		1.4		400.1	
a	Bank credit in W	4.2		3.3		2.1		-.3		-3.8		.2		*	6.3			.1		.6		6.6	6.3	

* Less than \$50 million.

For the consumer sector, acquisitions of new fixed capital consist of purchases of new durable goods of \$33.1 billion and purchases of new houses of \$13.8 billion.

² Financial sources of funds represent net changes in liabilities; financial uses of funds, net changes in financial assets.

NOTE.—For description of sectors and transaction categories, see FEDERAL RESERVE BULLETIN, April 1957, pp. 386-91.

Source: Reproduced from *Federal Reserve Bulletin*, October 1957.

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.



Industry

VARIOUS INDICATORS OF INDUSTRIAL ACTIVITY

	Mar. 1958	Feb. 1958	Mar. 1958* compared with
Steel Ingot Rate, St. Louis area (Operating rate, per cent of capacity)	78	— 1%	—20%
Coal Production Index—8th Dist. (Seasonally adjusted, 1947-49=100)	82.3 p	+ 1	— 8
Crude Oil Production—8th Dist. (Daily average in thousands of bbls.)	383.6	+ 2	— 3
Freight Interchanges RRs—St. Louis (Thousands of cars—25 railroads—Terminal R. R. Assn.)	92.7	+ 6	—16
Livestock Slaughter—St. Louis area (Thousands of head—weekly average)	89.8	+ 2	—29
Lumber Production—S. Pine (Average weekly production—thousands of bd. ft.)	215.9	+ 8	+ 7
Lumber Production—S. Hardwoods (Operating rate, per cent of capacity)	69	—0	—15

* 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:	March 1958 (In millions)	March 1958 compared with February 1958	March 1957
East St. Louis—National Stock Yards, Ill.	\$ 141.8	+14%	— 1%
Evansville, Ind.	167.7	+ 6	—11
Little Rock, Ark.	207.6	+11	+ 7
Louisville, Ky.	842.3	+ 5	— 1
Memphis, Tenn.	762.3	+ 4	— 1
St. Louis, Mo.	2,420.4	+16	— 5
Total—Six Largest Centers	\$4,542.1	+11%	— 3%

Other Reporting Centers:

Alton, Ill.	\$ 40.6	+13%	+ 4%
Cape Girardeau, Mo.	16.6	+16	— 5
El Dorado, Ark.	28.4	+ 7	— 9
Fort Smith, Ark.	55.6	+ 8	+ 2
Greenville, Miss.	26.2	— 3	— 3
Hannibal, Mo.	11.9	+15	+ 7
Helena, Ark.	9.6	+11	+19
Jackson, Tenn.	24.8	+ 4	— 4
Jefferson City, Mo.	142.7	+69	+86
Owensboro, Ky.	46.7	+ 1	+ 1
Paducah, Ky.	28.4	+ 5	— 1
Pine Bluff, Ark.	44.5	+11	+ 9
Quincy, Ill.	40.6	+ 8	+ 1
Sedalia, Mo.	15.7	+ 1	+ 1
Springfield, Mo.	93.2	+ 5	+ 4
Texarkana, Ark.	19.3	+ 5	— 0

Total—Other Centers	\$ 644.8	+16%	+13%
---------------------	----------	------	------

Total—22 Centers	\$5,186.9	+11%	— 1%
------------------	-----------	------	------

INDEX OF BANK DEBITS—22 Centers

Seasonally Adjusted (1947-1949=100)	1958	1957
March	163.2	165.5
February	167.4	

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	Apr. 16 1958	Change from Mar. 19 1958
Loans ¹	\$1,596	\$+ 20
Business and Agricultural	801	+ 4
Security	79	+ 19
Real Estate	277	—0
Other (largely consumer)	467	+ 6
U.S. Gov't. Securities	992	+ 57
Other Securities	248	+ 12
Loans to Banks	53	+ 4
Cash Assets	953	+ 70
Other Assets	44	+ 1
Total Assets	\$3,886	\$+156
Liabilities and Capital		
Demand Deposits of Banks	\$ 774	\$+ 59
Other Demand Deposits	2,100	+ 65
Time Deposits	643	+ 18
Borrowings and Other Liab.	66	+ 12
Total Capital Accounts	303	+ 2
Total Liab. and Capital	\$3,886	\$+156

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)	Feb. 1958	Feb. '58 from Feb. '57p	Percentage Change Jan. thru Feb. 1958 compared with 1957
Arkansas	\$ 25,705	—18%	—32%
Illinois	168,437	— 5	+ 8
Indiana	82,584	— 6	+ 4
Kentucky	21,751	— 8	—14
Mississippi	25,172	—32	—35
Missouri	64,863	+19	+ 8
Tennessee	22,552	—13	—17
7 States	411,064	— 6	— 5
8th District ¹	160,144	— 7	—13

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

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

p—Preliminary.

Construction

CONSTRUCTION CONTRACTS AWARDED IN EIGHTH FEDERAL RESERVE DISTRICT *

(Value of contracts in thousands of dollars)

	Mar. 1958	Feb. 1958	Mar. 1957
Total	\$121,504	\$110,324	\$134,068
Residential	40,823	31,487	44,496
Nonresidential	54,854	52,926	53,811
Public Works and Utilities	25,827	25,911	35,761

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

Trade

DEPARTMENT STORES

Net Sales	Mar. 1958 compared with Feb. '58	3 mos. '58 to same period '57	Percentage of Accounts and Notes Receivable Outstanding Feb. 28, '58, collected during March.
			Instl. Accounts
8th F.R. District Total	+31%	— 1%	— 4%
Fort Smith Area, Ark. ¹	+33	— 6	— 5
Little Rock Area, Ark.	+17	+ 4	+ 1
Quincy, Ill.	+32	+12	+ 4
Evansville Area, Ind.	+33	—20	—19
Louisville Area, Ky., Ind.	+37	— 1	— 4
Louisville (City)	+34	— 4	— 7
Paducah, Ky. ¹	+45	— 3	— 5
St. Louis Area, Mo., Ill.	+29	—0	— 2
St. Louis (City)	+28	— 4	— 6
Springfield Area, Mo.	+43	— 8	— 9
Memphis Area, Tenn.	+39	+ 2	— 6
All Other Cities ²	+38	—13	—11

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, 1958, were 17 per cent lower than on the corresponding date a year ago.

INDEXES OF SALES AND STOCKS—8TH DISTRICT

	Mar. 1958	Feb. 1958	Jan. 1958	Mar. 1957
Sales (daily average), unadjusted ³	117	96	100	117
Sales (daily average), seasonally adjusted ³	134	125	132	135
Stocks, unadjusted ⁴	n.a.	138	127	154
Stocks, seasonally adjusted ⁴	n.a.	142	143	148

n.a. Not available.

³ Daily average 1947-49=100

⁴ End of Month average 1947-49=100

Trading days: Mar., 1958—26; Feb., 1958—24; Mar., 1957—26.

RETAIL FURNITURE STORES

	Net Sales
	Mar. 1958 compared with Feb. '58
8th Dist. Total ¹	+18%
St. Louis Area	+26
Louisville Area	+15
Memphis Area	— 1
Little Rock Area	—32
Springfield Area	+56

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.