83d Congress, 1st Session

HISTORICAL AND DESCRIPTIVE SUPPLEMENT TO

Economic Indicators

Prepared for the Joint Committee on the Economic Report
by the Committee Staff with the Cooperation
of the
Office of Statistical Standards, Bureau of the Budget

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JOINT COMMITTEE ON THE ECONOMIC REPORT

(Created pursuant to sec. 5 (a) of Public Law 304, 79th Cong.)

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[PUBLIC LAW 120—81ST CONGRESS; CHAPTER 237—1ST SESSION]

JOINT RESOLUTION [S. J. Res. 55]

To print the monthly publication entitled "Economic Indicators"

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Joint Committee on the Economic Report be authorized to issue a monthly publication entitled "Economic Indicators," and that a sufficient quantity be printed to furnish one copy to each Member of Congress; the Secretary and the Sergeant at Arms of the Senate; the Clerk, Sergeant at Arms, and Doorkeeper of the House of Representatives; two copies to the libraries of the Senate and House, and the Congressional Library; seven hundred copies to the Joint Committee on the Economic Report; and the required number of copies to the Superintendent of Documents for distribution to depository libraries; and that the Superintendent of Documents be authorized to have copies printed for sale to the public.

Approved June 23, 1949.

Letters of Transmittal

DECEMBER 18, 1953.

To Members of the Joint Committee on the Economic Report:

For the information of the members of the Joint Committee on the Economic Report and others interested there is transmitted herewith a Supplement to the committee's monthly publication *Economic Indicators* containing both historical tables of the various indicators now published and a description of the derivation, limitations and uses of each indicator. These materials were developed by the committee staff with the cooperation of the Office of Statistical Standards, Bureau of the Budget, and of the agencies responsible for each series.

As you are undoubtedly aware, there have been numerous requests for this information in recent years. It is believed that the present publication will be useful not only to the members of the committee and to other Members of Congress but also to other users of *Economic Indicators*, both within the Government and among the nearly 4,000 private subscribers.

JESSE P. WOLCOTT,
Chairman, Joint Committee on the Economic Report.

DECEMBER 18, 1953.

The Honorable JESSE P. WOLCOTT,
Chairman, Joint Committee on the Economic Report,
United States House of Representatives, Washington, D. C.

DEAR MR. WOLCOTT: Pursuant to numerous requests the committee staff transmits herewith a supplement to the committee's monthly publication *Economic Indicators*, containing for each indicator (1) historical data and (2) a description and references to additional technical explanations. This report is intended to answer most of the requests for general information which cannot be carried each month in the committee's publication but which is often essential to the interpretation and use of the current materials.

The descriptive material shown for each series in *Economic Indicators* attempts in a nontechnical way to explain how the series is derived, what its limitations are, and the uses for which it is appropriate or, in some cases, warning of uses for which it is especially not appropriate. Both the historical data and the descriptions which are included in this Supplement are designed for general users of the data rather than for technicians.

It might be helpful to point out for the benefit of persons not familiar with *Economic Indicators* that this is a monthly publication printed by the Congress in accordance with Public Law 120, 81st Congress; chapter 237, 1st session, a copy of which is reproduced on the back of the front cover of this Supplement. *Economic Indicators* was first published by the Joint Committee on the Economic Report as a committee print in 1948 to provide its members with information on current economic trends and developments in a concise and graphic form. Knowing that other Members of the Congress, businessmen, farm leaders, labor organizations, and representatives of the press also sought such information the Joint Committee at the same time sponsored legislation which later resulted in authorizing publication on a permanent basis. The materials for *Economic Indicators* are prepared each month for the Joint Committee on the Economic Report by the Council of Economic Advisers.

The Committee has always invited suggestions for improving *Economic Indicators*. Improvements have been made as a result of these suggestions. It is recognized that the materials included must be limited to those series of most general use by Members of Congress, executive Government agencies, and others. The Committee policy has been to carry standard series and relationships without interpretation. Other publications of the Committee and the executive agencies are considered the medium for interpretations of the data.

Economic Indicators currently has a list of nearly 4,000 paid subscribers. It is used widely by schools and libraries as a reference source and has a circulation of over 200 foreign subscribers, covering all major nations of the world. The monthly *Indicators* is sold through the Superintendent of Documents, United States Government Printing Office, Washington, D. C., price 20 cents per copy; $2 per year; $2.50 foreign.

For this Supplement, the developmental and supervisory work was done by the Committee staff. The descriptions of the series were written by members of the staff of the Office of Statistical Standards, Bureau of the Budget. The tables were prepared by Miss Frances James and the agencies compiling the original data.

Respectfully submitted.

GROVER W. ENSLEY, *Staff Director.*

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THE TOTAL OUTPUT OF THE ECONOMY

THE NATION'S ECONOMIC ACCOUNTS

Description of series.—The Nation's economic accounts summarize the combined incomes and expenditures of consumers, business, and Government. The accounts are designed to equal, when totaled, expenditures for gross national production on the one side and incomes from gross national production on the other side. The statement of these accounts represents the results of double-entry bookkeeping—for every dollar of recorded expenditures for goods and services there must be a dollar of recorded income. Thus in the Nation's economic accounts, receipts and expenditures add to the same total. It follows that for any past period if the receipts of any one of these three categories of the economy exceeds the expenditures of that category, this saving will be offset by an excess of expenditures over receipts in another category or categories.

The consumer account summarizes the detailed statistics on personal income and consumption shown in the tables in the Purchasing Power section of *Economic Indicators*, particularly the table on Consumer Income, Spending, and Saving. It should be noted that, whereas personal income includes the income of unincorporated businesses and farms, only expenditures for consumption purposes are included in this account. Investments of both corporate and noncorporate businesses are included in the business account. Residential construction, whether for owner occupancy or for rental purposes, is also included with business investment, while the actual or imputed rent of dwellings is included in consumer expenditure.

In the business account, receipts of business include the undistributed profits of corporations after adjustment for inventory valuation, plus the capital consumption allowances of both corporate and noncorporate enterprises and institutions, and depreciation on residences. Depreciation allowances must be added to receipts since investment is on a gross basis, that is, before deduction for depreciation. Business investment includes additions to plant and equipment and inventories of both corporate and noncorporate enterprises, as well as residential construction.

Government receipts and expenditures are shown on an income and product account basis, rather than on either a cash or a conventional budget basis, so as to be consistent with the receipts and expenditure accounts of the other sectors and with the gross national product total. Government transfer payments, such as social security and veterans' benefits, and interest charges represent income to the recipients, but are not included in the gross national product. Therefore, these payments are subtracted from both receipts and expenditures.

The income and product accounts of the Government are on a consolidated basis, just as the cash accounts are, but they depart from the latter because of the timing of the items included in each and because of conceptual differences. The income and product accounts of the Government are designed to be in accord with the accrual records maintained by private business. Thus, business taxes, especially those on corporate profits, are recorded on an accrual rather than a collections basis, and Government expenditures for goods are corrected for the lag between deliveries and payments therefor. All capital transactions, such as receipts from the sale of Government property and changes in loans and investments of Government credit agencies, are excluded from the income and product accounts although such transactions are included in both the cash and conventional budgets.

Uses and limitations.—A set of economic accounts for the Nation reduces the voluminous detail of economic activity to understandable proportions by providing the factual background for seeing in perspective the operations of the major categories of the economy—consumer, business, and Government—and the interrelationships or transactions between and among them. A statement of these accounts serves a number of purposes:

(1) In summarizing the pattern of change in the economy over recent periods, the statement indicates what one should look for among the other charts and tables included in *Economic Indicators*.

(2) The accounting methodology needed to prepare this statement helps to assure that the various

estimates such as income, expenditures, savings, investment in the other charts and tables are consistent.

(3) It is frequently necessary to project and evaluate the likely economic impact of public and private programs on the economy. The framework of these accounts enables the expression quantitatively of the combination of such public and private plans within a framework of the broad categories of the economy so as to measure inconsistencies or imbalances between and among them, and inconsistencies between and among the assumptions upon which these plans are based.

Preparation of a Nation's economic budget for a future period, using these accounts, is especially helpful when Government programs are of such magnitude and importance that they dominate changes in the economy; in other words, when Government spending and tax plans are the main forces making for changes in the economy. This type of analysis is therefore particularly useful in formulating a stabilization program in periods of war or high national defense operations. At other times, its main benefit is in identifying and measuring inflationary and deflationary programs of Government and private economic groups or individuals and in pointing out areas in which adjustments are necessary to achieve economic stability and growth.

(4) Another use, related to this last use, is that of enabling those who must make an actual forecast, such as business firms, private economists and others, to check their forecasts as to their consistency in several ways: consistency with past patterns of fluctations in the total and various segments of the economy; consistency as between and among the various assumptions as to income, savings, investment, prices, and employment that underlie the forecast.

Certain limitations must be recognized in using these economic accounts. Needless to say, the statistics do not throw light on all aspects of the economy but only broad summary categories and thus must be supplemented by the use of additional economic information, such as that contained in other parts of *Economic Indicators*. Also, the data are national in coverage, hence their trends and changes must be carefully interpreted and supplemented by other data for use in the analysis of regional or individual industry problems. Third, they do not, of course, provide the assumptions or the reasons which one should have for explaining or projecting economic changes; they only provide the relevant statistical background for intelligent reasoning and judgment. Finally, it must be recognized that estimates for both receipts and expenditures for some of these categories rest upon data collected for other purposes, or upon crude or indirect estimates in cases where no direct survey is regularly conducted to obtain data. Thus there will be times when it will be difficult to interpret the meaning of some of the changes in the accounts if, at the time, statistical discrepancies in the accounts which arise from technical problems in estimating the various items are so large that they throw doubt on some of the movements or the importance of other movements in the accounts.

References.—The estimates included in the Nation's economic accounts are all taken from the national income and product statistics of the Department of Commerce. The *National Income Supplement* to the *Survey of Current Business*, 1951, has complete statistics from 1929 to 1950, as well as much explanatory material. Revised estimates for 1949–52 can be found in the *Survey of Current Business*, July 1953.

See also Technical Notes on the Nation's Economic Budget, Appendix A: *Report of the Joint Committee on the Economic Report on the January 1952 Economic Report of the President*, Senate Report No. 1295, 82d Congress, 2d session, pp. 99–105, and statistical materials accompanying the Annual Economic Reviews prepared by the Council of Economic Advisers for inclusion with the Economic Report of the President, 1948–53.

[Billions of dollars]

Year	Consumers			Business			Government			Statistical discrepancy [2]
	Disposable income	Consumption expenditures	Saving (+) or dissaving (−)	Gross retained earnings	Investment [1]	Excess of earnings (+) or investment (−)	Receipts (less transfers, etc.)	Expenditures for goods and services	Excess of receipts (+) or expenditures (−)	
1929	82.5	78.8	+3.7	11.9	16.6	−4.7	9.5	8.5	+1.1	−0.1
1930	73.7	70.8	+2.9	9.0	10.9	−1.9	8.9	9.2	−.3	−.7
1931	63.0	61.2	+1.8	5.3	5.6	−.2	6.4	9.2	−2.8	+1.2
1932	47.8	49.2	−1.4	2.7	1.1	+1.7	6.4	8.1	−1.7	+1.4
1933	45.2	46.3	−1.2	2.7	1.5	+1.2	6.7	8.0	−1.3	+1.2
1934	51.6	51.9	−.2	5.0	3.2	+1.7	7.4	9.8	−2.4	+.9
1935	58.0	56.2	+1.8	6.5	6.1	+.4	8.0	9.9	−1.8	−.3
1936	66.1	62.5	+3.6	6.7	8.2	−1.6	8.9	11.7	−2.9	+.9
1937	71.1	67.1	+3.9	7.9	11.5	−3.6	12.3	11.6	+.7	−1.0
1938	65.5	64.5	+1.0	8.0	7.4	+.6	11.3	12.8	−1.5	−.1
1939	70.2	67.5	+2.7	8.6	10.8	−2.2	11.2	13.1	−1.9	+1.4
1940	75.7	72.1	+3.7	10.7	15.5	−4.8	13.4	13.9	−.5	+1.6
1941	92.0	82.3	+9.8	11.6	19.5	−7.9	21.2	24.7	−3.5	+1.6
1942	116.7	91.2	+25.6	13.9	10.7	+3.2	28.6	59.7	−31.2	+2.3
1943	132.4	102.2	+30.2	16.3	3.5	+12.8	44.7	88.6	−43.9	+.9
1944	147.0	111.6	+35.4	17.5	5.6	+11.9	45.2	96.5	−51.4	+4.0
1945	151.1	123.1	+28.0	15.7	9.3	+6.4	43.6	82.8	−39.2	+4.9
1946	158.9	146.9	+12.0	15.0	33.3	−18.3	35.5	30.9	+4.6	+1.7
1947	169.5	165.6	+3.9	21.1	39.1	−18.0	42.4	28.6	+13.7	+.3
1948	188.4	177.9	+10.5	29.1	44.6	−15.5	44.8	36.6	+8.2	−3.2
1949	187.2	180.6	+6.7	30.2	34.0	−3.8	40.6	43.6	−3.1	+.2
1950	205.8	194.6	+11.3	30.3	50.2	−20.0	50.3	42.0	+8.3	+.4
1951	225.0	208.1	+16.9	33.8	58.8	−25.0	70.0	62.9	+7.1	+1.1
1952	235.0	218.1	+16.9	37.4	52.3	−14.9	75.1	77.5	−2.4	+.5

[1] Gross private domestic investment and net foreign investment.

[2] Excess of the value of the estimated gross national product computed by the final products method over its independently estimated value computed by adding necessary conceptual adjustments to the national income. Discrepancy shown may differ from that derived from income and expenditure items shown in this table because of rounding.

Source: Department of Commerce.

GROSS NATIONAL PRODUCT

Description of series.—Gross National Product (often called GNP) represents the total national output of goods and services at current market prices. It measures this output in terms of the expenditures by which these goods are acquired. These expenditures are the sum of four major items:

1. Personal consumption expenditures
2. Gross private domestic investment
3. Net foreign investment
4. Government purchases of goods and services

The goods and services included in the GNP are for the most part those actually bought for final use in legal markets. There are a number of exceptions, the most important of which is the rental value of owner-occupied dwellings.

The GNP series measures the product attributable to the factors of production—labor and property—supplied by residents of continental United States. For the most part these factors are located in this country, but the GNP total also includes earnings of American employees of the United States Government stationed abroad, foreign interest and dividends received by Americans, and the profits from foreign branches of American business.

"Personal consumption expenditures" is the sum of money and imputed expenditures made by consumers (individuals, nonprofit institutions such as hospitals, etc.) for goods and services. This series is described below, in the section on Consumer Income, Spending and Saving (p. 48).

"Gross private domestic investment" consists of new construction, producers' durable equipment, and changes in business inventories. This component of GNP is described below, in a separate section (p. 30).

"Net foreign investment" is the net change in the international assets and liabilities of this country (including our gold stocks) arising out of current transactions with foreign countries. It is the sum of: (1) domestic output sold abroad minus United States purchases of foreign output; (2) cash gifts and contributions received from abroad minus those sent abroad; and (3) production abroad by United States labor and property minus production in the United States by foreign-owned labor and property.

"Government purchases of goods and services" are those made by Federal, State, and local governments. They include: (1) net purchases of new goods (such as school buildings and armaments); (2) payments for services (principally compensation for Government employees); (3) gross investment by Government enterprises; and (4) net Government purchases from abroad and international contributions. Items which do not represent current productive activity—such as transfer payments (e. g., social security and veterans' payments), Government interest, subsidies, loans, and other financial transfers—are excluded. The GNP series on Government purchases will differ from expenditures shown in the *Federal Budget*, which includes many of these items. Differences may also arise because of variation in the time at which expenditures occur and are recorded.

Statistical procedures.—Hundreds of basic economic series are evaluated, adjusted, and combined in the process of preparing the GNP estimates. For example, consumer expenditures are estimated for benchmark years primarily from data in the Censuses of Business and Manufactures, reports of the Department of Agriculture, Internal Revenue Service, and Interstate Commerce Commission, with current quarterly estimates carried forward by the extensive sample reports of the Census Bureau's Monthly Report on Retail Trade, sales-tax data, and data from other sources. Construction activity is estimated jointly by the Departments of Commerce and Labor from BLS reports on building permits secured in hundreds of cities, special field surveys, and F. W. Dodge reports on construction contract awards and related items. Investment in producers' durable equipment is estimated for benchmark years from Census of Manufactures and related data, with current quarterly and annual totals estimated from sample surveys and sales and financial reports to the Department of Commerce and other agencies. For details of the methods used, reference should be made to the comprehensive study by the Department of Commerce, *National Income*, 1951 edition.

Relation to other series.—Two other series widely used as indicators of the general level of economic activity are *National Income* and the *Federal Reserve Index of Industrial Production.* Gross National Product and National Income are compiled from the same series of accounts, but whereas the former measures the current value of total output, the latter measures only the earnings of labor and property which flow from that output. National Income is the smaller of the two aggregates because from the current value of total output are subtracted (1) allowance for depreciation and similar capital consumption, and (2) indirect taxes (such as sales and excise taxes).

The GNP measures total output, whereas the Federal Reserve Index of Industrial Production covers only two sections of the economy—manufac-

Gross National Product

[Billions of dollars]

Year	Total gross national product	Personal consumption expenditures	Gross private domestic investment	Net foreign investment	Government purchases of goods and services					
					Total	Federal				State and local
						Total	National security [1]	Other	Less Government sales	
1929	103.8	78.8	15.8	0.8	8.5	1.3	(2)	(2)	----	7.2
1930	90.9	70.8	10.2	.7	9.2	1.4	(2)	(2)	----	7.8
1931	75.9	61.2	5.4	.2	9.2	1.5	(2)	(2)	----	7.7
1932	58.3	49.2	.9	.2	8.1	1.5	(2)	(2)	----	6.6
1933	55.8	46.3	1.3	.2	8.0	2.0	(2)	(2)	----	5.9
1934	64.9	51.9	2.8	.4	9.8	3.0	(2)	(2)	----	6.8
1935	72.2	56.2	6.1	−.1	9.9	2.9	(2)	(2)	----	7.0
1936	82.5	62.5	8.3	−.1	11.7	4.8	(2)	(2)	----	6.9
1937	90.2	67.1	11.4	.1	11.6	4.6	(2)	(2)	----	7.0
1938	84.7	64.5	6.3	1.1	12.8	5.3	(2)	(2)	----	7.5
1939	91.3	67.5	9.9	.9	13.1	5.2	1.3	3.9	(3)	7.9
1940	101.4	72.1	13.9	1.5	13.9	6.2	2.2	4.0	(3)	7.8
1941	126.4	82.3	18.3	1.1	24.7	16.9	13.8	3.2	(3)	7.8
1942	161.6	91.2	10.9	−.2	59.7	52.0	49.6	2.7	0.2	7.7
1943	194.3	102.2	5.7	−2.2	88.6	81.2	80.4	1.5	.6	7.4
1944	213.7	111.6	7.7	−2.1	96.5	89.0	88.6	1.6	1.2	7.5
1945	215.2	123.1	10.7	−1.4	82.8	74.8	75.9	1.0	2.2	8.0
1946	211.1	146.9	28.7	4.6	30.9	20.9	21.2	2.5	2.7	10.0
1947	233.3	165.6	30.2	8.9	28.6	15.8	13.3	3.8	1.3	12.8
1948	259.0	177.9	42.7	1.9	36.6	21.0	16.1	5.6	.6	15.6
1949	258.2	180.6	33.5	.5	43.6	25.4	19.3	6.6	.4	18.2
1950	286.8	194.6	52.5	−2.3	42.0	22.1	18.5	3.9	.2	19.9
1951	329.8	208.1	58.6	.3	62.9	41.1	37.4	4.1	.4	21.8
1952	348.0	218.1	52.5	−.2	77.5	54.2	48.9	5.8	.5	23.4

[1] Includes expenditures for military services, international security and foreign relations (except foreign loans), development and control of atomic energy, promotion of the merchant marine, promotion of defense production and economic stabilization, and civil defense. For further details, see *Economic Report of the President*, January 1953 (p. 165), and *Survey of Current Business*, July 1953 (p. 10).

[2] Not available.

[3] Less than $50 million.

NOTE.—Detail will not necessarily add to totals because of rounding.
Quarterly data are available beginning with 1939.

Source: Department of Commerce.

tures and mining. The products in the GNP series are final product, whereas the Reserve Board index includes both final and intermediate product, and thus may show an increase or decrease in activity not yet reflected in flow of final output. The GNP series in current prices combines price and volume changes, whereas the Federal Reserve index measures physical volume.

Uses and limitations.—The GNP total is the most inclusive monetary measure of trends in the economy as a whole which is currently estimated. It also has high value as an analytic tool, since the movements of many sectors of the economy, including the sales of many industries and enterprises, are quite closely related to changes in the level of GNP.

Since GNP is measured in current dollars, the effects of changes in both the price level and the physical volume of output are combined, and movements in the total from quarter to quarter should not be interpreted as necessarily representing changes in the physical quantity of goods and services produced by the economy. On an annual basis, however, GNP estimates corrected for price changes ("deflated GNP") are available which show changes in the total volume of national output. One of the most important characteristics of the GNP is that changes in the total can be analyzed by examination of changes in its components, notably purchases by consumers, the investment of private business, the expenditures of Government, and the movement of foreign trade.

References.—The quarterly GNP estimates appear each month in the statistical section of the *Survey of Current Business*. Preliminary annual estimates appear in the February issue, final estimates in the July issue. Statistical data for 1929–48, including measures of deflated GNP, appear in the *1951 National Income Supplement to the Survey of Current Business;* those for 1949–52 appear in the July 1953 issue of the *Survey*.

PRICES

CONSUMER PRICES

Description of series.—The Consumer Price Index, compiled by the Bureau of Labor Statistics, measures the average change in prices of goods and services purchased by urban wage earner and salaried clerical workers' families. The goods and services included in the index are those required to maintain the level of living characteristic of such families in 1952. These families represent about 64 percent of all people living in urban places, and about 40 percent of the total United States population. The index is not specifically representative of price changes for commodities and services purchased by farm families, for persons making purchases in communities of less than 2,500 population, for single persons, or for families living in urban areas whose purchases are not similar to those of wage earner and salaried clerical workers' families. The index is a price barometer; it does not measure changes in the total amount of money spent by such urban families for family living.

The index is based upon prices collected on about 300 items in 46 cities. These 300 items were selected by the Bureau of Labor Statistics as representative of the thousands of commodities and services purchased in 1950 as reported in a survey of wage earner and salaried clerical workers' families in 91 cities.

In each of these 46 cities the Bureau has selected a list of stores and service establishments from which to collect prices regularly. This list is representative of the types of outlets in which wage earner and salaried clerical workers' families make their purchases, and includes chain stores, independent stores, department stores, specialty stores and public utilities. Prices are also collected on such items as physicians' and dentists' fees, hospital rates, and beauty-parlor services. Federal, State, and city taxes are added to the retail prices for the commodities on which they are imposed. Automobile taxes are added; property taxes are included in the cost of homeownership, and implicitly included in rental costs. Neither income taxes nor social-security taxes are included.

Prices on the 300 items are collected by the use of specifications limiting the qualities priced to those representative of the qualities purchased by urban wage earner and salaried clerical workers' families in 1952. Revisions in individual specifications are made from time to time as former descriptions become obsolete. Prices are collected in each city at intervals ranging from once every month to once every 4 months. Prices for foods, for a few other important items such as cigarettes and public transportation, and for rents, are collected monthly in each city. Prices for other goods and services are collected every month in the 5 largest cities; in the other 41 cities they are collected every 3 or 4 months, depending on the size of the city. Pricing of these other goods and services in these 41 cities is on a rotating cycle so that several cities of each size group are priced each month. Between the periodic pricing periods in a given city, the price change for groups of these items is estimated for the purpose of computing the monthly national index.

Prices for practically all of the commodities and many of the services are collected by personal interview. Monthly rent information and a few other prices (e. g., streetcar and bus fares, public utility rates, fuel prices) are collected by mail.

A major revision of this series was recently completed, with the revised index introduced as of January 1953. The principal changes were—

1. Change in the list of items priced to reflect current purchasing habits.
2. Increase in the number of items priced. Among the important additions to the pricing list were used cars, home purchase and maintenance, and restaurant meals.
3. Revision and expansion of the list of cities in which prices were collected so that the index will reflect price changes affecting wage earner and clerical workers' families in all urban areas.
4. Change of the base period of the index from 1935–39 to 1947–49.

The revised series was linked to the former series to provide a continuous index from 1913.

Statistical procedures.—The purpose of the index calculation is to determine how much more or less it would cost to purchase the same quantities and qualities of goods and services in this period than in an earlier period. The first step in the index calculation is to compare the current price for each commodity or service with the price reported for that particular commodity or service at the time of the preceding collection. This percentage change is then multiplied by the estimated cost of this fixed quantity of the item in the preceding period. After these calculations have been made for each of the food items, for example, these estimated costs for food for the current period are totaled and compared with the total for the preceding period. This result measures the average price change for all foods, and

[1947–49=100]

Year	All items	Food	Housing		Apparel	Transportation	Medical care	Personal care	Reading and recreation	Other goods and services
			Total	Rent						
1917	54.8	57.9		77.4	49.2					
1918	64.3	66.5		78.8	66.6					
1919	74.0	74.2		85.3	88.2					
1920	85.7	83.6		100.2	105.1					
1921	76.4	63.5		115.1	80.9					
1922	71.6	59.4		118.5	65.7					
1923	72.9	61.4		121.6	65.8					
1924	73.1	60.8		125.9	65.3					
1925	75.0	65.8		126.4	64.0					
1926	75.6	68.0		125.2	63.0					
1927	74.2	65.5		123.2	61.8					
1928	73.3	64.8		120.3	60.9					
1929	73.3	65.6		117.4	60.3					
1930	71.4	62.4		114.2	58.9					
1931	65.0	51.4		108.2	53.6					
1932	58.4	42.8		97.1	47.5					
1933	55.3	41.6		83.6	45.9					
1934	57.2	46.4		78.4	50.2					
1935	58.7	49.7		78.2	50.6					
1936	59.3	50.1		80.1	51.0					
1937	61.4	52.1		83.8	53.7					
1938	60.3	48.4		86.5	53.4					
1939	59.4	47.1		86.6	52.5					
1940	59.9	47.8		86.9	53.2					
1941	62.9	52.2		88.4	55.6					
1942	69.7	61.3		90.4	64.9					
1943	74.0	68.3		90.3	67.8					
1944	75.2	67.4		90.6	72.6					
1945	76.9	68.9		90.9	76.3					
1946	83.4	79.0		91.4	83.7					
1947	95.5	95.9	95.0	94.4	97.1	90.6	94.9	97.6	95.5	96.1
1948	102.8	104.1	101.7	100.7	103.5	100.9	100.9	101.3	100.4	100.5
1949	101.8	100.0	103.3	105.0	99.4	108.5	104.1	101.1	104.1	103.4
1950	102.8	101.2	106.1	108.8	98.1	111.3	106.0	101.1	103.4	105.2
1951	111.0	112.6	112.4	113.1	106.9	118.4	111.1	110.5	106.5	109.7
1952	113.5	114.6	114.6	117.9	105.8	126.2	117.2	111.8	107.0	115.4

NOTE.—Monthly data are available beginning with January 1913 for "all items" and food; September 1940–September 1944 and January 1947 to date for rent; September 1940 for apparel, and January 1947 for all others.

Source: Department of Labor.

from this the index number of food for that city is calculated. Similar calculations are made for apparel, rent, and for all other groups of items priced. The United States index is calculated by combining city totals. Two-fifths of the weight is carried by the 12 largest cities; one-fifth by the 9 cities selected to represent the 42 cities with population of 240,000 to 1,000,000; one-fifth by the 9 cities selected to represent the more than 200 cities with population of 30,000 to 240,000; and one-fifth by the 16 small cities selected to represent the nearly 3,000 towns with population ranging from 2,500 to 30,000.

Uses and limitations.—The index measures changes for only a limited population group: wage earner and salaried clerical workers' families living in urban areas. Other qualities of commodities and weights would have to be used for other income groups, for single workers, for retired people, etc.

The "fixed market basket" represents the average quantities bought by all wage earner and clerical workers' families, and is not necessarily representative of the purchases made by any single family. However, the index is a good measure of *average* changes in prices for goods and services purchased by an average wage earner or clerical worker's family.

The city indexes cannot be used to measure the differences in the levels of prices in the various cities; they indicate only the difference in the rate of price movement. That is, assume the index for city A is 113 and that for city B is 115. This does not necessarily mean that prices on the average are higher in city B than in city A. If prices in city A were higher than in city B in the base period, the total cost of the market basket may still be higher in city A. The indexes do show that prices have increased more rapidly in city B than in city A since the base period.

Although attention is paid to quality changes, no index can take complete account of such changes.

References.—The basic release of the index is the report entitled "Consumer Price Index," issued by the Bureau of Labor Statistics toward the end of the month following the month to which the figures relate. A detailed description of the Consumer Price Index and its uses and limitations is presented in "The Consumer Price Index, A Short Description of the Index as Revised, 1953"—a multilith statement issued by BLS in January 1953; and in an article in the February 1953 issue of the *Monthly Labor Review*.

WHOLESALE PRICES

Description of series.—The Wholesale Price Index, compiled by the Bureau of Labor Statistics, measures the general rate and direction of the composite of price movements in primary markets, and the specific rates and directions of price movements for individual commodities and groups of commodities.

The index is based on price quotations for approximately 2,000 commodities selected to represent all commodities sold on primary markets in the United States. All types of commodities, from raw materials to fabricated products, are included in the index. For commodities traded on organized exchanges, such as livestock and grains, the quotations are furnished by the exchanges or other Government agencies, or are taken from published sources. For some standardized commodities, such as certain chemicals and specified constructions of cotton gray goods, quotations are taken from authoritative trade papers. For the majority of fabricated products, prices are reported to the Bureau of Labor Statistics by producers. Prices are quoted at the level of the first commercial transaction, and, for each commodity, the reporter is requested to quote the price which he charges to the channel of distribution to which he sells the largest volume of this particular commodity. Consequently, the majority of the quotations in the index are producers' prices, rather than wholesalers' prices. The prices relate to a particular day of the month—usually Tuesday of the week containing the 15th.

Initial contacts with manufacturers to solicit their cooperation in reporting prices on specified commodities are made by personal interview; subsequent price reports are mailed to Washington by the reporting firm. Insofar as possible, identical qualities of the commodities are priced from period to period, so that the index will measure only real price changes, not any differences due to changes in qualities or terms of sale.

A revision of this index was introduced with release of the January 1952 index. The principal changes from the old series were—

1. Increase in the commodity coverage—the number of items priced was increased from approximately 900 to about 2,000.
2. Change in the basis for weights from average sales for 1929–31 to 1947 sales.
3. Change of the base period from 1926 to 1947–49.
4. A modification of the classification system.

The revised index has been linked to the old series to provide a continuous index.

Statistical procedures.—The individual price series are combined into the index by multiplying the value weight assigned each item by its current price relative, and summing to obtain the current aggregate. The weights in the index are based on the total value of primary market transactions for commodities in 1947, the latest year for which a complete Census of Manufactures is available. The weights are based on 1947 data, shifted to a 1947–49 base (i. e., weights adjusted by change in item prices from 1947 to 1947–49 average). Within product classes, the total 1947 adjusted weight has been split to reflect more recent or normal conditions. For example, steel weights reflect increased importance of alloys since 1947. Each commodity price series in the index has its own direct weight (i. e., the value of the sales of that commodity on primary markets in 1947) plus an imputed weight for other commodities not priced for the index, but for which it is known, or assumed, that prices move like the commodity priced. The current index is obtained by dividing this aggregate by the aggregate for the base period. In addition to the comprehensive index, indexes are released each month for 15 major groups such as farm products and processed foods, 88 subgroups such as grains and cotton products, over 200 product classes and

Wholesale Prices

[1947–49=100] [1]

Year	All commodities	Farm products	Processed foods	Other than farm products and foods (industrial)
1926	65. 0	55. 9	58. 2	71. 5
1927	62. 0	55. 5	56. 7	67. 2
1928	62. 9	59. 2	59. 4	66. 4
1929	61. 9	58. 6	58. 5	65. 5
1930	56. 1	49. 3	53. 3	60. 9
1931	47. 4	36. 2	44. 8	53. 6
1932	42. 1	26. 9	36. 5	50. 2
1933	42. 8	28. 7	36. 3	50. 9
1934	48. 7	36. 5	42. 6	56. 0
1935	52. 0	44. 0	52. 1	55. 7
1936	52. 5	45. 2	50. 1	56. 9
1937	56. 1	48. 3	52. 4	61. 0
1938	51. 1	38. 3	45. 6	58. 4
1939	50. 1	36. 5	43. 3	58. 1
1940	51. 1	37. 8	43. 6	59. 4
1941	56. 8	46. 0	50. 5	63. 7
1942	64. 2	59. 2	59. 1	68. 3
1943	67. 0	68. 5	61. 6	69. 3
1944	67. 6	68. 9	60. 4	70. 4
1945	68. 8	71. 6	60. 8	71. 3
1946	78. 7	83. 2	77. 6	78. 3
1947	96. 4	100. 0	98. 2	95. 3
1948	104. 4	107. 3	106. 1	103. 4
1949	99. 2	92. 8	95. 7	101. 3
1950	103. 1	97. 5	99. 8	105. 0
1951	114. 8	113. 4	111. 4	115. 9
1952	111. 6	107. 0	108. 8	113. 2

[1] This does not replace the former index (1926=100) as the official index of primary market prices prior to January 1952. These data from January 1947 through December 1951 represent the revised sample and the 1947–49 weighting pattern. Prior to January 1947 they are based on the month to month movement of the former index. The only official index up to and including December 1951 is the former monthly index (1926=100).

NOTE.—Monthly data are available beginning with 1926.

Source: Department of Labor.

most of the individual series. In addition, 16 special group indexes (e. g., building materials) are regularly published.

Each week the Bureau publishes an index based on that week's prices for a small sample (about 200) of the commodities included in the monthly index, and on an estimate of the prices for all other commodities.

Uses and limitations.—The index is based for the most part on producers' prices; therefore, it cannot be used as a measure of price change at the wholesale market level.

A comparison of the movement of the subgroud indexes of the Wholesale Price Index and the Consumer Price Index cannot be used as a measure of the change in retailers' margins for the specified groups of commodities mainly because the two indexes are based on different weighting patterns, and the lists of commodities priced are not identical.

The index is designed to measure "pure" price changes; that is, changes which are not occasioned by changes in quality, quantity, terms of sale, etc. Therefore, it cannot be used as a measure of changes in manufacturers' average realized prices which are affected by product mix and terms of sale as well as by price movements.

An individual price series (in contrast to the price indexes) relates to a single quality and is selected to represent the price movement of the commodity and is not necessarily the average price of all qualities of the commodity.

References.—The basic release of the index is the report entitled "Wholesale (Primary Market) Price Index," issued by the Bureau of Labor Statistics during the second week of the month following the month to which the figures relate. A detailed description of the index and its uses and limitations is presented in the February 1952 *Monthly Labor Review* and issued as Reprint No. R. 2067.

PRICES RECEIVED AND PAID BY FARMERS

Parity Index

Description of series.—The Department of Agriculture Parity Index, computed by the Agricultural Marketing Service (AMS),[1] measures the changes in prices being paid by farmers for a list of commodities and services used in family living and farm production. The index is composed of five major parts. The series on prices paid for commodities and services used in family living accounts for 44.0 percent of the total weight; commodities and services used in farm production, 41.2 percent; interest on indebtedness secured by farm mortgages, 3.0 percent; taxes on farm real estate, 3.8 percent; and rates of wages paid hired farm labor, 8.0 percent.

Altogether 344 price series in addition to interest on farm mortgage debt, taxes on farm real estate, and wage rates are currently included in the Parity Index. Forty-two of the price series are used in both the Family Living and Production Indexes. The Family Living Index includes 194 items and the Production Index 192 items.

Prices for most commodities are collected quarterly from independent stores and monthly from chain stores. Prior to March 1953 the index was based on independent store prices only, but since that date combined (independent and chain) price series have been used. The index changes in the interquarterly months are determined largely by changes in chain store prices.

Changes in average costs of electricity and telephone services are based upon an annual survey of 20,000 farmers. Data on interest charges are developed annually on the basis of data obtained from the Bureau of the Census, special surveys, and lending agencies. The tax series is developed annually from data obtained from the Bureau of the Census and special surveys. The wage-rate series is based on returns from quarterly mail surveys to farmers. The index was revised with the release of the January 1950 series. The principal differences between the old and revised series are—

1. Cash wage rates paid to hired farm labor were added to the index.
2. A weighting pattern based on farmers' purchasing habits during the 1937–41 period was adopted.
3. The number of items included in the index was increased.

Statistical procedures.—Independent dealers mail their price reports to the AMS State offices where average prices for the State are calculated for each item. Chain store prices for many items are reported directly to the Washington office where they are combined with the appropriate State averages based on independent store prices. These averages are then combined into national averages by weighting each State average by the estimate of the amount of that commodity purchased by farmers in the designated State. These estimates of purchases are based upon census reports and other available information.

Subgroup indexes are computed for 15 types of expenditures, such as food and tobacco, clothing, farm machinery, and livestock. The 6 subgroup indexes relating to expenditures for family living are combined into 1 index, and the 9 subgroups relating to expenditures required for producing farm products are combined into another index. These two group indexes are combined with the indexes for wage rates, interest, and taxes to form the Parity Index.

Relation to other series.—The movement of retail prices as they affect farmers is frequently compared with that relating to urban workers by comparing the movement of the Consumer Price Index with that of the Index of Prices Paid by Farmers for Family Living. Although the movement of the two indexes in some periods has been quite similar, there are important differences between the indexes which account for differences in movements in other periods. Some of the principal differences are:

1. The commodity coverage of the two indexes is not the same and the weights used for individual commodities differ because one index is based on the urban family pattern of purchases, the other on the farm family pattern.

2. All expenses for commodities and services purchased by urban families are represented in the Consumer Price Index (CPI). On the other hand, certain types of expenses are not represented in the Index of Prices Paid by Farmers for Family Living. For example, medical expenses are not included; nor are residential rents, since few farmers rent homes other than those that are rented with the farm. All costs of homeownership, including purchase, repairs and maintenance, and insurance are represented in the CPI; only costs of building materials for houses are represented in the farm family-living index. Services carry a relatively heavy weight in the CPI; only telephone and electricity costs are represented in the farm family-living index.

3. The Consumer Price Index measures price changes only; the Index of Prices Paid by Farmers for Family Living reflects differences occasioned by

[1] Under the reorganization of the Department of Agriculture which became effective on November 2, 1953, most statistical functions of the former Bureau of Agricultural Economics were reassigned to the Agricultural Marketing Service.

Prices Received and Paid by Farmers

[1910–14=100]

Year	Prices paid for items used in		Parity index (prices paid, interest, taxes, and wage rates)	Prices received by farmers	Parity ratio [1]
	Living	Production			
1910	99	97	97	103	106
1911	99	98	98	95	97
1912	100	102	101	99	98
1913	100	101	101	101	100
1914	102	102	103	102	99
1915	104	104	105	99	94
1916	115	115	116	119	103
1917	143	156	148	178	120
1918	170	180	173	206	119
1919	202	195	197	218	111
1920	228	195	214	212	99
1921	164	128	155	124	80
1922	153	127	151	131	87
1923	156	138	159	142	89
1924	156	140	160	143	89
1925	161	145	164	156	95
1926	158	141	160	146	91
1927	155	141	159	141	89
1928	156	148	162	149	92
1929	154	146	160	148	92
1930	144	135	151	125	83
1931	124	113	130	87	67
1932	106	99	112	65	58
1933	108	99	109	70	64
1934	122	114	120	90	75
1935	124	122	124	109	88
1936	124	122	124	114	92
1937	128	132	131	122	93
1938	122	122	124	97	78
1939	120	121	123	95	77
1940	121	123	124	100	81
1941	130	130	133	123	92
1942	149	148	152	158	104
1943	166	164	171	[2] 192	112
1944	175	173	182	[2] 196	108
1945	182	176	190	[2] 206	108
1946	202	191	208	[2] 234	112
1947	237	224	240	275	115
1948	251	250	260	285	110
1949	243	238	251	249	99
1950	246	246	256	256	100
1951	268	273	282	302	107
1952	271	274	287	288	100

[1] Ratio of index of prices received by farmers to parity index.
[2] Includes wartime subsidy payments paid on beef cattle, sheep, lambs, milk, and butterfat between October 1943 and June 1946.

NOTE.—Monthly data are available beginning with January 1910 for the index of prices received by farmers and beginning with January 1937 for the other indexes.

Source: Department of Agriculture.

differences in qualities purchased in various periods, as well as price changes.

Uses and limitations.—The index is designed to measure prices for the qualities of the commodities being purchased currently by farmers; therefore, the movement of the index may be affected by changes in qualities which farmers purchase as they adjust to changing income levels or to changes in qualities commonly stocked by merchants. That is, if farmers purchase better quality merchandise the index will rise because of this trading up; conversely, the purchase of poorer quality merchandise will depress the index. Therefore, the use of the index as a measure of pure price movements—that is, of differences not occasioned by changes in qualities or terms of sale—is limited.

References.—See below under "Prices Received by Farmers."

Prices Received by Farmers

Description of series.—The Index of Prices Received by Farmers computed by the Agricultural Marketing Service is a measure of the change in average prices of farm products from month to month. It covers the period from January 1910 to date. It is based on average prices received for all grades and qualities of the important agricultural commodities at the point of first sale, which generally is the local market. The base period is January 1910 to December 1914, as required by law.

The price data used in constructing the index are obtained chiefly by mail on a voluntary basis from buyers of farm products (such as country mills and elevators, creameries and milk stations, cooperative marketing organizations, and local dealers) and other persons with a knowledge of farm product prices (such as local bankers and well-informed farmers). In recent years reports have been received each month from approximately 10,000 such reporters.

The index is based on prices for about 50 commodities which account for approximately 95 percent of the total cash receipts from marketings of all farm commodities. In addition to the over-all index for "all farm products," indexes are prepared for "all crops," for "livestock and livestock products," and for 13 subgroups. Four of these subgroup indexes—fruit, truck crops, dairy products, and poultry and eggs—are published also on a seasonally adjusted basis.

Statistical procedures.—The index is basically of the weighted aggregative type. In combining the United States average prices for individual commodities into subgroup indexes, weights based on average quantities sold during 1937–41 are used. The subgroup indexes are then converted to a 1910–14 base.

In combining subgroup indexes into group and all-commodity indexes, the index numbers are weighted by the percentage which cash receipts from marketings for the particular commodity subgroups bear to the total for the same period—1937–41.

A number of revisions have been made in the index series from time to time. Mainly they have involved revisions in basic price series or changes in weights. The most recent major revision was made as of January 1950. This revision resulted in changes which put the index on a basis more consistent with that for the Parity Index (the Index of Prices Paid by Farmers, Including Interest, Taxes, and Wage Rates), improved the weighting structure, and made minor changes in commodity coverage.

Relation to other series.—This index should not be confused with the farm product component of the Wholesale Price Index. There are significant differences. The index described here measures changes in prices at the point of first sale, whereas the Wholesale Price Index measures them in selected central markets. This series is based on average prices for all of a given commodity rather than prices of specific grades or qualities, as is the Wholesale Price Index. Furthermore, commodities traded among farmers never enter into wholesale trade. Finally, there are differences in the weights and base periods used in the two indexes.

Uses and limitations.—The index is widely used as the best measure of changes in average prices received by farmers for commodities sold in local markets. It is used in the computation of adjusted base-period prices, which are needed in calculating parity prices under the "new" formula prescribed by the Agricultural Adjustment Act of 1938, as amended. It is also used in computing the "Parity ratio" (the ratio of the Index of Prices Received by Farmers to the Parity Index), to measure whether prices farmers receive for farm products are on the average higher or lower in relation to prices farmers pay for goods and services than they were in the base period, 1910–14.

The Index of Prices Received by Farmers is not a pure price index in the sense of measuring changes in prices alone. It measures changes in *average* prices for all grades and qualities of a given commodity rather than changes in prices of specific grades. Consequently, changes in the index may result from price changes for specific grades of a commodity or for all grades, from changes in the relative quantities of various grades, or from a combination of these.

As already noted, the index is based on commodities accounting for about 95 percent of the total value of all commodities farmers have to sell. Timber and other forest products, greenhouse products, and a number of miscellaneous and minor commodities are omitted for lack of adequate marketing and price data. These omissions are not significant with respect to the index as a whole.

References.—The Parity Index and the Index of Prices Received by Farmers are published monthly by the Agricultural Marketing Service in *Agricultural Prices.* Historical data appear in the Department of Agriculture's annual publications, *Agricultural Statistics* and *Crops and Markets.* A detailed description of the price series is included in *The Agricultural Estimating and Reporting Services of the United States Department of Agriculture,* Miscellaneous Publication No. 703 of the Department of Agriculture. A semitechnical explanation of the most recent major revisions is available in the April 1950 issue of *Agricultural Economics Research,* published by the Department of Agriculture.

Stock Prices

[Weekly average; 1939=100]

Year	Composite index [1]	Manufacturing			Transportation	Utilities	Trade, finance, and service	Mining
		Total	Durable goods	Nondurable goods				
1939	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1940	94.2	93.4	92.5	94.2	99.2	99.9	90.4	75.6
1941	85.7	84.8	81.6	88.0	96.5	89.1	82.0	71.1
1942	74.9	75.5	73.7	77.2	90.8	69.8	71.3	59.7
1943	99.2	99.1	94.7	103.5	125.1	90.5	101.0	83.5
1944	108.1	106.9	104.7	109.2	140.8	99.0	117.3	93.3
1945	131.2	129.0	129.0	129.2	190.0	112.9	149.3	114.3
1946	149.4	146.6	138.6	154.5	202.4	121.0	204.3	125.5
1947	130.9	132.4	119.9	144.6	149.1	105.5	162.8	117.2
1948	132.7	136.8	124.3	148.6	158.1	99.3	156.9	133.0
1949	127.7	132.1	116.0	147.2	136.0	98.1	160.7	129.4
1950	154.1	165.7	150.2	180.2	160.0	108.9	183.8	143.5
1951	184.9	206.8	178.5	233.1	199.0	112.6	207.9	204.9
1952	195.0	220.2	188.8	249.3	220.6	117.9	205.8	275.7

[1] Includes 265 common stocks, distributed as follows: 14 for mining, 98 for durable goods manufacturing, 72 for nondurable goods manufacturing, 21 for transportation, 28 for utilities, and 32 for trade, finance, and service.

NOTE.—Monthly and weekly data are available beginning with 1939.

Source: Securities and Exchange Commission.

STOCK PRICES

Description of series.—These indexes measure average price movement of 265 of the more active common stocks listed on the New York Stock Exchange. The stocks, classified in *Economic Indicators* only by broad categories, are also classified in the basic releases under 29 selected industry groups. These groups and the individual stocks in them were selected on the basis of common-stock trading activity on the Exchange in 1949. The selected groups correspond in general to classifications in the Standard Industrial Classification. The stocks thus selected from a total of approximately 1,000 listed common stocks accounted for about 70 percent of the value of common-stock trading activity on the New York Stock Exchange in 1949.

The prices reflected in the indexes are for the last sales of the respective stocks during the week as reported in the financial press.

Statistical procedures.—The index for each of the 29 industry groups measures the total current market value of the included issues (i. e., number of shares outstanding times price) as a percentage of their total market value in 1939 (computed as an average of 52 weekly figures). Each specific industry is weighted in the larger aggregates according to the value of the selected issues, and not necessarily according to the value of all listed issues in the industry.

When the number of outstanding shares of an issue is changed an adjustment of the index is made only if such change involves a change in the invested capital. The base value of the issue is then revised in the ratio of the new to the old capitalization so that the index will reflect only price movement.

Uses and limitations.—This is the only stock-price index issued by the Federal Government. It is a moderately sensitive weekly index presented in terms of categories roughly comparable with the Standard Industrial Classification—a feature which facilitates use in conjunction with other series so presented.

The indexes will not necessarily reflect weekly price movements of stocks not listed on the New York Stock Exchange, of the less active stocks so listed, or of those from industries excluded from the sample because of low volume of trading activity. This selectivity of industries should be borne in mind when using the indexes for the broader industrial categories presented in *Economic Indicators*.

References.—The SEC data are first published in a release issued each Monday entitled "SEC Indexes of Weekly Closing Prices of Common Stocks on the New York Stock Exchange," showing data for the 2 previous weeks, with percent change. The monthly SEC *Statistical Bulletin* shows price and change data for the 4 or 5 latest weeks. Data back to 1939 are available on request. A release entitled "Computation of SEC Index," which includes a list of the selected stocks, may be obtained from SEC.

EMPLOYMENT AND WAGES

CIVILIAN LABOR FORCE

Description of series.—Each month the Census Bureau publishes estimates of the civilian labor force—that is, all persons at work or holding a job and persons who are seeking work. In addition to the overall figures on employment and unemployment, subgroupings of the data are presented to make clear changes in the labor-force activity of various types of persons. Employed persons are classified by age and sex, by whether they are engaged in agricultural or nonagricultural pursuits, by broad occupational groupings and by number of hours worked during the week. In addition to age and sex, duration of unemployment is shown for the unemployed.

The estimates are obtained by means of a sample survey of households, representing all persons in the continental United States except those living in institutions (such as prisons or homes for the aged). On the basis of responses to the census interviewers, all persons 14 years and over in the sample households are classified as employed, unemployed or not in the labor force for the calendar week including the 8th of the month.

Counted as *employed* are all persons who, during the survey week, were either (*a*) "At work"—those who did *any* work for pay or profit, or those who worked without pay for 15 hours or more on a family farm or business; or (*b*) "With a job but not at work"—those who did not work and were not looking for work but had a job or business from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or layoff with definite instructions to return within 30 days of layoff. Also included are persons who had new jobs to which they were scheduled to report within 30 days.

Included as *unemployed* are those persons who did not work at all during the survey week and who were looking for work. Also included as unemployed are persons who would have been looking for work except that (*a*) they were temporarily ill, (*b*) they expected to return to a job from which they had been laid off for an indefinite period, or (*c*) they believed no work was available in their line of work or in the community.

The sum of the employed and the unemployed provides the *civilian labor force.* All other civilians 14 years of age and over are classified as "not in the labor force" (housewives, students, retired or disabled persons, those doing less than 15 hours of unpaid family work, and the voluntarily idle).

The sample survey was started in March 1940. Prior to that date there was no direct enumeration of the labor force. The estimates shown for 1939 and earlier years have since been prepared by the Bureau of Labor Statistics, using the same concepts as those employed by the Census Bureau, and whatever information was available—primarily the 1930 and 1940 Censuses of Population, and employment trends from BLS and BAE series for intervening years.

Since the sample survey was instituted in 1940, two revisions have been made in the series. In November 1943 an improved sample design was introduced and the estimates were revised back to 1940 using the 1940 Census of Population figures as a benchmark for that date. In July 1945 a new schedule was used which resulted in a more nearly complete count of employed persons; the estimates were again revised back to 1940 to take account of the change in interviewing procedure.

Statistical procedures.—National estimates are prepared by inflating the sample results to independent estimates of the population by sex, color, and age groups. The population estimates are obtained by bringing Census of Population figures up to date by adding births and net immigration and subtracting deaths. Starting in January 1953, materials from the 1950 Census of Population were used in preparing the estimates. Therefore, the figures from January 1953 on are not exactly comparable with those for prior months. A further change in estimating procedures in September 1953 affected somewhat the figures for agricultural employment.

In order to improve the reliability of the sample without increasing its size, the Census Bureau is now engaged in spreading the sample of 25,000 households among 230 areas instead of 68 as in the past. Figures based on the new sample design will become available early in 1954.

Relation to other series.—The Census Bureau's estimates of employment, obtained from a sample of households, differ in a number of respects from estimates of employment prepared from reports of employing establishments and based on payroll records, such as the Bureau of Labor Statistics current nonagricultural employment series and the Department of Agriculture estimates of farm employment. Because of sampling variability, changes in the various series may not always be consistent. The census estimates provide information on the work

Civilian labor force

Year	Total labor force (including armed forces) [1]	Civilian labor force					Unemployment as percent of total civilian labor force
		Total	Employment [2]			Unemployment	
			Total	Agricultural	Nonagricultural		
	Thousands of persons 14 years of age and over						
1929	49, 440	49, 180	47, 630	10, 450	37, 180	1, 550	3. 2
1930	50, 080	49, 820	45, 480	10, 340	35, 140	4, 340	8. 7
1931	50, 680	50, 420	42, 400	10, 290	32, 110	8, 020	15. 9
1932	51, 250	51, 000	38, 940	10, 170	28, 770	12, 060	23. 6
1933	51, 840	51, 590	38, 760	10, 090	28, 670	12, 830	24. 9
1934	52, 490	52, 230	40, 890	9, 900	30, 990	11, 340	21. 7
1935	53, 140	52, 870	42, 260	10, 110	32, 150	10, 610	20. 1
1936	53, 740	53, 440	44, 410	10, 000	34, 410	9, 030	16. 9
1937	54, 320	54, 000	46, 300	9, 820	36, 480	7, 700	14. 3
1938	54, 950	54, 610	44, 220	9, 690	34, 530	10, 390	19. 0
1939	55, 600	55, 230	45, 750	9, 610	36, 140	9, 480	17. 2
1940	56, 030	55, 640	47, 520	9, 540	37, 980	8, 120	14. 6
1941	57, 380	55, 910	50, 350	9, 100	41, 250	5, 560	9. 9
1942	60, 230	56, 410	53, 750	9, 250	44, 500	2, 660	4. 7
1943	64, 410	55, 540	54, 470	9, 080	45, 390	1, 070	1. 9
1944	65, 890	54, 630	53, 960	8, 950	45, 010	670	1. 2
1945	65, 140	53, 860	52, 820	8, 580	44, 240	1, 040	1. 9
1946	60, 820	57, 520	55, 250	8, 320	46, 930	2, 270	3. 9
1947	61, 608	60, 168	58, 027	8, 266	49, 761	2, 142	3. 6
1948	62, 748	61, 442	59, 378	7, 973	51, 405	2, 064	3. 4
1949	63, 571	62, 105	58, 710	8, 026	50, 684	3, 395	5. 5
1950	64, 599	63, 099	59, 957	7, 507	52, 450	3, 142	5. 0
1951	65, 832	62, 884	61, 005	7, 054	53, 951	1, 879	3. 0
1952	66, 426	62, 966	61, 293	6, 805	54, 488	1, 673	2. 7

[1] Data for 1940–52 exclude about 150,000 members of the armed forces who were outside the continental United States in 1940 and who were therefore not enumerated in the 1940 census. This figure is deducted by the Census Bureau from its current estimates for comparability with 1940 data.

[2] Includes part-time workers and those who had jobs but were not at work for such reasons as vacation, illness, bad weather, temporary lay-off, and industrial disputes.

NOTE.—Monthly data are available beginning with March 1940.

Sources: Department of Labor (1929–39) and Department of Commerce (1940–52).

status of the population: persons employed at more than one job, either because they hold more than one job concurrently or because they changed jobs during the survey week, are counted only once by the census and are classified according to the job at which they work the greatest number of hours during the week. Estimates based on reports from business establishments and farms, on the other hand, count persons who work for more than one establishment as many times as the number of different payrolls on which their names appear. The census estimates relate to all types of workers, including domestic service workers, unpaid family workers (working 15 hours or more during the week) and self-employed persons, groups which are generally excluded from employment series based on establishment reports. On the other hand, the census excludes workers less than 14 years of age whereas the payroll-based series have no age exclusions. An additional difference arises from the fact that persons with a job but not at work are included with the employed in the census estimates, whereas only part of this group (those receiving pay while away from work) are likely to be included in the BLS estimates. Finally, the census estimates relate to the calendar week including the 8th of the month, the BLS figures relate to the payroll period ending nearest the 15th of the month and farmers report to the Department of Agriculture for a week ending near the end of the month.

For a number of reasons, the unemployment estimates of the Bureau of the Census are not directly comparable with statistics derived from unemployment insurance operations. In the first place, some unemployed persons are not eligible for unemployment insurance, particularly young persons looking

for their first jobs, domestic servants, ex-government workers, agricultural workers, and persons who lost their jobs in firms too small to be covered by the various State unemployment insurance laws. Unemployed persons who have already received the benefits to which they are currently entitled are not included in the unemployment insurance claims figures. Also, the qualifications for drawing unemployment insurance differ from the definition of unemployment used by the Census Bureau. For example, persons with a job but not at work and persons working only a few hours during the week are sometimes eligible for unemployment insurance, but are classified by the Census Bureau as employed. Furthermore, some persons may be reported to the Census Bureau as not looking for work even though they may be registered at public employment offices, consider themselves available for jobs and be eligible for unemployment insurance.

Uses and limitations.—One of the chief advantages of the census labor force, employment and unemployment estimates is that they provide the only comprehensive figures covering the employment status of the whole population. The data are collected monthly and published promptly. The estimates of unemployment, in particular, are used as a current indicator of the general health of the economy.

Another advantage of the household enumeration method of obtaining labor force information is the possibility of relating work status to other personal and family characteristics. In addition to broad occupation and industry groups, classifications can be made by sex, age, and color, by marital status and number of children. For example, changes in the employment of married women, and of married women with small children, can be studied. By asking supplementary questions from time to time other information concerning the family can be similarly estimated, such as family incomes and the amount of migration during the course of a year. All these analyses throw light on the changing size and composition of the labor force.

It should be noted that in the classification used, anyone who did any work for pay during the survey week (or did 15 or more hours of unpaid work in a family enterprise) is counted as employed. Also counted as employed are those who did not work nor look for work but who had definite jobs waiting for them. (The numbers in these groups are shown separately in census releases.) Thus the survey indicates roughly the total demand for jobs: The number of persons who have jobs (the employed) and the number seeking jobs (the unemployed). To understand current trends, the summary figures need to be supplemented by the detailed data. The information provided regularly on hours worked shows the number of full-time and part-time employed. From time to time additional information is provided on the extent of voluntary and involuntary part-time employment, and the amount of underemployment arising from economic causes. Similarly, information on changes in the duration of unemployment adds meaning to the total count of unemployment.

Since the estimates are prepared from a small sample, the user should not attach significance to very small monthly changes. A table showing the sampling reliability of the estimates is regularly published in the census releases.

The user should also keep in mind that the information is collected by personal interview, usually with the housewife. She may not, in some cases, have exact knowledge for all members of the household. For this reason, as well as because of the relatively small size of the sample, only broad occupational and industry groupings of the data are published. Finally, the measurement of unemployment is in some cases difficult, since it depends in part on the attitude of the person interviewed. The classification of a person as unemployed has been made as objective as possible, by using the criterion of "looking for work," but no method has been as yet developed which will insure consistent reporting of activity month after month. Some marginal (usually very small) groups may be reported as unemployed in some circumstances whereas they would be reported as not in the labor force in others. Most of these problems of measurement affect persons whose attachment to the labor force is casual or intermittent, especially married women and youths still in school looking for part-time jobs.

References.—The regular monthly estimates of the civilian labor force are published by the Bureau of the Census in *The Monthly Report on the Labor Force* (Current Population Reports, Series P–57), which includes also descriptions of the data and an indication of the reliability of the estimates. Annual summaries and supplementary information on part-time workers, income, migration, etc., are published in special labor-force reports (Current Population Reports, Series P–50).

The techniques used in preparing the estimates for the earlier years are described in "Labor Force, Employment, and Unemployment, 1929–39: Estimating Methods," which appeared in the July 1948 issue of the Labor Department's *Monthly Labor Review*.

Nonagricultural Employment

[Thousands of wage and salary workers [1]]

Year	Manufacturing			Contract construction	Wholesale and retail trade	Finance, service, etc.	Government (Federal, State, local)	Transportation and public utilities	Mining
	Total	Durable goods	Nondurable goods						
1919	10,534	(2)	(2)	1,021	4,664	3,104	2,671	3,711	1,124
1920	10,534	(2)	(2)	848	4,623	3,252	2,603	3,998	1,230
1921	8,132	(2)	(2)	1,012	4,754	3,284	2,531	3,459	953
1922	8,986	(2)	(2)	1,185	5,084	3,347	2,542	3,505	920
1923	10,155	(2)	(2)	1,229	5,494	3,554	2,611	3,882	1,203
1924	9,523	(2)	(2)	1,321	5,626	3,679	2,723	3,806	1,092
1925	9,786	(2)	(2)	1,446	5,810	3,757	2,802	3,824	1,080
1926	9,997	(2)	(2)	1,555	6,033	3,990	2,848	3,940	1,176
1927	9,839	(2)	(2)	1,608	6,165	4,166	2,917	3,891	1,105
1928	9,786	(2)	(2)	1,606	6,137	4,322	2,996	3,822	1,041
1929	10,534	(2)	(2)	1,497	6,401	4,558	3,066	3,907	1,078
1930	9,401	(2)	(2)	1,372	6,064	4,482	3,149	3,675	1,000
1931	8,021	(2)	(2)	1,214	5,531	4,246	3,264	3,243	864
1932	6,797	(2)	(2)	970	4,907	3,952	3,225	2,804	722
1933	7,258	(2)	(2)	809	4,999	3,839	3,167	2,659	735
1934	8,346	(2)	(2)	862	5,552	4,031	3,298	2,736	874
1935	8,907	(2)	(2)	912	5,692	4,145	3,477	2,771	888
1936	9,653	(2)	(2)	1,145	6,076	4,373	3,662	2,956	937
1937	10,606	(2)	(2)	1,112	6,543	4,588	3,749	3,114	1,006
1938	9,253	(2)	(2)	1,055	6,453	4,543	3,876	2,840	882
1939	10,078	4,683	5,394	1,150	6,612	4,703	3,987	2,912	845
1940	10,780	5,337	5,443	1,294	6,940	4,896	4,192	3,013	916
1941	12,974	6,945	6,028	1,790	7,416	5,167	4,622	3,248	947
1942	15,051	8,804	6,247	2,170	7,333	5,297	5,431	3,433	983
1943	17,381	11,077	6,304	1,567	7,189	5,320	6,049	3,619	917
1944	17,111	10,858	6,253	1,094	7,260	5,308	6,026	3,798	883
1945	15,302	9,079	6,222	1,132	7,522	5,449	5,967	3,872	826
1946	14,461	7,739	6,722	1,661	8,602	6,207	5,607	4,023	852
1947	15,290	8,372	6,918	1,982	9,196	6,448	5,456	4,122	943
1948	15,321	8,312	7,010	2,169	9,519	6,636	5,614	4,141	982
1949	14,178	7,473	6,705	2,165	9,513	6,736	5,837	3,949	918
1950	14,967	8,085	6,882	2,333	9,645	6,894	5,992	3,977	889
1951	16,082	9,071	7,011	2,588	10,013	7,068	6,373	4,166	913
1952	16,209	9,262	6,946	2,572	10,251	7,237	6,633	4,220	872

[1] Revised series; see *Employment and Payrolls*, April 1953. Includes all full- and part-time wage and salary workers in nonagricultural establishments who worked during or received pay for any part of the pay period ending nearest the 15th of the month. Excludes proprietors, self-employed persons, domestic servants, and personnel of the armed forces. Total derived from this table not comparable with estimates of nonagricultural employment of the civilian-labor force reported by the Department of Commerce (p. 15) which include proprietors, self-employed persons, and domestic servants; which count persons as employed when they are not at work because of industrial disputes; and which are based on an enumeration of population, whereas the estimates in this table are based on reports from employing establishments.

[2] Not available.

NOTE.—Monthly data are available beginning with January 1939.

Source: Department of Labor.

NONAGRICULTURAL EMPLOYMENT—SELECTED INDUSTRIES

(Table on p. 17.)

Description of series.—Current monthly series on employment in nonagricultural establishments, with related information on hours and earnings (see below), are prepared by the Bureau of Labor Statistics. Employment estimates are published for more than 200 separate industry groups and subgroups as well as 8 major industry divisions (manufacturing, mining, trade, etc.). In addition, employment indexes for more than 150 specific industries are published monthly, and estimates of women employed in manufacturing industries are available quarterly.

Employment figures represent the total number of persons employed in nonagricultural establishments in the continental United States during a specified payroll period which (for all industries except Government) is that ending nearest the 15th of the month. Employed persons include all those who worked during or received pay for any part of the payroll period, including part-time as well as full-time, temporary as well as permanent, employees. Workers on an establishment's payroll who are on paid sick leave, paid holiday or paid vacation, or who work a part of a specified pay period and are unemployed or on strike during the other part are considered employed. Persons on the payroll of more than one establishment during the pay period are counted each time reported. On the other hand, persons are not considered employed who are laid off, on leave without pay, or on strike for the entire pay period. Proprietors, the self-employed and unpaid family workers, farm workers, and domestic workers in households are not included. Government employment statistics refer to civilian employees only, but include employees of State and local governments as well as Federal.

Information on employment (as well as on payrolls and hours worked) is collected each month from a sample of establishments under cooperative arrangements with State agencies (primarily State employment security agencies). The cooperating State agencies mail questionnaires to the reporting establishments and edit them when returned, before passing the information on to the BLS. To eliminate duplicate reporting, the same establishment reports are used for preparing State, area, and national estimates.

Durable goods manufacturing industries include: ordnance and accessories (except Government-operated establishments), lumber and wood products, furniture and fixtures, stone, clay and glass products, primary metal industries, fabricated metal products, machinery, transportation equipment, instruments and miscellaneous manufacturing industries. All other manufacturing industries are included in the nondurable manufacturing estimates.

Statistical procedures.—Sampling is used to collect current data in most industries. In general, the sample of about 150,000 establishments is designed to obtain reports from most if not all the large establishments in each industry but the proportion of total employment covered varies considerably from industry to industry. It is relatively high (68 percent) in manufacturing, for example, and much lower in wholesale and retail trade (19 percent) and service industries.

In order to compute total employment from the sample reports, month-to-month changes in the sample establishments are applied to a total employment figure (benchmark) separately for each industry. The benchmark figures are obtained from sources which, singly or in combination, insure either a complete count of employment for the specified benchmark period, or an estimate of reasonable accuracy. This method takes advantage of benchmark data which are byproducts of other governmental functions.

Since 1939 the basic sources of benchmark information have been periodic tabulations of employment data by industry compiled by State agencies from reports of establishments covered under State unemployment insurance laws. Supplementary tabulations prepared by the United States Bureau of Old-Age and Survivors Insurance are used for small-size establishments exempt from State unemployment insurance laws. For industries not covered by either of the two programs, benchmarks are compiled from other sources: for example, for interstate railroads, from information reported to the Interstate Commerce Commission; for State and local government, from data reported to the Bureau of the Census; for the Federal Government, from data compiled by the Civil Service Commission. Establishments are classified into the same industrial groupings for benchmark purposes as they are for monthly reporting.

The most recent benchmark adjustment was to data for the first quarter of 1951 (published in April 1953). These revisions were carried back to 1947 where appropriate.

Relation to other series.—For a comparison with the Current Population Survey, see under Civilian Labor Force, above.

Average weekly hours

[Hours per week, for production workers or nonsupervisory employees [1]]

Year	Manufacturing			Building construction	Retail trade [2]
	Total	Durable goods	Nondurable goods		
1909	51.0	(3)	(3)	(3)	(3)
1914	49.4	(3)	(3)	(3)	(3)
1919	46.3	(3)	(3)	(3)	(3)
1920	47.4	(3)	(3)	(3)	(3)
1921	43.1	(3)	(3)	(3)	(3)
1922	44.2	(3)	(3)	(3)	(3)
1923	45.6	(3)	(3)	(3)	(3)
1924	43.7	(3)	(3)	(3)	(3)
1925	44.5	(3)	(3)	(3)	(3)
1926	45.0	(3)	(3)	(3)	(3)
1927	45.0	(3)	(3)	(3)	(3)
1928	44.4	(3)	(3)	(3)	(3)
1929	44.2	(3)	(3)	(3)	(3)
1930	42.1	(3)	(3)	(3)	(3)
1931	40.5	(3)	(3)	(3)	(3)
1932	38.3	32.6	41.9	(3)	(3)
1933	38.1	34.8	40.0	(3)	(3)
1934	34.6	33.9	35.1	28.9	(3)
1935	36.6	37.3	36.1	30.1	(3)
1936	39.2	41.0	37.7	32.8	(3)
1937	38.6	40.0	37.4	33.4	(3)
1938	35.6	35.0	36.1	32.1	(3)
1939	37.7	38.0	37.4	32.6	42.7
1940	38.1	39.3	37.0	33.1	42.5
1941	40.6	42.1	38.9	34.8	42.1
1942	42.9	45.1	40.3	36.4	41.1
1943	44.9	46.6	42.5	38.4	40.3
1944	45.2	46.6	43.1	39.6	40.4
1945	43.4	44.1	42.3	39.0	40.3
1946	40.4	40.2	40.5	38.1	40.7
1947	40.4	40.6	40.1	37.6	40.3
1948	40.1	40.5	39.6	[4] 37.3	40.3
1949	39.2	39.5	38.8	36.7	40.4
1950	40.5	41.2	39.7	36.3	40.5
1951	40.7	41.6	39.5	37.2	40.2
1952	40.7	41.5	39.6	38.1	39.9

[1] Revised series; see *Hours and Earnings—Industry Report*, April 1953.
[2] Hours and earnings data exclude eating and drinking places.
[3] Not available.
[4] Data beginning with January 1948 are not strictly comparable with those for earlier years.

NOTE.—Monthly data are available beginning with 1932 for manufacturing industries, 1934 for building construction, and 1939 for retail trade.

Source: Department of Labor.

In addition to total employment in each industry, BLS also prepares estimates of production-worker employment for mining and manufacturing industries. These estimates are exactly comparable with the average hours and earning series (see below) which are prepared from information reported on the same questionnaires as the employment figures.

In general, BLS employment estimates are comparable with other data collected from establishments, such as employment, production, and similar data obtained by the Census Bureau in the manufacturing censuses and annual surveys. Some differences will be found, however, especially for individual industries, caused chiefly by differences in the industries covered, the business units considered parts of an establishment, and in the industrial classification of establishments.

More serious differences are found between the BLS establishment-based series and those based on reports from companies, such as financial reports on profits, because the industry totals that result when a single industry classification is assigned to an entire company differ substantially from those in which each establishment of the company has been assigned to the industry of its principal activity. (See Corporate Profits, below.)

Uses and limitations.—Current employment statistics are widely used as a timely indicator of changes in economic activity in various sectors of the economy. Comparable information for a large number of detailed industries is provided within a few weeks. Furthermore, because of the promptness with which basic information is supplied in considerable industry detail, the BLS employment estimates are frequently incorporated in other Federal statistical series, particularly in making current estimates of production, productivity and national income.

The publication of comparable State and local area estimates by the cooperating State agencies using the same concepts and methods provides a means whereby business trends can be followed for various sections of the country and for about 100 of the large metropolitan areas.

The national estimates are not all of uniform quality, however. In general, those for manufacturing industries are most reliable. Since "cutoff" sampling rather than a probability design has been used, it is not possible to calculate the sampling variability of monthly estimates. Experience with the program has shown that the monthly employment data in some industries tend to have an increasing bias for the successive months between two benchmarks. Although this error cannot be adjusted precisely on a current basis, average adjustment is made through the use of bias adjustment factors before publication. Appropriate changes in employment levels are also made, when necessary, at the next revision to new benchmarks.

References.—The basic release of the employment series is the BLS *Employment and Payrolls Monthly Statistical Report*, which contains national estimates, State and area estimates, and an explanatory note. The national employment series for 13 months are also reprinted in the *Monthly Labor Review*. A more detailed technical note on "Measurement of Industrial Employment" appears in the September 1953 issue of the *Monthly Labor Review*.

AVERAGE WEEKLY HOURS—SELECTED INDUSTRIES

(Table on p. 19.)

Description of series.—With the employment figures for the specified payroll period, described in the preceding section, BLS collects from the sample establishments total man-hours of production or nonsupervisory workers actually worked or paid for, including hours paid for holidays, sick leave, and vacations taken.

Statistical procedures.—The average hour figures are obtained by dividing the number of production and related workers (or nonsupervisory workers in industries other than mining and manufacturing) into the total man-hours reported for each industry. The average hours are normally less than scheduled hours because of such factors as absenteeism, labor turnover, part-time work, and stoppages.

Uses and limitations.—Changes in hours worked supplement the information on employment, since frequently hours worked are affected even before employment by changes in economic activity. The hours figures are used in compiling the average earnings figures discussed below. They also serve as a basis for current production estimates for some industries (see description of the Index of Industrial Production, p. 24).

Hours paid for as measured by these series differ from plant man-hours which do not include hours paid for vacation, sick leave, or holidays.

References.—The basic release of the average weekly hours series is the BLS monthly *Hours and Earnings—Industry Report*, which includes an explanatory note. A more detailed technical note on "Hours and Earnings in Nonagricultural Industries" is also available from the Bureau of Labor Statistics.

Average Hourly Earnings

[For production workers or nonsupervisory employees [1]]

Year	All manufacturing		Durable goods manufacturing		Nondurable goods manufacturing		Building construction		Retail trade [2]	
	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]
1909	$0.193	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1914	.223	$0.590	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1919	.477	.732	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1920	.555	.735	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1921	.515	.765	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1922	.487	.772	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1923	.522	.813	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1924	.547	.849	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1925	.547	.828	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1926	.548	.823	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1927	.550	.841	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1928	.562	.870	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1929	.566	.876	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1930	.552	.878	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1931	.515	.899	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1932	.446	.866	$0.497	$0.965	$0.420	$0.816	(4)	(4)	(4)	(4)
1933	.442	.908	.472	.969	.427	.877	(4)	(4)	(4)	(4)
1934	.532	1.056	.556	1.103	.515	1.022	$0.795	$1.577	(4)	(4)
1935	.550	1.064	.577	1.116	.530	1.025	.815	1.576	(4)	(4)
1936	.556	1.065	.586	1.123	.529	1.013	.824	1.579	(4)	(4)
1937	.624	1.153	.674	1.246	.577	1.067	.903	1.669	(4)	(4)
1938	.627	1.181	.686	1.292	.584	1.100	.908	1.710	(4)	(4)
1939	.633	1.210	.698	1.335	.582	1.113	.932	1.782	$0.642	$1.036
1940	.661	1.252	.724	1.371	.602	1.140	.958	1.814	.653	1.047
1941	.729	1.316	.808	1.458	.640	1.155	1.010	1.823	.680	1.047
1942	.853	1.389	.947	1.542	.723	1.178	1.148	1.870	.626	1.020
1943	.961	1.474	1.059	1.624	.803	1.232	1.252	1.920	.679	1.041
1944	1.019	1.537	1.117	1.685	.861	1.299	1.319	1.989	.731	1.103
1945	1.023	1.509	1.111	1.639	.904	1.333	1.379	2.034	.783	1.155
1946	1.086	1.478	1.156	1.573	1.015	1.381	1.478	2.011	.893	1.215
1947	1.237	1.471	1.292	1.536	1.171	1.392	1.681	1.999	1.009	1.200
1948	1.350	1.490	1.410	1.556	1.278	1.411	[5] 1.848	2.040	1.088	1.201
1949	1.401	1.562	1.469	1.638	1.325	1.477	1.935	2.157	1.137	1.268
1950	1.465	1.617	1.537	1.696	1.378	1.521	2.031	2.242	1.176	1.298
1951	1.59	1.63	1.67	1.71	1.48	1.51	2.19	2.24	1.26	1.29
1952	1.67	1.67	1.76	1.76	1.54	1.54	2.31	2.31	1.32	1.32

[1] Revised series; see *Hours and Earnings—Industry Report*, April 1953.
[2] Hours and earnings data exclude eating and drinking places.
[3] Earnings in current prices divided by consumer price index on base 1952=100.
[4] Not available.
[5] Data beginning with January 1948 are not strictly comparable with those for earlier years.

NOTE.—Monthly data are available beginning with 1932 for manufacturing industries, 1934 for building construction and 1939 for retail trade.

Source: Department of Labor.

AVERAGE HOURLY EARNINGS—SELECTED INDUSTRIES

(Table on p. 21.)

Description of series.—The payroll figures on which these averages are based are collected by BLS with the employment and hours figures, described above. They are reported before deductions for taxes, social insurance, etc. They include pay for sick leave, holidays, and vacations taken, but exclude retroactive pay and bonuses, unless earned and paid regularly each pay period. Earnings in 1952 prices, prepared by the Council of Economic Advisers, are the average hourly earnings figures adjusted for changes in purchasing power as determined by the Consumer Price Index, with 1952=100.

Statistical procedures.—Average hourly earnings are derived by dividing total payrolls by total man-hours reported for each industry. Only the sample data are used, since there are no benchmarks available for hours and earnings.

Uses and limitations.—Average hourly earnings figures are widely used in collective bargaining, in "escalating" long-term sales contracts (such as labor costs for equipment which takes a number of months or years to build) and in general economic analysis.

The hourly earnings figures reflect not only changes in basic hourly and incentive wage rates, but also such variable factors as premium pay for overtime and late-shift work, and changes in output of workers paid on an incentive basis. The changing employment of workers as between relatively high-paid and low-paid work, and relatively high-wage and low-wage industries, also affects the hourly earnings averages.

Hourly earnings refer to the actual return to the worker for a stated period of time, and should not be confused with wage rates, which represent the rates stipulated for a given unit of work or time. Since certain types of payments (see above) as well as payments to workers excluded from the production worker (or nonsupervisory employee) definition are not included, the earning series should not be taken to represent labor costs to the employer.

The fact that large establishments predominate in the BLS sample may affect somewhat the level of the average earnings figures for some industries, but has no measurable effect on the trends in average hourly earnings.

References.—The basic release of the average hourly earnings series is the BLS monthly *Hours and Earnings—Industry Report*, which also includes estimates of hourly earnings excluding overtime, and an explanatory note. A more detailed technical note on "Hours and Earnings in Nonagricultural Industries" is also available from the Bureau of Labor Statistics.

AVERAGE WEEKLY EARNINGS—SELECTED INDUSTRIES

Statistical procedures.—Average weekly earnings are obtained by multiplying average hours and average hourly earnings for each industry (see above).

Uses and limitations.—The average weekly earnings figures come closer than the hourly earnings to measuring what the worker has to spend, since these figures are affected by changes in the length of the workweek. However, they do not represent take-home pay, since no deductions have been made for income and social-security taxes, group insurance, occupational supplies, union dues, or other payroll deductions.

References.—The basic release of the average weekly earnings series is the BLS monthly *Hours and Earnings—Industry Report*, which also includes estimates of net spendable weekly earnings in manufacturing, earnings in 1947–49 dollars for selected industries, and an explanatory note. A more detailed technical note on "Hours and Earnings in Nonagricultural Industries" is also available from the Bureau of Labor Statistics.

Average Weekly Earnings

[For production workers or nonsupervisory employees [1]]

Year	All manufacturing		Durable goods manufacturing		Nondurable goods manufacturing		Building construction		Retail trade [2]	
	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]	Current prices	1952 prices [3]
1909	$9.84	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1914	11.01	$29.13	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1919	22.08	33.87	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1920	26.30	34.83	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1921	22.18	32.96	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1922	21.51	34.09	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1923	23.82	37.10	$25.78	$40.16	$21.94	$34.17	(4)	(4)	(4)	(4)
1924	23.93	37.16	25.84	40.12	22.07	34.27	(4)	(4)	(4)	(4)
1925	24.37	36.87	26.39	39.92	22.44	33.95	(4)	(4)	(4)	(4)
1926	24.65	37.01	26.61	39.95	22.75	34.16	(4)	(4)	(4)	(4)
1927	24.74	37.83	26.66	40.76	23.01	35.18	(4)	(4)	(4)	(4)
1928	24.97	38.65	27.24	42.17	22.88	35.42	(4)	(4)	(4)	(4)
1929	25.03	38.75	27.22	42.14	22.93	35.50	(4)	(4)	(4)	(4)
1930	23.25	36.96	24.77	39.38	21.84	34.72	(4)	(4)	(4)	(4)
1931	20.87	36.42	21.28	37.14	20.50	35.78	(4)	(4)	(4)	(4)
1932	17.05	33.11	16.21	31.48	17.57	34.12	(4)	(4)	(4)	(4)
1933	16.73	34.35	16.43	33.74	16.89	34.68	(4)	(4)	(4)	(4)
1934	18.40	36.51	18.87	37.44	18.05	35.81	$22.97	$45.58	(4)	(4)
1935	20.13	38.94	21.52	41.62	19.11	36.96	24.51	47.41	(4)	(4)
1936	21.78	41.72	24.04	46.05	19.94	38.20	27.01	51.74	(4)	(4)
1937	24.05	44.45	26.91	49.74	21.53	39.80	30.14	55.71	(4)	(4)
1938	22.30	42.00	24.01	45.22	21.05	39.64	29.19	54.97	(4)	(4)
1939	23.86	45.62	26.50	50.67	21.78	41.64	30.39	58.11	$23.14	$44.24
1940	25.20	47.73	28.44	53.86	22.27	42.18	31.70	60.04	23.50	44.51
1941	29.58	53.39	34.04	61.44	24.92	44.98	35.14	63.43	24.42	44.08
1942	36.65	59.69	42.73	69.59	29.13	47.44	41.80	68.08	25.73	41.91
1943	43.14	66.17	49.30	75.61	34.12	52.33	48.13	73.82	27.36	41.96
1944	46.08	69.50	52.07	78.54	37.12	55.99	52.18	78.70	29.53	44.54
1945	44.39	65.47	49.05	72.35	38.29	56.47	53.73	79.25	31.55	46.53
1946	43.82	59.62	46.49	63.25	41.14	55.97	56.24	76.52	36.35	49.46
1947	49.97	59.42	52.46	62.38	46.96	55.84	63.30	75.27	40.66	48.35
1948	54.14	59.76	57.11	63.04	50.61	55.86	[5] 68.85	75.99	43.85	48.40
1949	54.92	61.23	58.03	64.69	51.41	57.31	70.95	79.10	45.93	51.20
1950	59.33	65.49	63.32	69.89	54.71	60.39	73.73	81.38	47.63	52.57
1951	64.71	66.17	69.47	71.03	58.46	59.78	81.47	83.30	50.65	51.79
1952	67.97	67.97	73.04	73.04	60.98	60.98	88.01	88.01	52.67	52.67

[1] Revised series; see *Hours and Earnings—Industry Report*, April 1953.
[2] Hours and earnings data exclude eating and drinking places.
[3] Earnings in current prices divided by consumer price index on base 1952=100.
[4] Not available.
[5] Data beginning with January 1948 are not strictly comparable with those for earlier years.

NOTE.—Monthly data are available beginning with June 1914 for all manufacturing industries, 1923 for durable and nondurable goods manufacturing, 1934 for building construction, and 1939 for retail trade.

Source: Department of Labor.

PRODUCTION AND BUSINESS ACTIVITY

INDUSTRIAL PRODUCTION

Description of series.—The Index of Industrial Production is computed by the Board of Governors of the Federal Reserve System. It is designed to measure changes in the physical volume or quantity of output of manufactures and minerals. It does not register changes in the value of such production, nor does it include other productive activities (such as construction and public utilities) often regarded as industrial. The manufacturing and mining industries covered by the index produce about one-third of the goods and services in the United States.

The manufactures and minerals indexes are based on figures compiled by the Bureau of the Census, Bureau of Mines, Department of Agriculture, Tariff Commission, Bureau of Labor Statistics, the Internal Revenue Service, and a few other Government agencies, and by trade associations and trade journals. The component series are carefully chosen to represent the industries, industry groups, and other subdivisions in the index, and where necessary and possible they are adjusted for undercoverage or other deficiencies. For example, shipment series are adjusted for inventory changes, where feasible; value data for price changes; man-hours for estimated changes in output per man-hour.

Both annual and monthly data are utilized. Annual data, which are generally more reliable and available in greater detail than the monthly data, are used to compute an annual index and a set of annual group, subgroup, and industry indexes measuring year-to-year output changes. Monthly data are utilized to make a monthly index and group and other detailed monthly indexes similiar to the annual indexes. The use of comprehensive annual indexes to determine levels makes it possible to employ fewer but more select component series to represent each industry in the monthly indexes.

Manufactures.—The annual index of manufactures includes about 1,370 detailed product or industry series, and the monthly index 164 series. The series selected are classified into the 21 major groups for manufacturing of the Standard Industrial Classification. Indexes are also computed for durable and nondurable manufactured goods. Series on quantities of products manufactured or shipped, or quantities of materials consumed or supplied, account for about three-fourths of the weights assigned in the annual index, and about one-half of the weights in the monthly index. The remaining series in the annual index are mostly deflated value figures, estimates based on several types of data, or adjusted man-hour data, with the last accounting for 4 percent of the weight. The remaining components in the monthly index consist largely of man-hour data adjusted for estimated changes in output per man-hour to represent output. The use of so large a proportion of man-hour data in the monthly index has been questioned, but it should be remembered that only the current changes are governed by these man-hour series, with the index levels for the industries concerned determined largely by annual data on quantities of products produced or shipped or other types of data.

Minerals.—The annual index of minerals is composed of about 70 separate series, and the monthly index of 11 series, classified into the 5 major groups for mining of the Standard Industrial Classification. The annual series on minerals, representing the production of all the important minerals, are in physical volume units, and all but one of the monthly series are in physical volume units. The exception is the man-hour series used to represent stone and earth quarrying, to which less than 10 percent of the weight of the minerals index is assigned, and which, of course, is adjusted to annual physical volume levels.

Since its first publication in 1927 the index has undergone several major revisions. The most recent revision was completed in 1953, and the revised index introduced in December 1953. The principal changes were—

1. Increase in the number of component monthly series from 100 to 175, and many improvements in the series used.

2. Use of component series to represent certain industries formerly represented only indirectly.

3. Use of a comprehensive and detailed annual index, based on about 1,440 series, to check and correct the annual levels of the individual monthly measurements.

4. Use of 1947 value added data for calculative weights, in place of the 1937 value added data previously employed, for the segment of the index from 1947 to date.

5. Change of the comparison base period from 1935–39 to 1947–49.

6. Adoption of the latest Standard Industrial Classification code as the basis for organizing the index and its components.

Industrial Production

[1947–49=100, seasonally adjusted]

Period	Total industrial production	Manufactures			Minerals
		Total	Durable goods	Nondurable goods	
1919	39	38	38	37	45
1920	41	39	42	36	53
1921	31	30	24	34	42
1922	39	39	37	40	45
1923	47	45	47	44	62
1924	44	43	43	42	57
1925	49	48	49	46	59
1926	51	50	52	48	63
1927	51	50	49	50	64
1928	53	52	53	51	63
1929	59	58	60	56	68
1930	49	48	45	51	59
1931	40	39	31	48	51
1932	31	30	19	42	42
1933	37	36	24	48	48
1934	40	39	30	49	51
1935	47	46	38	55	55
1936	56	55	49	61	63
1937	61	60	55	64	71
1938	48	46	35	57	62
1939	58	57	49	66	68
1940	67	66	63	69	76
1941	87	88	91	84	81
1942	106	110	126	93	84
1943	127	133	162	103	87
1944	125	130	159	99	93
1945	107	110	123	96	92
1946	90	90	86	95	91
1947	100	100	101	99	100
1948	104	103	104	102	106
1949	97	97	95	99	94
1950	112	113	116	111	105
1951	120	121	128	114	115
1952	124	125	136	114	114

NOTE.—Monthly data are available beginning with 1919.

Source: Board of Governors of the Federal Reserve System.

The new version of the index is confined for the present to the period since January 1947. In revising the index for the earlier period use will be made of the major group components of the benchmark index of manufactures (computed by Federal Reserve and the Census Bureau from data of the 1939 and 1947 Censuses of Manufactures, and published in 1952) to determine the 1939 levels of the industry group indexes relative to 1947. Pending this detailed revision, interim benchmark adjustments have been made to the old indexes for durable and nondurable manufactures—and also for minerals and total industrial production—from January 1939 to December 1946. The old indexes beginning in 1919 have been linked on to the respective revised measures to form a series of continuous indexes from 1919 to the present.

Statistical procedures.—The method used in combining the individual series is the weighted average of relatives. This consists of (1) reducing each series into relatives with the average for the base period, 1947–49, as 100; (2) multiplying each series of relatives by a base-year weight factor; and (3) adding the products (series of relatives multiplied by weights) for any one month to obtain the index number for the month. The weights used are percentage weight factors, that is, percentage of the weight assigned to each series to the total weight assigned to all series in the base period. Since the total of the percentage weight factors is equal to

100, the sum of the products of all series for any one month (all series times their respective weight factors) gives the index of industrial production for that month. The products of the component series and their weights give the number of points contributed to the index by individual series. This method of computation facilitates analysis of the changes in the index. For example, it makes it possible to observe the points contributed by each series or group of series, and therefore to determine what series or group of series are responsible for the month-to-month changes in the total index or in the index for any group or subgroup of industries.

The weights used are based on value added—the difference between the value of products and the cost of materials or supplies consumed—in individual mining and manufacturing industries in 1947. The value added data for mining are based on estimates prepared by the Bureau of Labor Statistics in connection with its input-output studies. The value added figures for manufacturing are obtained from the Census of Manufactures for 1947. However, since value added data are not available for individual products of each industry, such data are in most cases estimated on the assumption that they are proportional to value of the product.

Since the value added data used relate to 1947, while the component series are expressed as relatives with the average for the base period 1947–49 as 100, it is necessary to adjust the 1947 value added for each series by the ratio of the level of that series in 1947 to the average level of that series in 1947–49. The value added data so adjusted, expressed as percentages of the total for all manufacturing and mining, are the weight factors used in combining the individual series into the group and total industrial production indexes.

Components of the index are adjusted for two kinds of short-time recurring fluctuations—differences in the number of working days from month to month and seasonal variations. The first adjustment is accomplished by reducing reported quantity figures to average daily output in the month. For this purpose, only regular weekend closings—where in effect—are treated as nonworking days. No allowance is made for holiday shutdowns, whose effects on production are adjusted by the seasonal variation factors. No adjustment is needed for the man-hour series which are reported in terms of rates.

The adjustment for seasonal fluctuations is made directly for the 21 manufacturing and 5 mineral major industry group indexes, and the adjusted indexes for the larger aggregates—such as durable and nondurable manufactures, manufactures, minerals, and industrial production—are obtained as combinations of these.

Relation to other series.—As an important general economic indicator, the index of industrial production is related in varying degree to other general economic indicators. Among the more important series to which the index is closely related are gross national product and manufacturers' sales. It should be observed, however, that these are value or dollar-volume series, and are therefore influenced by price as well as quantity changes. The industrial production index, on the other hand, being a measurement of physical volume, registers quantity changes only.

Also, the national product statistics relate to output at a final stage and include trade and services as well as both "industrial" and "nonindustrial" goods, whereas the industrial production index is confined to manufacturing and mining, and reflects activity at successive stages within these sectors. Other differences include the fact that as a monthly measure the production index is available more frequently, and for the sectors concerned, in greater detail.

The monthly Department of Commerce series on manufacturers' sales corresponds in coverage to the manufacturing component of the production index, and includes successive stages of processing. The importance assigned to each industry, however, is proportional to the gross value of sales, rather than net value added as in the production index, so that changes in activity at later stages of processing influence the sales measure more than they do the production index. This and other factors, including the influence of price changes on the sales measures, lead to differences in movements, and indicate why one (or more) series may be the best measure for a specific purpose.

Uses and limitations.—The total index of industrial production is probably most widely used as a business barometer. Both in whole and in detail it is used in conjunction with related data on employment, inventories, trade, prices, and other economic variables, in analyzing short- and long-run developments in the economy.

The component indexes are used to determine the areas in which the occurrence of important changes accounted for the observed changes in the total index. They are also used in analyses relating to individual industries. Many companies, for instance, make continuing studies of their own output and sales figures in relation to the output movements of the industry. They also use the industry and product series in studies of potential markets, and in other types of research. The new index includes

Production of Selected Manufactures

[1947–49=100, seasonally adjusted]

Period	Durable manufactures				Nondurable manufactures			
	Primary metals	Lumber and products [1]	Machinery [2]	Transportation equipment	Textiles and apparel	Petroleum and coal products	Food and beverage manufactures	Chemicals and allied products
1939	53	80	38	48	80	63	66	45
1947	103	101	103	96	99	97	101	97
1948	107	106	104	102	103	104	99	103
1949	90	93	93	102	97	99	100	101
1950	115	113	114	120	110	110	103	121
1951	126	113	130	135	106	122	105	136
1952	116	111	147	154	105	123	105	137

[1] Except furniture. [2] Electrical and nonelectrical.

Source: Board of Governors of the Federal Reserve System.

many more detailed industry and product series than the old, and this expansion in detail—e. g., for consumer durable items—greatly facilitates analysis of current developments in markets for different types of industrial materials and finished goods.

Because the coverage of the index is limited to manufacturing and mining, it should not be used as a measure of total production, or even as a measure of total production of goods; the important goods-producing sectors of agriculture, construction, and utilities are not included. It might be noted, however, that changes in the output of manufactures and minerals are especially significant, in part because they account for a large part of variation in the total of all economic activity. Because it is necessary to use estimated or approximate data in many cases, some of the components are less reliable than others.

References.—The index of industrial production is published monthly in the *Federal Reserve Bulletin.* Seasonally adjusted indexes are available for all major groups and larger aggregates, and separate component indexes of manufactures, minerals, durable manufactures, nondurable manufactures, individual manufacturing and mineral industries, and individual manufacturing and mineral products are also published monthly in the *Bulletin,* without seasonal adjustment. The method of constructing the index is described in the December 1953 *Bulletin.*

PRODUCTION OF SELECTED MANUFACTURES

The charts and figures on "Production of Selected Manufactures" presented in the monthly issues of *Economic Indicators* are selected from the component-group indexes prepared by the Board of Governors of the Federal Reserve System for the Index of Industrial Production, described above.

The table on "Industrial Production" presents index figures for total industrial production and for manufactures (total, durable goods, and nondurable goods) and minerals. The table on "Production of Selected Manufactures" presents index figures for 8 of the major components which comprise the index of manufactures.

The relative importance of each of these 8 component indexes, as well as of the minerals and manufactures indexes, in the over-all Index of Industrial Production may be seen in the following tabulation, which shows the percent of the weight of each to the total weight of the index in the base period, 1947–49:

	Percentage of total weight assigned
Industrial production	100.00
Minerals	9.98
Manufactures	90.02
Durable manufactures	45.17
Primary metals	6.70
Lumber and products (except furniture)	3.09
Machinery (electrical and nonelectrical)	13.68
Transportation equipment	7.54
All other	14.16
Nondurable manufactures	44.85
Textiles and apparel	11.87
Petroleum and coal products	2.50
Food and beverage manufactures	10.73
Chemicals and allied products	6.84
All other	12.91

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Steel

The weekly series on steel production is compiled by the American Iron and Steel Institute. It includes ingot production by open-hearth, Bessemer, and electric-furnace processes, and steel for castings, except that produced in foundries operated by companies which do not produce ingots. The very small quantity of crucible steel is included with the production of electric furnaces.

The series on "Percent of theoretical capacity" is the ratio of weekly production to average weekly capacity as of the first of the year.

During 1953 the estimates of total production and capacity have been based on current reports from 93 percent of the industry. The estimated 100 percent production is obtained on the basis of the ratio of the annual production of the reporting companies to the total production of all companies in the previous year.

With the release of the weekly production figures, the Institute also published the scheduled operating rate for the coming week. Also published by the Institute are monthly estimates of the ratio of production to capacity, calculated in essentially the same manner as the weekly estimates. The monthly figures are subsequently revised when the final total production figures for the year are available.

Other related monthly series, such as iron-ore production, pig-iron production, shipments of steel forgings, and manufactured steel products, are published in the Department of Commerce's monthly *Survey of Current Business*.

Weekly and monthly estimates of production and percent of operating capacity are issued as mimeographed releases by the American Iron and Steel Institute. More detailed figures are contained in the Institute's monthly AIS Form 7. For more complete statistical coverage of the industry, see the *Annual Statistical Report* of the American Iron and Steel Institute, and *Business Statistics, 1953*, a supplement to the *Survey of Current Business*.

Electric Power, by Utilities

The weekly figures shown are the Edison Electric Institute's estimates of "net energy for distribution" by all plants that *contribute to the public supply*. "Net energy for distribution" may be defined as the energy sold to ultimate consumers, plus line losses and unaccounted for energy; or as net generation, plus net import over international boundaries, less energy used by the producer and the distributor. The series is not a measure of total use of electric energy, since it does not include energy generated by captive plants of industrial establishments.

The weekly figures are collected by the institute, by telegraph, from approximately 90 reporting utilities (either companies or groups of interconnected companies) representing in the aggregate over 90 percent of the total energy available for public consumption. The estimated 100 percent production is obtained by applying the ratio of the monthly production of the reporting utilities to the total production of all utilities as reported to the Federal Power Commission for the previous month.

The weekly series is useful in economic analysis because it is available promptly and is a reliable measure of net energy distribution to the public supply. It should be remembered, however, that figures on total net generation are not a sensitive measure of important changes in industrial activity, since they include energy used for nonindustrial purposes, such as air-conditioning loads and sales to residential and rural consumers.

In addition to the weekly series, the Edison Electric Institute also publishes a monthly statement on "Source and Disposal of Energy," for which the data on generation are obtained from the Federal Power Commission. The Federal Power Commission issues a monthly publication on *Electric Power Statistics*, with data on production, fuel consumption, requirements, and supply.

Bituminous Coal

The series on the production of bituminous coal, which includes bituminous coal and lignite, is compiled weekly by the Bureau of Mines, Department of the Interior. It is a very close approximation of total production in the United States.

The figures are estimated on the basis of car loadings and river shipments. The method of estimation consists of raising the rail and river shipment figures by factors to represent the coal that is not transported by rail or river, such as truck shipments, local sales, colliery fuel, and coal produced by small mines for local use. The weekly estimates are adjusted annually by the actual figures on the production of bituminous coal and lignite which are collected annually from all producers by the Bureau of Mines. The correction is negligible—within less than one-half of 1 percent of the annual canvass figures.

Although bituminous coal is still an important industrial fuel, contributing approximately 40 percent of the total supply of energy from mineral fuels, the series on bituminous coal and lignite production may not by itself be as good an indicator of industrial activity as its importance suggests. During normal peacetime, coal mines operate at a fraction of their capacity, about 3 days a week, and the coal-using industries carry considerable stocks which may serve

Weekly Production—Selected Indicators

[Weekly average]

Year	Steel		Electric power, by utilities (millions of kilowatt-hours)	Bituminous coal (thousands of short tons) [2]	Cars and trucks (number)
	Thousands of net tons	Percent of theoretical capacity [1]			
1919	745	63.6	(3)	1,512	36,084
1920	903	75.7	(3)	1,847	42,834
1921	425	34.5	(3)	1,356	31,079
1922	765	60.9	(3)	1,379	48,926
1923	965	76.6	(3)	1,845	77,577
1924	813	63.8	(3)	1,573	69,280
1925	975	74.2	(3)	1,692	82,035
1926	1,037	83.5	(3)	1,864	82,710
1927	965	74.9	(3)	1,684	65,410
1928	1,104	83.9	1,551	1,631	83,822
1929	1,212	88.5	1,733	1,740	103,047
1930	874	62.5	1,714	1,522	64,538
1931	557	37.6	1,646	1,243	45,956
1932	293	19.5	1,488	1,007	26,359
1933	499	33.1	1,544	1,090	36,924
1934	560	37.4	1,655	1,173	52,944
1935	732	48.7	1,793	1,217	75,903
1936	1,023	68.4	2,037	1,432	85,656
1937	1,086	72.5	2,256	1,456	92,480
1938	609	39.6	2,148	1,139	47,867
1939	1,013	64.5	2,398	1,293	68,794
1940	1,281	82.1	2,684	1,503	85,949
1941	1,589	97.3	3,142	1,695	93,049
1942	1,650	96.8	3,552	1,909	20,830
1943	1,704	98.1	4,155	1,907	14,456
1944	1,715	95.5	4,385	2,009	15,218
1945	1,529	83.5	4,244	1,891	15,094
1946	1,277	72.5	4,235	1,745	59,581
1947	1,628	93.0	4,821	2,058	92,163
1948	1,695	94.1	5,300	1,948	82,340
1949	1,496	81.0	5,500	1,427	120,350
1950	1,857	96.9	6,183	1,687	154,212
1951	2,018	100.9	6,958	1,772	129,828
1952	1,782	85.8	7,451	1,542	106,765

[1] Percent of capacity based on weekly net ton capacity. [2] Daily average for the week. [3] Not available.

Sources: American Iron and Steel Institute, Edison Electric Institute, Department of the Interior, and Ward's Automotive Reports.

as a buffer between changes in industrial activity as represented by increases and decreases in coal consumption and by the ups and downs in coal output. Coal production figures should therefore be analyzed in conjunction with the related series, also compiled by the Bureau of Mines, on the consumption of coal by industries and deliveries to retail dealers, and on stocks of coal held by industries and retail dealers.

The weekly estimates of production, together with the series on consumption and consumers' stocks, are published in the Bureau of Mines multilithed *Weekly Coal Report.* A description of the method used in making the estimates may be found in the chapter on "Bituminous Coal and Lignite" in the Bureau of Mines *Minerals Yearbook.*

Cars and Trucks

This series is an average of the weekly output of cars and trucks by each of the individual producers in the United States. It appears in *Ward's Automotive Reports,* published each Monday, which shows a breakdown of the weekly total by cars, trucks and makes, and a similar breakdown for cars produced in Canada. These series are used by general business analysts as well as by persons especially concerned with the level of activity in the industry, particularly its suppliers.

In addition to the weekly series, the *Automotive Reports* carries current and cumulative monthly totals. Closely related to these monthly production totals are the monthly factory sales figures compiled by the Automobile Manufacturers Association. The sales figures typically differ somewhat from the production figures, principally because of the inclusion of some units produced in earlier periods and the exclusion of some units produced in the current month.

GROSS PRIVATE DOMESTIC INVESTMENT

Description of series.—Gross private domestic investment is one of the major components of gross national product. The series measures gross fixed capital formation, which is defined for national income purposes as including all newly produced durables acquired by their ultimate business users, and net changes in business inventories.

Three separate series are published under "Gross private domestic investment": New Construction, Producers' Durable Equipment, and Change in Business Inventories. The New Construction series used in computing gross private domestic investment is derived from the private construction component of the New Construction series described below (p. 34) by adding oil- and gas-well drilling.

The quarterly estimates of national income and product, of which these series are a part, are revised annually to reflect more complete data than were available when the estimates were made initially. The revised series are published annually in the July issue of the *Survey of Current Business* and for both the Producers' Durable Equipment series and the Change in Business Inventories series reflect more complete data and more detailed procedures. In recent years revisions in the Change in Business Inventories series sometimes have been quite sizable, and have arisen primarily from revisions in the basic book value data rather than from revision in the inventory valuation adjustment.

Statistical procedures.—The Producers' Durable Equipment series is estimated generally by use of the commodity-flow technique, i. e., by segregating finished producers' durables from total manufacturing output and then tracing their flow and measuring their distributive costs so as to arrive at the final costs to purchasers. Three of the producers' durable equipment groups—Business Motor Vehicles, Railroad and Transit Equipment, and Ships and Boats—are estimated by other methods.

The estimates of producers' durable equipment expenditures are based upon 1939 benchmarks provided by the Census of Manufactures of that year and brought up to date by data from the 1947 census and 1950 and 1951 Annual Survey of Manufactures, and from summaries of quarterly reports to the National Production Authority. For more recent quarters, estimates are made by extrapolating these benchmark estimates largely on the basis of industry sales data, which have significant limitations in such use.

The Change in Business Inventories series measures physical changes in business inventories valued at average prices prevailing during the year.

The primary source for estimates of changes in the nonfarm portion of these business inventories is reported accounting data on the value of inventories at the beginning and end of the period for which the estimates are made. Inventory calculation by individual business firms varies widely in method, both with respect to the scope of the cost elements included in the inventory account and with respect to the valuation procedures used, and numerous adjustments in the reported data are necessary to arrive at an estimate of changes in inventories consistent with the basic concept. The principal adjustment, however, is that of removing the price change element in the reported figures and revaluing inventory change in current dollars.

Relation to other series.—The relationship between the Producers' Durable Equipment Expenditures series and the durable goods portion of the Expenditures for New Plant and Equipment series, to which it is most closely related, is discussed in the following section.

The Change in Business Inventories series is most closely related to the estimates of inventories levels, discussed below (p. 38). These series differ conceptually, however, in that the Inventories series is based upon the data as reported by reporting companies, whereas for the GNP Change in Business Inventories series, OBE adjusts the data reported to reflect a uniform method of valuation. The two series therefore should not be used interchangeably.

Uses and limitations.—The three series which constitute Gross Private Domestic Investment are part of the national product accounts. Although relatively small they are important, since they measure an economic factor of crucial importance in business conditions. While the figures on the Change in Business Inventories are in the nature of rough estimates, they are useful indicators of the trends in the level of inventory accumulation. Comprehensive accounting data on inventories become available only after a lag of several years, and current estimates are based upon less satisfactory data than the estimates for past years.

Finally, the estimates of inventory change included in the series are calculated as the difference between large and possibly volatile inventory totals at two points in time. Even small errors in the estimates of total inventories can lead to large relative errors in the estimates of inventory change.

References.—These series are published quarterly in the *Survey of Current Business*. For a full discussion of the concepts and statistical methods employed in these series, see the *1951 National Income Supplement* to the *Survey of Current Business*, particularly pages 37–39 and 112–125.

Gross Private Domestic Investment

[Billions of dollars]

Year	Total gross private domestic investment	New construction			Producers' durable equipment	Change in business inventories
		Total	Residential nonfarm	Other		
1929	15.8	7.8	2.8	5.0	6.4	1.6
1930	10.2	5.6	1.4	4.2	4.9	−.3
1931	5.4	3.6	1.2	2.4	3.2	−1.4
1932	.9	1.7	.5	1.2	1.8	−2.6
1933	1.3	1.1	.3	.8	1.8	−1.6
1934	2.8	1.4	.4	1.0	2.5	−1.1
1935	6.1	1.9	.7	1.2	3.4	.9
1936	8.3	2.8	1.1	1.7	4.5	1.0
1937	11.4	3.7	1.4	2.3	5.4	2.3
1938	6.3	3.3	1.5	1.8	4.0	−1.0
1939	9.9	4.9	2.7	2.2	4.6	.4
1940	13.9	5.6	3.0	2.6	6.1	2.3
1941	18.3	6.8	3.4	3.3	7.7	3.9
1942	10.9	4.0	1.8	2.2	4.9	2.1
1943	5.7	2.5	1.0	1.5	4.1	−.9
1944	7.7	2.8	.8	2.0	5.7	−.8
1945	10.7	3.9	1.1	2.8	7.5	−.7
1946	28.7	10.3	4.0	6.3	12.3	6.1
1947	30.2	13.9	6.3	7.6	17.1	−.8
1948	42.7	17.7	8.6	9.1	19.9	5.0
1949	33.5	17.2	8.3	9.0	18.7	−2.5
1950	52.5	22.7	12.6	10.1	22.3	7.5
1951	58.6	23.1	11.0	12.2	24.6	10.9
1952	52.5	23.4	11.1	12.3	25.4	3.7

NOTE.—Detail will not necessarily add to totals because of rounding.
Quarterly data are available beginning with 1939.

Source: Department of Commerce.

EXPENDITURES FOR NEW PLANT AND EQUIPMENT

Description of series.—The series on expenditures for new plant and equipment, published jointly by the Securities and Exchange Commission and the Office of Business Economics, Department of Commerce, measures the expenditures by all private businesses except agriculture, professions, and institutions for plant and types of machinery and equipment for which the reporting companies maintain depreciation accounts. Expenditures charged off as expense during the period in which made are excluded. Estimates are made for both actual plant and equipment expenditures for recent quarters (and calendar years) and anticipated expenditures for the two succeeding quarters (and calendar year). These estimates are based upon information contained in the annual reports of virtually all (and in quarterly reports of approximately half) of the registered corporations to SEC, quarterly reports by a group of nonregistered corporations to OBE, and annual and quarterly reports by Class I railroads to the Interstate Commerce Commission.

The last major revision in the series was published in two parts, the revision for manufacturing industries in the December 1951 issue of the *Survey of Current Business* and the revision for nonmanufacturing industries in the August 1952 issue. The revision established a benchmark based on gross capital assets as reported to the Internal Revenue Service for the 1948 tax year, and introduced improvements in the estimating procedures being used. For example, information contained in the mandatory annual reports of corporations registered with the SEC was used for the first time and adjustments were made for biases arising out of changes in the business population.

Because of the method of estimating used, viz, the extrapolation of benchmark estimates on the basis of less than complete current data, lesser revisions in the estimates of actual expenditures for plant and equipment for any given quarter or year are made to take into account new data as they become available.

Statistical procedures.—The benchmark for the estimates is the gross capital assets of the full universe of companies as derived from reports to the Internal Revenue Service for the tax year 1948. The estimation of year-to-year and quarter-to-quarter movements in these expenditures are made by extrapolating the benchmark estimates on the basis of the annual and quarterly reports received by SEC, OBE, and ICC. A relatively constant group of reporting companies is used; this group of reporting companies is not a randomly selected sample.

The seasonal factors used for adjusting the actual expenditures data for changes due to seasonal fluctuations are based on the "ratio to moving average" technique. Adjustments are also made where necessary in the estimates of plant and equipment expenditures to correct for biases due to changes in the business population which are not reflected in the constant reporting group data.

Relation to other series.—The SEC–OBE series on actual plant and equipment expenditures utilizes the same definitions and industry classification as those of the 1947 Census of Manufactures and the later Annual Surveys of Manufactures of the Census Bureau. There is a substantial difference between the Census Bureau data on expenditures for plant and equipment and the SEC–OBE manufacturing series, however, in that the SEC–OBE series uses companywide outlays whereas Census uses outlays of establishments. Thus, the Census annual series covers only *establishments* classified as manufacturing whereas the SEC–OBE quarterly and annual series cover all activities, manufacturing as well as nonmanufacturing, of *companies* classified as manufacturing and excludes the manufacturing activities of companies classified as nonmanufacturing.

The SEC–OBE series differs somewhat in concept from the Producers' Durable Equipment and New Construction components of Gross Private Domestic Investment (see p. 30). The principal differences are that the SEC–OBE series is confined to nonagricultural industries, and excludes expenditures of institutions and professional persons and outlays on plant and equipment charged off as expenses during the period of the expenditure. The Producers' Durable Equipment estimates are derived generally by use of a commodity-flow technique to arrive at a measure of the output of all types of capital goods destined for use by domestic business. The SEC–OBE series measures directly expenditures by users for capital goods for which depreciation accounts are maintained.

The SEC–OBE series on manufacturers' expenditures for new plant and equipment is directly comparable in classification and scope with the OBE series on manufacturers' sales, new orders, and inventories (see p. 38). It has a different scope from the Federal Trade Commission-Securities and Exchange Commission financial reports series in manufacturing, mainly in that the FTC–SEC estimates of balance-sheet and income-statement items covers only *corporations*.

Uses and limitations.—This series is one of the very few economic series in which estimates of antic-

Expenditures for New Plant and Equipment

[Millions of dollars]

Year	Total [1]	Manufacturing			Mining	Transportation		Public utilities	Commercial and other [2]
		Total	Durable goods	Nondurable goods		Railroads	Other		
1939	5,512	1,943	756	1,187	326	280	365	520	2,078
1945	8,692	3,983	1,590	2,393	383	548	574	505	2,699
1946	14,848	6,790	3,112	3,678	427	583	923	792	5,333
1947	20,612	8,703	3,407	5,296	691	889	1,298	1,539	7,492
1948	22,059	9,134	3,483	5,651	882	1,319	1,285	2,543	6,896
1949	19,285	7,149	2,593	4,555	792	1,352	887	3,125	5,980
1950	20,605	7,491	3,135	4,356	707	1,111	1,212	3,309	6,775
1951	25,644	10,852	5,168	5,684	929	1,474	1,490	3,664	7,235
1952	26,455	11,994	5,784	6,210	880	1,391	1,363	3,838	6,989

[1] Excludes agriculture.
[2] Commercial and other includes trade, service, finance, communications, and construction.

NOTE.—These figures do not agree with the totals included in the gross national product estimates of the Department of Commerce, principally because the latter cover agricultural investment and also certain equipment and construction outlays charged to current expense.
Detail will not necessarily add to totals because of rounding.
Data on Expenditures for New Plant and Equipment are not available for the years 1940–44.

Sources: Securities and Exchange Commission and Department of Commerce.

ipated events as well as historical events are made. The series attempts to measure economic phenomena of great importance in the analysis of business conditions. The reliability of estimates of anticipations is difficult to ascertain. An estimate of anticipated expenditures for a period can be different from actual expenditures for the same period either because the estimating procedures and statistical techniques employed are faulty or because the anticipated expenditures were—for any number of reasons—not made in fact. In some periods in the past there have been marked differences between estimates of anticipated expenditures and actual expenditures for the same period, generally due to unanticipated developments, such as substantial price changes or the outbreak of Korean hostilities, which caused businessmen to change their plans. In the postwar period the deviations between actual and anticipated expenditures have ranged from 1 to 15 percent.

References.—These estimates are published quarterly in Department of Commerce press releases and in the *Survey of Current Business* and in a special statistical release of the SEC.

For a fuller description of the methods employed in making the estimates and of the latest revisions in the series, see the December 1951 and August 1952 issues of the *Survey of Current Business.*

NEW CONSTRUCTION

Description of series.—This series represents the monthly dollar value of new construction put in place. A seasonally adjusted series is also published currently. The Business and Defense Services Administration, Department of Commerce, and the Bureau of Labor Statistics, Department of Labor, are jointly responsible for the series, with the former having primary responsibility for private nonresidential construction and the latter for private residential and all public construction.

Construction covers the erection of fixed structures and utilities. It includes building and nonbuilding structures such as dams, reservoirs, docks, highways, airfields, and utility lines. Installed service facilities which become integral parts of structures are included, but movable equipment and machinery are not included. Drilling of oil, gas, and water wells, digging and shoring of mines, and operations which are an integral part of farming such as plowing, terracing, and digging drainage ditches, are not considered as construction. Major additions and alterations are counted as new construction, but maintenance and repairs are not.

The distinction between private and Federal, State, and local public construction is made on the basis of ownership, not source of funds. Residential construction includes nonhousekeeping facilities such as hotels and dormitories as well as dwelling units.

Statistical procedures.—Three general methods are used in making the estimates of new construction activity, depending on the availability of sources of data on different types of construction.

The first method—converting data on work started to estimates of work put in place—is used for most types of private and non-Federal public construction. Information compiled by the F. W. Dodge Corp. on contract awards for private nonresidential and State and local public construction in the 37 Eastern States is adjusted to allow for projects not included in the Dodge reports—chiefly small projects and work done by a firm's own force. Allowance is also made for construction in 11 Western States not covered by Dodge by applying the ratio of valuation of building authorized in these States to the total valuation of permits in the entire country for each of several types of construction. An estimate of the valuation of dwelling units started is obtained by multiplying the number of units reported in the New Housing Starts series (p. 36) by valuation figures reported in building permits, the latter having been adjusted on the basis of periodic field surveys to reflect construction costs. These estimates of valuation of work started are then translated into estimates of the value of work put in place by the application of typical progress patterns which have been developed for different types and sizes of projects by surveying actual projects.

The second method—reports of physical progress—provides the basis for estimates of construction activity on most Federal public-construction projects as well as on some State and local jobs receiving Federal aid. Progress reports are supplied by the Federal agencies administering the various programs.

The third method—based on financial reports—is used for estimating most utility construction. The method is to apply a monthly trend pattern to an estimated annual total based on the previous year's level and other information on anticipated activity. The trend data are based on Dodge reports of contract awards and quarterly reports of some types of companies to the Securities and Exchange Commission. These monthly estimates are revised when the financial reports become available after the end of the year. Construction expenditure estimates for telephone and telegraph are based on monthly estimates received from the companies.

Monthly estimates of farm construction are prepared by projecting annual estimates for the preceding year on the basis of the trend of farm income and applying a seasonal pattern to the annual totals.

Relation to other series.—This series is one of the components in the Gross National Product series.

The definition of construction used in the New Construction series is more inclusive than that in some of the series pertaining to labor. The Nonagricultural Employment series contains a component for employment in contract construction only, excluding employment on construction performed by force account. The series on Average Weekly Hours and Average Hourly and Weekly Earnings cover contract construction of buildings only.

Uses and limitations.—Although the New Construction series indicates the current volume of this segment of economic activity, it does not serve the same purpose as would a series on new work started. The future trend in the series is determined to a considerable extent by past commitments made.

The figures cannot be used as an indicator of the physical volume of construction without extensive adjustments for changes in prices and wage rates, technological changes, and other relevant factors.

New Construction

[Monthly average, millions of dollars]

Year	Total new construction	Private construction			Federal, State, and local [1]
		Total private	Residential (nonfarm)	Other	
1915	272	212	102	110	60
1916	321	262	115	147	59
1917	381	274	99	175	107
1918	426	240	76	164	186
1919	525	360	154	206	165
1920	562	450	168	282	113
1921	500	370	175	195	130
1922	637	497	280	217	140
1923	778	642	367	276	135
1924	867	709	422	287	158
1925	953	775	460	315	178
1926	1,007	828	467	361	179
1927	1,003	802	430	372	201
1928	970	763	397	365	207
1929	899	692	302	390	207
1930	728	490	173	317	238
1931	536	314	130	184	222
1932	295	140	52	87	155
1933	240	103	39	63	137
1934	310	126	52	74	184
1935	353	167	84	82	186
1936	541	248	130	118	293
1937	583	325	156	169	258
1938	582	297	166	131	285
1939	683	366	223	142	317
1940	723	421	249	172	302
1941	996	517	292	225	479
1942	1,173	285	143	142	888
1943	692	165	74	91	527
1944	438	182	68	114	256
1945	469	270	92	178	200
1946	1,000	803	335	469	197
1947	1,391	1,105	526	579	287
1948	1,806	1,404	715	689	402
1949	1,899	1,365	689	676	534
1950	2,371	1,788	1,050	738	583
1951	2,575	1,797	914	883	778
1952	2,720	1,818	925	893	902

[1] Includes public residential construction.

NOTE.—Detail will not necessarily add to totals because of rounding. Monthly data are available beginning with 1939.

Sources: Department of Commerce and Department of Labor.

Also, since the series does not include maintenance and repair, it cannot be related directly to the total use of construction labor and materials.

Because of the many different sources of data, and the various estimating procedures used, the error in the estimates cannot be statistically measured. Year-to-year trends are probably quite good but caution should be exercised in drawing conclusions from relatively small month-to-month changes.

While extensive adjustments are made for undercoverage of the source data now used, there is no satisfactory factual basis for making these adjustments, and much reliance is placed on judgment and opinion. The construction patterns used in translating work started into work put in place may be obsolete and do not reflect short-run changes due to such factors as weather or the labor and materials supply situation. The indexes used in adjusting to eliminate seasonal variation may also be obsolete.

References.—Data used in this series are published in more detail by type of construction, ownership, and geographic location in *Construction and Building Materials*, a monthly publication of the Department of Commerce, and in *Construction*, a monthly publication of the Bureau of Labor Statistics.

More detailed descriptions of the sources of data used and the methods of compiling the estimates of expenditures for new construction are contained in a supplement to *Construction and Building Materials* published each May, and in an article on "Estimating Expenditures for New Construction" published in the *Monthly Labor Review* for February 1950.

NEW HOUSING STARTS

Description of series.—This series, prepared by the Bureau of Labor Statistics, represents the number of nonfarm dwelling units on which construction is started in the United States each month.

For the purpose of this series the dwelling unit is defined as a dwelling place containing permanent cooking facilities, i. e., accommodations with housekeeping facilities designed for family living. Units such as transient hotels and dormitories which lack housekeeping facilities and such dwellings as trailers, houseboats, sheds, and shacks are not included. Temporary dwellings built just before and during World War II and the temporary reuse units built during the veterans' emergency housing program of 1946–47 are not included.

Dwelling units are classified as public or private on the basis of ownership. Those owned by agencies of Federal, State, or local governments are counted as public.

Statistical procedures.—Each month a questionnaire is mailed to some 6,000 local government officials throughout the country who issue building permits. About 2,500 of these are in urban places and the rest are in incorporated places under 2,500 population, plus some counties and townships which require permits. Information is requested, among other things, on the number of dwelling units for which building permits were issued during the month.

Reports from permit-issuing places are classified by type of place, size, geographic area, and whether inside or outside a metropolitan area. Reports in each class are weighted to account for places not reporting, and added to give the total number of units for which permits were issued. Adjustments are made to allow for difference in time between issuance of permit and start of construction and for permits not used. The result is an estimate of private units started in permit-issuing places.

Information on new housing starts in rural nonfarm portions of the country not covered by building permits is obtained by field surveys in the non-permit-issuing parts of a sample of 96 counties. This sample was selected by classifying all counties into 96 groups according to such characteristics as size, whether more urban or rural in character, winter temperature, extent of previous building activity, and racial composition of the population, and drawing one county at random from each group. The number of starts reported in each sample county is weighted to represent all counties in the group from which it was drawn, and the weighted figures are added to give an estimate of the number of private units started in rural non-permit-issuing places. This figure added to that for permit-issuing places gives the total number of private nonfarm units started.

Information on number of public units started is obtained directly from the sponsoring Federal, State, and local agencies. This figure added to the estimate for private units gives the estimate of the total number of nonfarm dwelling units started each month.

The seasonally adjusted annual rate of starts of private units published currently is computed each month by dividing the estimate of private starts for that month by the respective seasonal index and multiplying the result by 12.

In order to obtain a preliminary estimate by 15 days following the end of the month, all permit reports received at that time, supplemented by telegraphic and telephone reports as necessary, are classified into estimating cells. The percent change from the previous month is computed for identical reporting places and this figure is applied to all places in the class, except all large cities and high activity places for which actual reports are required. Since the field surveys in non-permit-issuing areas are not completed in time, a preliminary estimate for such areas is made by projecting the previous month's figure on the basis of the trend shown by rural nonfarm places for which permits are issued.

Relation to other series.—Data compiled for this series are used in the preparation of estimates for the series on New Construction, described above.

The series on New Housing Starts has a limited relationship to Census of Housing figures. Units started should not be added to Census inventory figures without an adjustment to allow time for completion. Also, although new construction usually accounts for the greater part of the difference in inventory reported in successive housing censuses, there are other changes too, such as demolition, disaster losses, additions and losses due to conversions, and changes in classification as farm or nonfarm. The census also includes certain types of places where people live which would not be counted as dwelling units under the definition for the New Housing Starts series.

The Bureau of Labor Statistics also publishes data on building authorized for all reporting places. These figures differ from the New Housing Starts series in that they represent totals taken from building permit reports without any adjustment for lag and lapse.

Year	New nonfarm housing units started		
	Total	Publicly owned	Privately owned
1920	247, 000	----------	247, 000
1921	449, 000	----------	449, 000
1922	716, 000	----------	716, 000
1923	871, 000	----------	871, 000
1924	893, 000	----------	893, 000
1925	937, 000	----------	937, 000
1926	849, 000	----------	849, 000
1927	810, 000	----------	810, 000
1928	753, 000	----------	753, 000
1929	509, 000	----------	509, 000
1930	330, 000	----------	330, 000
1931	254, 000	----------	254, 000
1932	134, 000	----------	134, 000
1933	93, 000	----------	93, 000
1934	126, 000	----------	126, 000
1935	221, 000	5, 300	215, 700
1936	319, 000	14, 800	304, 200
1937	336, 000	3, 600	332, 400
1938	406, 000	6, 700	399, 300
1939	515, 000	56, 600	458, 400
1940	602, 600	73, 000	529, 600
1941	706, 100	86, 600	619, 500
1942	356, 000	54, 800	301, 200
1943	191, 000	7, 300	183, 700
1944	141, 800	3, 100	138, 700
1945	209, 300	1, 200	208, 100
1946	670, 500	8, 000	662, 500
1947	849, 000	3, 400	845, 600
1948	931, 600	18, 100	913, 500
1949	1, 025, 100	36, 300	988, 800
1950	1, 396, 000	43, 800	1, 352, 200
1951	1, 091, 300	71, 200	1, 020, 100
1952	1, 127, 000	58, 500	1, 068, 500

NOTE.—Monthly data are available beginning with 1939.

Source: Department of Labor.

Uses and limitations.—This series serves as an important guide in the formulation of national housing policy and as an indicator of a substantial part of all building activity and related economic trends. One deficiency, which affects its use as a timely indicator, is the fact that the revised estimate, made 3½ months after the month affected, may differ fairly substantially from the preliminary estimate. For the 4-year period 1949–52 these changes averaged 3.2 percent, but ranged from an increase of 12.8 percent in the final estimate over the preliminary to a decrease of 6.1 percent. Increases have been slightly more frequent and larger than decreases.

The revised or final estimates are subject to two kinds of errors. The first, amounting to about 2 percent, is error due to sampling in nonpermit places and lack of complete information reported from permit-issuing places. The amount of the second type of error cannot be measured. It stems from a variety of sources, such as building without permits, short-run changes in the time of starting construction after permits are issued, and use of obsolete data in classifying areas into the various groups used in the estimating procedure. The latter is in process of being corrected by rebasing the classifications on more up-to-date information, and the estimating procedure for both permit and nonpermit areas is being improved.

References.—Data presented in this series are published in somewhat greater detail in *Construction*, published monthly by the Bureau of Labor Statistics. A more detailed technical description of the methods used was presented in an article on "Estimating National Housing Volume" in the October 1949 issue of the *Monthly Labor Review*. The seasonal adjustment is described in more detail in an article on "Method of Compiling Seasonally Adjusted Annual Rates of Housing Starts" in the August 1952 issue of *Construction*.

Total Business, Retail, and Manufacturing

Description of series.—Total business sales and inventories are estimated monthly by the Office of Business Economics, Department of Commerce, by summing the estimates computed separately for manufacturing, retail trade and wholesale trade. The sales estimates include all business receipts of the reporting companies, not just receipts from sale of merchandise. In the manufacturers' series, inventories are valued at book value. In the retail and wholesale trade series, inventories are valued at cost. The estimates are adjusted for seasonal variation.

Statistical procedures.—The estimates of manufacturers' and wholesale monthly sales and end-of-month inventories are made by extrapolating benchmark estimates: the Internal Revenue Service's *Statistics of Income, 1949*, Part II, for manufacturers, and a modified 1948 Census of Wholesale Trade base for wholesalers. As new annual data become available the benchmark estimates are extrapolated to more recent annual estimates which in turn are extrapolated on the basis of monthly data reported to the Census Bureau and OBE. The estimates are revised as more comprehensive data become available. A sample survey being initiated by Census will soon provide direct estimates for wholesale trade.

Monthly estimates of retail sales, unadjusted for seasonal variation, are derived directly from a monthly sample survey conducted by the Census Bureau. A random sample, stratified by size and industry group, is used. The estimates are computed directly from the reported sales of stores in the sample essentially by weighting the reported sales of each member of the sample by a value dependent upon its probability of selection. These estimates are not linked to a benchmark. Adjustments for seasonal variation are made by OBE.

In attempting to relate these series to each other, it must be recognized that the different basic units of measurement used (e. g., company or establishment) can affect the totals, and to a lesser extent the movements, which a given series reflects. For example, the wholesale trade and retail trade sales series described above are based upon the establishment unit of classification, whereas the manufacturers' sales series is based upon the company unit of classification. The Office of Business Economics adjusts the wholesale series to remove the major sources of duplication so that they can be summed to obtain a series for total business sales.

Uses and limitations.—The monthly sales and inventories series are important economic indicators, reflecting the level of economic activity at the three major stages of the distributive process. The sales series reflect the demand for goods and services at these three stages, and constitute a basic measure of the state of business for the periods covered. The inventories series reflect the net result of a combination of at least two factors, viz, the effect of recent actual sales levels on the stocks of sellers at various stages of distribution and the sales levels expected by these sellers during the immediate future.

The monthly estimates are tested against more comprehensive data when those data become available at some later time. The estimates for such aggregates as total manufactures' sales have in the past proved generally accurate, but preliminary estimates, especially, are subject to changes.

References.—Sales and inventory data for manufacturers, wholesale trade and retail trade are published monthly in the form of press releases and in the *Survey of Current Business*. Retail sales estimates are also published in a separate *Monthly Retail Trade* report by the Bureau of the Census.

More complete descriptions of the various series have been presented in issues of the *Survey of Current Business:* for Manufacturers, October 1951, October 1952, and December 1953; for Wholesale Trade, August 1948, October 1951, October 1952, and December 1953; and for Retail Trade, September 1952 and November 1952. The Bureau of the Census has also issued a "Description of the Sample for the Monthly Retail Trade Report."

Department Stores

Description of series.—Monthly indexes of department store daily average sales and end-of-month inventories are prepared as a joint product of the Federal Reserve Board's Division of Research and Statistics and the research departments of the 12 Federal Reserve district banks. The coverage and collection methods and the procedures used in computing these indexes are described in detail in the December 1951 issue of the *Federal Reserve Bulletin*.

Relation to other series.—The index of department-store sales is closely related in scope to the Commerce (Census and Office of Business Economics) series on department-store sales. The series are not completely comparable. The Commerce series include sales taxes in the total receipts figure; the Federal Reserve sales index is based upon a receipts figure from which sales taxes are excluded. The Census dollar-volume series, which is unadjusted

Year	Total business [1]		Retail		Manufacturing			Department stores	
	Inventories [2]	Sales [3]	Inventories [2]	Sales [3]	Inventories [2]	Sales [3]	New orders [3]	Inventories [4]	Sales [3]
	Millions of dollars							Index 1947–49=100	
1925	(5)	(5)	(5)	(5)	(5)	(5)	(5)	48	36
1926	(5)	(5)	(5)	(5)	12,466	5,137	(5)	48	37
1927	(5)	(5)	(5)	(5)	12,089	5,225	(5)	48	37
1928	(5)	(5)	(5)	(5)	12,206	5,488	(5)	48	37
1929	(5)	(5)	(5)	(5)	12,775	5,859	(5)	48	38
1930	(5)	(5)	(5)	(5)	11,265	4,759	(5)	44	35
1931	(5)	(5)	(5)	(5)	9,105	3,585	(5)	39	32
1932	(5)	(5)	(5)	(5)	7,332	2,565	(5)	31	24
1933	(5)	(5)	(5)	(5)	8,146	2,857	(5)	29	24
1934	(5)	(5)	(5)	(5)	8,718	3,601	(5)	31	27
1935	(5)	(5)	(5)	(5)	9,098	4,194	(5)	31	29
1936	(5)	(5)	(5)	(5)	10,676	5,008	(5)	33	33
1937	(5)	(5)	(5)	(5)	12,012	5,485	(5)	39	35
1938	18,920	(5)	5,276	(5)	10,750	4,487	(5)	35	32
1939	20,051	10,802	5,534	3,503	11,465	5,112	5,354	35	35
1940	22,176	12,134	6,119	3,865	12,819	5,859	6,806	38	37
1941	28,780	15,811	7,776	4,606	16,960	8,172	9,803	46	44
1942	31,091	18,623	8,023	4,768	19,287	10,430	13,345	63	50
1943	31,343	21,920	7,561	5,270	20,098	12,820	12,705	55	56
1944	31,059	23,785	7,640	5,851	19,507	13,782	11,906	58	62
1945	30,893	23,852	7,948	6,503	18,390	12,873	10,532	59	70
1946	42,942	27,150	11,852	8,541	24,498	12,617	13,694	77	90
1947	50,605	33,156	14,060	9,967	28,920	15,917	15,622	93	98
1948	55,647	36,438	15,828	10,877	31,734	17,630	17,350	107	104
1949	52,264	34,664	15,311	10,893	28,972	16,416	15,903	100	98
1950	62,423	39,425	18,652	11,974	34,118	19,312	20,967	109	105
1951	[6] 74,059	[6] 44,454	[6] 20,754	[6] 13,185	43,039	22,334	24,431	129	109
1952	74,757	45,554	20,804	13,674	43,824	23,043	23,603	118	110

[1] Also includes wholesale, not shown separately in this table. Revised sales figures for manufacturing and wholesale trade will appear in the December 1953, *Survey of Current Business;* revised inventory figures for manufacturing and wholesale and retail trade will appear in the January 1954 issue of the *Survey*.
[2] Book value, end of period, seasonally adjusted.
[3] Monthly average for year.
[4] Average of end-of-month book value.
[5] Not available.
[6] Revised series beginning with 1951; not comparable with previous data. See *Survey of Current Business*, September and November, 1952, for detail.

NOTE.—Monthly data are available beginning with 1919 for department stores and beginning with 1939 for all others. Also, quarterly data for manufacturing inventories and sales are available beginning with 1926.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

for seasonal variation, measures total sales during a calendar month, whereas the Federal Reserve unadjusted index measures daily average sales on the trading days in the month. All other things being equal, the Census estimates will vary with the number of trading days in the month; the department-store sales index should not be affected by changes in the number of trading days in the month. OBE adjusts the Census series for seasonal variation and for number of trading days in the month. The Commerce adjusted dollar series is, therefore, comparable in this respect with the Federal Reserve adjusted index of department-store sales.

Uses and limitations.—Economic Indicators publishes the national indexes of department-store sales and inventories. Indexes for the 12 Federal Reserve bank districts and for some cities or areas within those districts, as well as for the Nation, are computed and published by the Federal Reserve System. Considerable use is made of the indexes at the local level, especially in the department-store field.

The department-store sales and inventories indexes are useful as indicators of the relative sales and inventories positions of this limited, although important, segment of retail trade. However, one should not attribute to the department-store indexes the characteristics of all retail trade. Comparison of month-to-month changes in department-store sales with month-to-month changes in total retail sales shows that, while changes in the two series have been almost always in the same direction, the magnitudes of the changes are substantially different for a majority of the months for which data are available.

References.—The indexes of department-store sales and inventories are published monthly in the *Federal Reserve Bulletin*. A detailed description of the series appeared in the December 1951 issue of the *Bulletin*, and an explanation of "Adjustment for Seasonal Variation" in the June 1941 issue.

MERCHANDISE EXPORTS AND IMPORTS

Description of series.—This monthly Bureau of the Census series on exports gives the value of merchandise (except in-transit merchandise) shipped from the United States to foreign countries. Exports of Alaska, Hawaii, and Puerto Rico to foreign countries are shown as United States exports. Shipments between the United States and its Territories and possessions are not regarded as exports or imports. Both Government and non-Government exports are included. The former include Mutual Security program military and economic aid, and Department of the Army civilian supply shipments, but shipments to United States Armed Forces and diplomatic missions abroad for their own use are excluded. Also excluded are exports of gold and silver, oil and coal bunkers laden at United States ports on vessels in foreign trade, and a number of items of relatively small importance such as low-valued or noncommercial shipments by mail and gifts valued below $100.

Except for Department of Defense shipments as explained below, export figures are obtained from the Shippers' Export Declaration which exporters are required to file with the collectors of customs. These shipments are valued at the time and place of export—that is, actual selling price, or cost if not sold, including inland freight, insurance and other charges to the place of export. Transportation and other costs beyond the United States port of exportation are excluded. For exports made by the Department of Defense of grant-aid military equipment and supplies under the Mutual Security Program and for other Department of Defense shipments such as those under the Civilian Supply Program, information is compiled by the Bureau of the Census from the records of the Department of Defense. In most instances, these records show values f. o. b. point of origin. These are adjusted to show value at the United States port of exportation.

The monthly series on imports gives the value of "general imports" into the United States, that is, merchandise released from customs custody immediately upon arrival, plus merchandise entered into customs bonded warehouses on arrival. As in the case of exports, Alaska, Hawaii, and Puerto Rico are included with continental United States, and both Government and non-Government shipments are recorded. Similarly, the exclusions with respect to in-transit shipments, gold and silver, and low-value items apply.

Imports are valued in accordance with the Tariff Act of 1930 which provides that the value of imported merchandise shall be the foreign or export value, whichever is higher. In general, they approximate those f. o. b. the exporting country. Transportation costs and United States customs duties are therefore excluded. The values given in the published statistics are those reported by importers on the Bureau of Customs Import Entry Form.

Relation to other series.—Concurrently with the publication of monthly totals for exports (including reexports) and general imports, the Bureau of the Census also shows exports of domestic merchandise and imports for consumption. The latter includes imports for immediate consumption, plus withdrawals for consumption from customs bonded warehouses. The difference between total merchandise exports and imports should not be confused with the more inclusive Gross National Product series of Net Foreign Investment, which is a measure of the excess of goods and services transferred to foreigners over those acquired from foreigners (see p. 4).

Uses and limitations.—These overall series provide accurate monthly indicators of the movement of merchandise exports and imports. They do not distinguish between Government and non-Government transactions. Although the exports are divided into "Grant-aid" and "Excluding grant-aid," the latter also includes some Government-sponsored exports, as noted in the table. The import totals include private shipments and those under Government sponsorship, such as purchases of strategic materials and reverse lend-lease. When United States trade statistics are compared with those of other countries, special attention needs to be given to the extent to which the series being compared differ as to valuation and coverage. Changes in exports relative to imports may indicate significant changes in our merchandise trade with other countries, but do not necessarily reflect changes in the balance of payments of the United States, which must take nonmerchandise items into account.

References.—Preliminary totals for exports (including reexports) and general imports are published monthly in the Bureau of Census release, FT 900–P, "Preliminary (Estimated) Export and Import Totals." Compiled totals for exports and general imports, exports of domestic merchandise, imports for consumption, and Department of Defense shipments of grant-aid military equipment and supplies are published shortly afterward in the monthly release FT 900, "Total Trade." Cumulative totals are provided in the "Quarterly Summary of Foreign Commerce of the United States," which also contains index numbers for the several export and import series. Detailed commodity by country

Merchandise Exports and Imports

[Monthly average, millions of dollars]

Year	Merchandise exports			Merchandise imports	Excess of exports (+) or imports (−)	
	Total[1]	Grant-aid shipments[2]	Excluding grant-aid shipments		Total	Excluding grant-aid shipments
1915	296			148	+148	
1916	457			199	+258	
1917	520			246	+274	
1918	512			253	+259	
1919	660			325	+335	
1920	686			440	+246	
1921	374			209	+165	
1922	319			259	+60	
1923	347			316	+31	
1924	383			301	+82	
1925	409			352	+57	
1926	401			369	+32	
1927	405			349	+56	
1928	427			341	+86	
1929	437			367	+70	
1930	320			255	+65	
1931	202			174	+28	
1932	134			110	+24	
1933	140			121	+19	
1934	178			138	+40	
1935	190			171	+19	
1936	205			202	+3	
1937	279			257	+22	
1938	258			163	+95	
1939	265			193	+72	
1940	335			219	+116	
1941	429	62	367	279	+150	+88
1942	673	411	262	230	+443	+32
1943	1,080	863	217	282	+798	−65
1944	1,188	942	247	327	+861	−80
1945	817	463	354	347	+470	+7
1946	812	54	757	412	+400	+345
1947	1,278	96	1,182	480	+798	+702
1948	1,054	[3]	[3]	594	+460	[3]
1949	1,004	[3]	[3]	552	+452	[3]
1950	856	24	833	738	+118	+95
1951	1,253	89	1,164	914	+339	+250
1952	1,265	166	1,099	893	+372	+206

[1] Includes shipments under special programs such as those grant-aid programs listed in footnote [2] below as well as other grant-aid programs such as ECA (Marshall Plan); other less important programs such as Surplus Incentive Material, Reorientation and Rehabilitation programs; and programs such as UNRRA, International Refugee Organization, etc. which were grant-aid only in part.

[2] Except for Army Civilian Supply exports for 1943–46 for which information is not available, the figures shown for 1947 and prior years include exports under the following programs (dates shown are the approximate periods the programs were in operation): Lend-lease (1941–47); Greek-Turkish Aid (1947–52); United States Foreign Relief (1947–48); Interim Aid (1947–48); and Army Civilian Supply (1943-present).

Figures are not shown for the years 1948–49 because separate information on ECA (Marshall Plan) economic aid exports is not available and these shipments represented most of the grant-aid shipments during that period.

Figures for the years 1950–52 include only the Department of Defense shipments of grant-aid military supplies and equipment under the Mutual Security Program—the only important grant-aid program during that period for which separate export information is available. During this period ECA and Mutual Security Program economic aid exports were important, but by 1952 they were much less important than the military grant-aid exports shown. Army Civilian Supply shipments were also relatively unimportant by 1952. More precise information on military and other grant-aid extended to other countries by the United States is provided in the balance of payments statistics.

[3] Not available.

NOTE.—Monthly data are available for all years shown in table.

Source: *Foreign Commerce and Navigation of the United States* and other Bureau of the Census publications and tabulations.

data are also published by the Census Bureau. A monthly pamphlet, "Foreign Trade Statistics Notes," contains supplementary information on such items as unusual transactions appearing in the statistics, changes in the types of shipments included in the statistics, special problems of valuation, commodity classification, and the like. A comprehensive discussion of the scope and content of United States foreign trade and shipping statistics is available in *Foreign Commerce and Navigation of the United States*, last published in 1946. A complete list of all Census publications in the field of foreign trade is available in the *Catalog of United States Foreign Trade Statistical Publications*.

PURCHASING POWER

NATIONAL INCOME

Description of series.—National income is the aggregate of earnings by labor and property from the current production of goods and services by the Nation's economy. It is the sum of five major items: (1) compensation of employees, (2) proprietors' income, (3) rental income, (4) net interest, and (5) corporate profits.

"Compensation of employees" is the sum of wages, salaries, and certain supplements, such as employer contributions to social insurance.

"Proprietors' income" measures the monetary earnings and income in kind of sole proprietorships (including doctors, lawyers, and other self-employed), partnerships and producers' cooperatives, exclusive of capital gains or losses. The supplementary income which individuals obtain from renting property does not appear here, but under rental income of persons.

"Rental income" consists of (1) net money income of persons from rental of real property, (2) estimated net rental value to homeowners of their homes, and (3) royalties received by persons from patents, copyrights, and rights to natural resources.

"Net interest" measures both the money interest and the imputed interest accruing to the Nation's residents from private business and from abroad, minus Government interest disbursements to business, which appears as part of business incomes. Imputed interest consists of the value of financial services received by persons without explicit payment and property income withheld by life-insurance companies and mutual financial intermediaries on account of persons.

"Corporate profits" are the earnings of corporations organized for profit, measured before Federal and State profit taxes, but without deduction of depletion charges and exclusive of capital gains and losses. (For a more extended discussion of corporate profits, see the following section.)

"Corporate inventory valuation adjustment" measures the excess of the value of change in the volume of corporate inventories (in terms of average prices during the period) over the change in terms of book values. This adjustment is required since, as is customary in business accounting, corporate profits are reported inclusive of inventory profits or loss, whereas only the value of the real change in inventories is counted as current output in the national product.

Statistical procedures.—The methods of estimation employed in the very complex area of national income are described in detail in the National Income Supplement to the *Survey of Current Business*, 1951. The following indicate briefly the types of estimating procedures used:

"Compensation of Employees"—reliable data are available each year from the social-security system, with current monthly estimates resting chiefly on employer reports to the Bureau of Labor Statistics on employment and earnings.

"Proprietors' Income"—estimated from income tax returns to the Internal Revenue Service, usually obtained every second year, with current quarterly data derived from analysis of trends in sales and corporate profits in individual industries.

"Rental Income"—estimated from a variety of Census and BLS data on average rents paid at various dates and Census and Internal Revenue Service data on the distribution of property ownership and rental income between persons and business.

"Net Interest"—estimated from reports to the Internal Revenue Service, Bureau of the Census, Board of Governors of the Federal Reserve System, and other agencies on interest and debt.

Relation to other series.—The relation of national income to gross national product is discussed above (p. 4); and the relation to personal income is defined below (p. 47).

Uses and limitations.—The national income measures earnings from current output and is a useful measure of the rate of flow of such earnings. The movements of this series correspond with movements in production. However, the value of the national income series lies more in the components than in the total. It may mean little to know that national income (unadjusted for price changes) has gone up; but it may be very important to know the relative contribution of wages and profits to that increase.

The chief cautions for use result partly from the definitions used, and partly from the nature of the basic data. With respect to the first, care must be taken not to interpret movements in the series as measuring something other than they are intended to measure. For example, variations in wages and profits do not necessarily indicate changes in the welfare of workers or in the ability of corporations to provide new capital. For such purposes, these variations must be considered in the light of other factors such as the cost of living and the cost of new plant and equipment. With respect to the second—which

National Income

[Billions of dollars]

Year	Total national income	Compensation of employees	Proprietors' (business, professional, farm) and rental income	Net interest	Corporate profits and inventory valuation adjustment		
					Total	Profits before taxes	Inventory valuation adjustment
1929	87.4	50.8	19.7	6.5	10.3	9.8	.5
1930	75.0	46.5	15.7	6.2	6.6	3.3	3.3
1931	58.9	39.5	11.8	5.9	1.6	−.8	2.4
1932	41.7	30.8	7.4	5.4	−2.0	−3.0	1.0
1933	39.6	29.3	7.2	5.0	−2.0	.2	−2.1
1934	48.6	34.1	8.7	4.8	1.1	1.7	−.6
1935	56.8	37.1	12.1	4.5	3.0	3.2	−.2
1936	64.7	42.7	12.6	4.5	4.9	5.7	−.7
1937	73.6	47.7	15.4	4.4	6.2	6.2	[1]
1938	67.4	44.7	14.0	4.3	4.3	3.3	1.0
1939	72.5	47.8	14.7	4.2	5.8	6.5	−.7
1940	81.3	51.8	16.3	4.1	9.2	9.3	−.1
1941	103.8	64.3	20.8	4.1	14.6	17.2	−2.6
1942	137.1	84.9	28.4	3.9	19.9	21.1	−1.2
1943	169.7	109.2	32.8	3.4	24.3	25.1	−.8
1944	183.8	121.2	35.5	3.1	24.0	24.3	−.3
1945	182.7	123.0	37.5	3.0	19.2	19.7	−.6
1946	180.3	117.1	42.0	2.9	18.3	23.5	−5.2
1947	198.7	128.0	42.4	3.5	24.7	30.5	−5.8
1948	223.5	140.2	47.3	4.3	31.7	33.8	−2.1
1949	216.3	139.9	42.1	5.0	29.2	27.1	2.1
1950	240.6	153.4	45.4	5.7	36.0	41.0	−5.0
1951	278.4	178.9	50.7	6.4	42.4	43.7	−1.3
1952	291.6	193.2	51.2	7.0	40.2	39.2	1.0

[1] Less than $0.05 billion.

NOTE.—Detail will not necessarily add to totals because of rounding. Quarterly data are available beginning with 1939.

Source: Department of Commerce.

is particularly applicable to the current data on proprietors' earnings, rental income, net interest, and the inventory valuation adjustment—it should be recognized that many of the available data permit only fair approximations of the phenomena being measured, and therefore too great reliance should not be placed on these statistics as instruments of precise measurement.

References.—Quarterly data appear regularly in the statistical section of the *Survey of Current Business*. For annual data, preliminary estimates appear in the February issue, revised estimates in the July issue. Historical data for 1929–48 appear in the *1951 National Income Supplement* to the *Survey*, and for 1949–52 in the July 1953 issue of the *Survey*. A detailed discussion of the technical aspects of the estimates is given in the *1951 National Income Supplement*.

CORPORATE PROFITS

Description of series.—The corporate profits series of the Office of Business Economics, Department of Commerce, contains profits estimates for past years and recent quarters for all United States corporations, estimates of the distribution of those profits between dividends and retained earnings, and estimates of corporate tax liability. The national income concept of profits of OBE is used in this series. This concept of profits differs from the conventional accounting concept of profits (which is used in the Internal Revenue Service tabulation of profits and in the financial reports series of the Federal Trade Commission and Securities Exchange Commission) in that dividends received by corporations are deducted from profits (and dividends) to obtain unduplicated totals reflecting income originating in United States corporations; profits are calculated inclusive of depletion, which is not considered an element of capital consumption in the national income and product accounts; capital gains and losses are eliminated from profits because they do not measure gains or losses originating in current production; and adjustments for international flows affecting profits are made. The estimates are based largely on tabulations from income-tax returns and from reports to the SEC, FTC, and other regulatory agencies.

The corporate profits series as initially published are revised to reflect more comprehensive data when those data become available. Since the data become more comprehensive in stages, i. e., more and more data become available periodically until the complete Internal Revenue tabulations are published, several revisions are made before "final" estimates are published. Some revisions, though minor, are made even after the tabulations are available.

Statistical procedures.—The annual data published in the corporate profits series are, except for the 2 or 3 most recent years, based upon tabulations by the Internal Revenue Service of unaudited corporate-income-tax returns. The data in these tabulations are adjusted in various ways to make them comparable, statistically and conceptually, with other entries in the national income accounts. The important accounting conceptual adjustments are suggested by the statement above of differences between the conventional accounting concept of profits and the national income concept. Another important adjustment of the tabulations is the audit adjustment which makes allowance for additional profits disclosed by auditing of the income-tax returns by Internal Revenue. Mutual insurance companies are not considered part of the corporate universe for national income purposes, and profits of these companies are removed from the tax-return tabulations.

Since the tax-return tabulations are not available until more than 2 years after the close of the year to which they refer, other bases for the estimates for the most recent 2 years and for quarters must be used. These estimates for current periods are made by extrapolating the benchmark estimates, i. e., the latest estimates based upon Internal Revenue tax-return tabulations. The extrapolators are based upon regular quarterly reports from manufacturing corporations to FTC and SEC and from public-utility corporations to Federal regulatory agencies, and upon nongovernmental surveys and miscellaneous sources of varying reliability. When the Internal Revenue tabulations of tax returns for a given year become available, the estimates for that year are revised to conform to the Internal Revenue tabulations.

The series on "Corporate tax liability" is derived by procedures generally similar to those described for corporate profits.

Relation to other series.—The corporate-profits series is designed primarily to measure the contribution of corporate profits to the national income. It is, therefore, as consistent with the concepts and other series which are a part of the national income accounts as the basic data permit, and can be used in conjunction with the other national income series (e. g., net interest, proprietors' and rental income, compensation of employees, etc.) with confidence of conceptual comparability.

The corporate-profits series is, as it must be, based upon reports from companies rather than establishments. This results in some noncomparability with series based upon reports from establishments. Furthermore, surveys based upon the establishment unit of classification are not confined to establishments of corporations but include establishments of other forms of organization as well. The corporate-profits series, or any other series based upon company reports, cannot safely be assumed to be directly comparable with these establishment series unless the reports on the different bases have been reconciled. These factors are more important when series for specific industries are being compared, however, than when the broad aggregates published in *Economic Indicators* are compared.

The series on Expenditures for New Plant and Equipment (p. 32) and Manufacturers' Inventories and Sales (p. 38) are also based primarily upon company reports. All three series are produced for recent periods by extrapolating benchmark esti-

Corporate Profits

[Billions of dollars]

Year	Corporate profits before taxes	Corporate tax liability	Corporate profits after taxes		
			Total	Dividend payments	Undistributed profits
1929	9.8	1.4	8.4	5.8	2.6
1930	3.3	.8	2.5	5.5	−3.0
1931	−.8	.5	−1.3	4.1	−5.4
1932	−3.0	.4	−3.4	2.6	−6.0
1933	.2	.5	−.4	2.1	−2.4
1934	1.7	.7	1.0	2.6	−1.6
1935	3.2	1.0	2.3	2.9	−.6
1936	5.7	1.4	4.3	4.6	−.3
1937	6.2	1.5	4.7	4.7	(1)
1938	3.3	1.0	2.3	3.2	−.9
1939	6.5	1.5	5.0	3.8	1.2
1940	9.3	2.9	6.4	4.0	2.4
1941	17.2	7.8	9.4	4.5	4.9
1942	21.1	11.7	9.4	4.3	5.1
1943	25.1	14.4	10.6	4.5	6.2
1944	24.3	13.5	10.8	4.7	6.1
1945	19.7	11.2	8.5	4.7	3.8
1946	23.5	9.6	13.9	5.8	8.1
1947	30.5	11.9	18.5	6.6	12.0
1948	33.8	13.0	20.7	7.2	13.5
1949	27.1	10.8	16.3	7.5	8.8
1950	41.0	18.2	22.7	9.1	13.6
1951	43.7	23.6	20.1	9.2	10.9
1952	39.2	20.6	18.6	9.1	9.5

[1] Less than $0.05 billion.

NOTE.—See table p. 43 for profits before taxes and inventory valuation adjustment. Detail will not necessarily add to totals because of rounding. Quarterly data are available beginning with 1939.

Source: Department of Commerce.

mates based upon Internal Revenue Service tabulations of income-tax returns. The Plant and Equipment Expenditures and the Inventories and Sales series differ from the corporate-profits series in that they cover unincorporated as well as incorporated businesses.

Uses and limitations.—The corporate-profits series is an important economic indicator, reflecting the state of health of a substantial part of the Nation's business community. Certain limitations of the series require that it be used with caution, however.

(1) As its title indicates, the series measures only the profits of corporations. It does not, therefore, portray fully the profit position of all business.

(2) The total corporate-profits series is too general to provide any indication of the profit positions of specific industries. In some situations knowledge of the profits experience of specific industries is vital to correct economic analysis.

(3) The quarterly corporate-profits estimates are less reliable than the annual estimates, especially the annual estimates for past years. There are two principal reasons for this: (*a*) quarterly income statements, upon which the quarterly series must be based, are inherently less reliable than annual income statements because they are affected by seasonal influences that are not completely accounted for in company reports and (*b*) wide gaps in the financial data available quarterly make the underlying basis of the quarterly estimates weaker than that of the annual estimates, even before the Internal Revenue tabulations become available.

References.—The corporate-profits series is published quarterly in the *Survey of Current Business*. A complete statement of the methods and the sources of data used in preparing these estimates is presented in the *1951 National Income Supplement* of the *Survey of Current Business*, pages 84–90. The statement on procedures for preparing recent year and quarterly estimates, described in detail on pages 88–89, is still generally accurate, although some relatively minor revisions have been made.

Personal Income

[Billions of dollars]

Year	Total personal income	Labor income (salaries, wages, and other labor income) [1]	Proprietors' income		Dividends and personal interest	Transfer payments
			Farm	Business, professional, and rental income [1]		
1929	85. 1	50. 5	5. 7	14. 1	13. 3	1. 5
1930	76. 2	46. 3	3. 9	11. 8	12. 6	1. 5
1931	64. 8	39. 2	2. 9	8. 9	11. 1	2. 7
1932	49. 3	30. 5	1. 7	5. 7	9. 1	2. 2
1933	46. 6	29. 0	2. 3	4. 9	8. 2	2. 1
1934	53. 2	33. 8	2. 3	6. 4	8. 6	2. 2
1935	59. 9	36. 8	4. 9	7. 3	8. 6	2. 4
1936	68. 4	42. 1	3. 9	8. 8	10. 1	3. 5
1937	74. 0	45. 9	5. 6	9. 8	10. 3	2. 4
1938	68. 3	42. 8	4. 4	9. 6	8. 7	2. 8
1939	72. 6	45. 7	4. 5	10. 2	9. 2	3. 0
1940	78. 3	49. 5	4. 9	11. 3	9. 4	3. 1
1941	95. 3	61. 5	6. 9	13. 9	9. 9	3. 1
1942	122. 7	81. 4	10. 5	18. 0	9. 7	3. 2
1943	150. 3	104. 5	11. 8	21. 1	10. 0	3. 0
1944	165. 9	116. 2	11. 8	23. 7	10. 6	3. 6
1945	171. 9	116. 9	12. 5	25. 0	11. 4	6. 2
1946	177. 7	111. 1	14. 8	27. 2	13. 2	11. 4
1947	191. 0	122. 3	15. 6	26. 8	14. 5	11. 8
1948	209. 5	134. 9	17. 7	29. 6	16. 0	11. 3
1949	205. 9	134. 2	12. 8	29. 3	17. 1	12. 4
1950	226. 7	146. 5	13. 3	32. 1	19. 6	15. 1
1951	254. 3	170. 7	15. 5	35. 2	20. 5	12. 5
1952	269. 7	184. 9	14. 8	36. 1	21. 0	12. 9

[1] Excludes social insurance contributions of employees and, beginning January 1952, of self-employed persons.

NOTE.—Detail will not necessarily add to totals because of rounding.
Monthly data are available beginning with 1929.

Source: Department of Commerce.

PERSONAL INCOME and PER CAPITA DISPOSABLE INCOME

(Discussion of these two series is here combined in one section, because of their close relationship.)

Description of series.—Personal income is composed of income received currently by individuals, by unincorporated businesses, and by nonprofit institutions (including pension, trust, and welfare funds). This income is here divided into labor income, proprietors' income, dividends and personal interest, and transfer payments. Although most of the income is in monetary form, there are important exceptions—chiefly estimated rental value to owner-occupants of their homes and value of food consumed on farms.

"Labor income" is principally wages and salaries, less contributions which are made from employees' pay for social security.

"Proprietors' income" is the sum of unincorporated business and rental income as defined above in the section on National Income (p. 42). In the present series, however, the income of farm operators is shown separately.

"Dividends and personal interest" is the sum of money dividends and the net interest component of national income, plus net interest paid by the Government.

"Transfer payments" include payments not resulting from current production, such as social-security benefits, military pensions, corporate gifts to nonprofit institutions, direct relief, and consumer bad debts. This component does not include Government interest.

Disposable personal income is equal to Personal Income less taxes on individuals (including income, property, and other taxes not deductible as business expense), customs receipts, and other general Government revenues received from individuals as individuals.

"Disposable personal income in 1952 prices" is the preceding series valued in 1952 prices by dividing the series in current dollars by an overall price index (with 1952=100) for personal consump-

Per Capita Disposable Income

Year	Total disposable personal income (billions of dollars)[1]		Per capita disposable personal income (dollars)[1]		Population (thousands)[3]
	Current prices	1952 prices [2]	Current prices	1952 prices [2]	
1929	82. 5	127. 3	677	1, 045	121, 881
1930	73. 7	119. 1	598	966	123, 188
1931	63. 0	113. 5	507	914	124, 149
1932	47. 8	97. 8	383	783	124, 949
1933	45. 2	97. 0	360	773	125, 690
1934	51. 6	104. 7	408	828	126, 485
1935	58. 0	115. 5	455	906	127, 362
1936	66. 1	130. 6	516	1, 020	128, 181
1937	71. 1	135. 4	551	1, 050	128, 961
1938	65. 5	127. 7	504	982	129, 969
1939	70. 2	138. 2	536	1, 055	131, 028
1940	75. 7	147. 9	573	1, 119	132, 122
1941	92. 0	169. 4	690	1, 271	133, 402
1942	116. 7	191. 3	865	1, 418	134, 860
1943	132. 4	198. 5	968	1, 451	136, 739
1944	147. 0	210. 3	1, 062	1, 519	138, 397
1945	151. 1	208. 7	1, 080	1, 492	139, 928
1946	158. 9	204. 2	1, 124	1, 445	141, 389
1947	169. 5	198. 2	1, 176	1, 375	144, 126
1948	188. 4	208. 6	1, 285	1, 423	146, 631
1949	187. 2	209. 9	1, 255	1, 407	149, 188
1950	205. 8	225. 7	1, 357	1, 488	151, 677
1951	225. 0	229. 6	1, 458	1, 488	154, 360
1952	235. 0	235. 0	1, 497	1, 497	156, 981

[1] Income less taxes.
[2] Dollar estimates in current prices divided by an overall implicit price index for personal consumption expenditures. This price index is based on Department of Commerce data, shifted from a 1939 base.
[3] Including armed forces overseas. Annual data as of July 1.

NOTE.—Quarterly data are available beginning with 1939.

Sources: Department of Commerce and Council of Economic Advisers.

tion expenditures. As a result, the income difference, for example, between 1939 and 1952 is far less in real terms than is indicated by comparing the current dollar estimates of 70.2 billion and 235 billion, respectively. Prices were so much lower in 1939 that the income for that year should almost be doubled for comparison with real income in 1952.

"Per capita disposable personal income" is obtained simply by dividing the disposable personal income series by the total midyear population.

Relation to other series.—Personal income differs from national income by including transfer payments and Government interest and by excluding contributions to social insurance (by employee and employer), the inventory valuation adjustment and corporate profits tax liability and undistributed corporate profits.

Uses and limitations.—The estimates for personal income and its components and for disposable income provide a measurement of trends in spending power of individuals. The inclusion of substantial nonmonetary items—imputed rent, interest, food, fuel—should be noted for some purposes, but the effect of including these items should not be overemphasized. They tend to make the income estimates generally more stable, but should have little effect on the ability of the estimates to show when a change is occuring and the direction of the shift.

Disposable personal income gives a more direct measure of income available for spending, since it approximates take-home income, than does personal income. For measuring changes, in real terms, in consumers' buying power, the estimates of disposable income in constant prices are to be preferred.

References.—Monthly data on personal income and quarterly data on disposable personal income appear regularly in the statistical section of the *Survey of Current Business.* Preliminary annual estimates appear in the February issue, and revised estimates in the July issue of the *Survey.* Historical data for 1929–48 appear in the *1951 National Income Supplement* to the *Survey of Current Business,* and for 1949–52 in the July 1953 issue of the *Survey.* The supplement also contains a detailed discussion of the statistical procedures used.

Description of the series.—"Disposable personal income" is discussed in the preceding section.

"Personal consumption expenditures" is the sum of money and imputed expenditures made by consumers (individuals, nonprofit institutions such as hospitals, etc.) for goods and services. The expenditure total covers total purchase cost to consumers, including general sales taxes. The full cost of automobiles, refrigerators, furniture, and the like is included in the period when sold—quarter or year—regardless of when payments are made or completed. The purchase of homes is not included as an expenditure: instead the estimated rental value to the homeowner is included if he occupies the home.

"Durable goods" are those items which generally last more than 3 years in use. "Nondurable goods" are items with a shorter life. "Services" include telephone, electricity, shoe repair, gas and water, and also such items as the expense of handling life insurance, and banking services furnished without payment (such as free checks where a minimum balance is maintained).

"Personal net saving" is equal to disposable personal income less personal consumption expenditures. As such, it conceptually includes not merely cash and bank deposits but changes in reserves of life-insurance companies, farmers' purchases of land and tractors, etc.

Statistical procedures.—Personal consumption expenditures for goods are estimated for benchmark years from the value of the output of specified items as reported in the Census of Manufactures, less the portion of this output bought by business and government or exported. To the consumer portion of manufactured products is added the value of nonmanufactured consumer goods (for example, nonprocessed foods) to derive producers' output for consumers. Successive adjustments are added for transportation, imports and exports, wholesale and retail inventory changes, wholesale and retail markups, and sales taxes. Transportation charges are computed from ICC and other data on transportation. Wholesale and retail markups are derived from Census of Business and Internal Revenue Service data. For service items a great variety of sources and procedures are used.

Current estimates of consumption expenditures rest chiefly on the month-to-month trends shown by the retail sales figures, by kind of store, reported in the Census Bureau's Monthly Report on Retail Trade, by Federal Reserve Board data for department stores, sales-tax receipts, and other source data.

Relation to other series.—Estimates of personal consumption expenditures will show much the same trends from quarter to quarter as the figures for total retail sales. However, personal consumption expenditures also include a wide variety of services and such items as food produced and consumed on farms which are outside of retail trade. Conversely, retail trade includes some commodity items, such as building materials, gasoline and trucks, which are not part of personal consumption expenditures.

The estimate of personal net saving and the liquid savings estimate of the Securities and Exchange Commission differ in level and trend. The chief reason for the difference is the inclusion in the personal net saving series (and not in the liquid savings estimates) of net purchases of nonfarm residences and net increases in persons' equities in farms and other unincorporated businesses. (For a detailed reconciliation of the two series, see table 6, p. 14, of the July 1953 issue of the *Survey of Current Business.*)

Uses and limitations.—The estimates of personal consumption expenditures represent a generally useful, reliable measure of trends in consumer purchases. They may be used to study trends in the ratio of wages, or more generally of income, to expenditure, and to review the division of the national output between consumer takings, business capital formation, and Government defense or other expenditures.

The estimates of personal saving are among the least satisfactory of the significant series which appear in the national income accounts. They are the residual from two larger estimates. The errors and limitations present in the hundreds of series, developed for other purposes, which must be used at present in estimating the national income do not completely cancel out. To this extent these errors are transmitted into the saving estimate. Quarter to quarter changes are, however, subject to revision as better data become available.

References.—Quarterly data appear in the statistical section of the *Survey of Current Business.* Preliminary annual estimates appear in the February issue and revised estimates in the July issue of the *Survey.* Historical data for 1929–48 appear in the *1951 National Income Supplement* to the *Survey of Current Business,* and for 1949–52 in the July 1953 *Survey.* The Supplement also contains a detailed discussion of the technical aspects of the estimates.

Consumer Income, Spending and Saving

[Billions of dollars]

Year	Disposable personal income [1]	Less: Personal consumption expenditures				Equals: Personal net saving	Net saving as percent of disposable income
		Total	Durable goods	Nondurable goods	Services		
1929	82.5	78.8	9.4	37.7	31.7	3.7	4.5
1930	73.7	70.8	7.3	34.1	29.5	2.9	3.9
1931	63.0	61.2	5.6	29.0	26.6	1.8	2.9
1932	47.8	49.2	3.7	22.7	22.8	−1.4	−2.9
1933	45.2	46.3	3.5	22.3	20.6	−1.2	−2.6
1934	51.6	51.9	4.3	26.7	20.9	−.2	−.5
1935	58.0	56.2	5.2	29.4	21.7	1.8	3.0
1936	66.1	62.5	6.4	32.9	23.3	3.6	5.4
1937	71.1	67.1	7.0	35.2	24.9	3.9	5.5
1938	65.5	64.5	5.8	34.0	24.7	1.0	1.5
1939	70.2	67.5	6.7	35.3	25.5	2.7	3.8
1940	75.7	72.1	7.9	37.6	26.6	3.7	4.9
1941	92.0	82.3	9.8	44.0	28.5	9.8	10.6
1942	116.7	91.2	7.1	52.9	31.2	25.6	21.9
1943	132.4	102.2	6.8	61.0	34.4	30.2	22.8
1944	147.0	111.6	7.1	67.1	37.4	35.4	24.1
1945	151.1	123.1	8.5	74.9	39.7	28.0	18.5
1946	158.9	146.9	16.6	85.8	44.5	12.0	7.6
1947	169.5	165.6	21.4	95.1	49.1	3.9	2.3
1948	188.4	177.9	22.9	100.9	54.1	10.5	5.6
1949	187.2	180.6	23.8	99.2	57.5	6.7	3.6
1950	205.8	194.6	29.2	102.6	62.7	11.3	5.5
1951	225.0	208.1	27.3	113.4	67.4	16.9	7.5
1952	235.0	218.1	26.7	118.8	72.7	16.9	7.2

[1] Income less taxes.

NOTE.—Detail will not necessarily add to totals because of rounding.
Quarterly data are available beginning with 1939.

Source: Department of Commerce.

FARM INCOME

Description of series.—The farm income series, computed by the Agricultural Marketing Service,[1] is a measure of the amount of cash received by farmers for the commodities they sell and for participation in certain Government farm programs. Estimates are made monthly and for calendar years and are available annually back to 1910. The series includes cash receipts from all sales except those from livestock sold by one farmer directly to another farmer in the same State. It represents gross receipts of farm operators, including any share going to landlords, without any deduction for expenses incurred. Government payments included in the series represent all money received by farmers directly from the Federal Government in connection with farm programs, such as rental and benefit, conservation, price-adjustment, parity, and production payments. These payments to landlords also are included.

The series is built up almost entirely from data collected for other purposes. In the past some income data have been obtained by interview surveys, but the surveys have been limited in scope and infrequent. Consequently, it has been necessary to consider agriculture as one big enterprise and to develop income estimates from estimates of quantities marketed and average prices. The basic data are collected by the Agricultural Marketing Service in connection with other series. Information on Government payments comes from the records of the Commodity Stabilization Service (formerly part of the Production and Marketing Administration).

Approximately 165 commodities or commodity groups are represented in the series. Cash receipts from "all farm marketings" and from "livestock and livestock products" and "crops" are computed and published monthly by States. Monthly estimates for 12 commodity groups also are published for the United States. A further breakdown by individual commodities is published for the United States and for each State on an annual basis.

Statistical procedures.—In general, estimates of cash farm income are derived by multiplying quantities marketed each month by midmonth prices. With minor exceptions, this procedure is followed commodity by commodity and State by State. Calendar-year estimates are a summation of the monthly estimates, and United States totals are a summation of the State figures. In case adequate data are not available on either the quantity marketed or the time it was marketed, it sometimes is necessary to impute figures on the basis of patterns and relationships found in earlier periods or in census data. In the absence of a midmonth price, a season average price is used. When the marketing of an individual commodity is completed and more complete information becomes available, the monthly and annual estimates are revised.

Cash receipts from farm marketings include moneys received from nonrecourse loans made by the Commodity Credit Corporation in connection with price supports. These are included in cash receipts in the month in which the loans are made. If redeemed later, they are treated as an offset to cash receipts in the month in which redeemed. Slight variations from this procedure are necessary in the case of wheat and cotton. Also the procedure is not applicable to tobacco.

Estimates of cash farm income are revised as more complete data become available, sometimes within a few months after they are first published but in any case at the end of the marketing year. They are also revised every 5 years following the agricultural census. No major conceptual change has been made in the series since 1936 when the work on "income parity" gave impetus to getting more complete and better income data. As a result the estimates were extended back to 1910, put on a calendar-year basis, and generally improved in comparability.

The Parity Index, which is used to convert the farm income series from current dollars to 1952 dollars, is discussed above in the section on prices.

Relation to other series.—The estimates of cash farm income form the basic core of several other income series. "Realized gross farm income" is obtained by adding to cash farm income the market value of home consumption of farm products and the rental value of farm dwellings. By subtracting farm production expenses one gets the amount of "realized net income of farm operators." Adjustments of realized net income for the net change in inventories held on farms and the addition of farm wages of laborers living on farms gives the "net income of persons on farms from farming." The further addition of farm wages of nonresident laborers, net rent paid to nonfarm landlords, and interest paid on farm-mortgage debt provides an estimate of "net income from agriculture." In most instances, corresponding series on a purely cash basis can also be computed.

The series on "realized net income of farm operators" differs from the Commerce Department series on "net income of farm proprietors" to the extent of

[1] Under the reorganization of the Department of Agriculture which became effective on November 2, 1953, most statistical functions of the former Bureau of Agricultural Economics were reassigned to the Agricultural Marketing Service.

Year	Farm income (monthly average, millions of current dollars)	Parity index (prices paid, interest, taxes, and wage rates) 1952=100 [1]	Farm income (monthly average, millions of 1952 dollars) [2]
1910	482	34	1,418
1911	465	34	1,368
1912	501	35	1,431
1913	520	35	1,486
1914	503	36	1,397
1915	533	37	1,441
1916	645	40	1,612
1917	895	52	1,721
1918	1,122	60	1,870
1919	1,214	69	1,759
1920	1,050	75	1,400
1921	676	54	1,252
1922	715	53	1,349
1923	796	55	1,447
1924	850	56	1,518
1925	918	57	1,611
1926	879	56	1,570
1927	894	55	1,625
1928	916	56	1,636
1929	942	56	1,682
1930	754	53	1,423
1931	531	45	1,180
1932	395	39	1,013
1933	453	38	1,192
1934	563	42	1,340
1935	637	43	1,481
1936	720	43	1,674
1937	763	46	1,659
1938	679	43	1,579
1939	715	43	1,663
1940	755	43	1,756
1941	968	46	2,104
1942	1,345	53	2,538
1943	1,667	60	2,778
1944	1,763	63	2,798
1945	1,844	66	2,794
1946	2,111	72	2,932
1947	2,502	84	2,979
1948	2,539	91	2,790
1949	2,344	87	2,694
1950	2,384	89	2,679
1951	2,757	98	2,813
1952	2,721	100	2,721

[1] Converted from the reported base, 1910-14=100, to the base 1952=100.
[2] Farm income in current dollars divided by parity index on base 1952=100.

NOTE.—Farm income includes cash receipts from marketings and Government payments.
Monthly data are available beginning with 1924, but with the exception of 1950, 1951, and 1952, they do not agree with the latest annual totals.

Source: Department of Agriculture.

the adjustments for the net change in farm inventories, which are reflected in the latter series.

Uses and limitations.—There is widespread interest in estimates of farm income as an important measure of the general condition of agriculture. The series is the most current indication of the flow of cash funds to that segment of the economy. Its use is limited though in that it measures gross cash farm income. Because it measures gross cash income, it is not as good a measure of the farmer's economic position as some of the net income series referred to above. These other series, however, are prepared only on an annual basis.

References.—Current estimates of farm income appear in *The Farm Income Situation* published by the Agricultural Marketing Service of the Department of Agriculture. Historical data can be found in the Department's annual publication, *Agricultural Statistics*. For a detailed discussion of procedures, see *The Agricultural Estimating and Reporting Services of the United States Department of Agriculture*, Miscellaneous Publication No. 703.

CREDIT, MONEY, AND FEDERAL FINANCE

BANK LOANS AND INVESTMENTS

Description of series.—"Commercial banks" are in general distinguished from other lending institutions by the fact that they accept deposits subject to check or withdrawal on demand. Mutual savings banks are not included, nor are savings and loan associations or various other financial institutions which do not receive demand deposits even though referred to as banks.

The "Weekly reporting member banks" comprise some 400 selected member commercial banks in (or with head offices in) approximately 100 cities, accounting currently for over half of the total commercial banking resources. The cities comprise the more important banking centers within each Federal Reserve district; and within each city the banks comprise a voluntary sample, usually accounting for over 90 percent of member bank resources. The coverage of the weekly series was last substantially revised in 1947 and carried back one year, with an increase of about 15 percent in loans and investments of reporting banks.

The category of "Bank loans" reported for all commercial banks covers all loans and discounts. The "Business loan" category reported for the weekly banks is the major component of bank loans and includes commercial, industrial and agricultural (other than real estate) loans. Monthly estimates for all commercial banks are not available, but the weekly banks currently account for about 70 percent of all such business loans.

Monthly figures shown in both series are as of the last Wednesday of the month except that final June and December figures for "all commercial banks" are as of the last day of the month.

Statistical procedures.—The "All commercial bank" and "Weekly reporting member bank" series are closely related. The weekly series is based on weekly reports filed with Federal Reserve banks and compiled cooperatively by these banks and the Board of Governors. Published figures are simple aggregates for the reporting banks. The monthly estimates for all commercial banks are prepared, also by the Federal Reserve System, on the basis of the weekly reports, monthly reports from all other member banks, and other information. Estimates are made for nonmember banks, accounting currently for about 16 percent of commercial bank credit, on the basis of the relationship between the movement of "country" member banks (those outside the major cities) and that of the nonmember banks, as determined semiannually when complete reports for the banking system are available. The June and December estimates are later replaced by "benchmark" figures for all commercial banks. These benchmarks are compiled by the Federal Deposit Insurance Corporation on the basis of compulsory "call reports" filed by all banks subject to Federal supervision (National banks, State member banks, and nonmember insured banks) with one or another of the Federal bank supervisory agencies; and of information obtained from State banking authorities and other sources for the relatively few uninsured banks. These final June and December figures, being normally for a day other than Wednesday, replace rather than revise the earlier estimates. Interim monthly estimates are revised only when some substantial error of estimate is suggested by the benchmarks.

Prior to 1947 each of the Federal supervisory agencies prepared separately a series of semiannual "all bank" statistics. Since 1947 a single series has by agreement been prepared by the FDIC. The Federal Reserve monthly estimates for all commercial banks have been published only since 1948.

Relation to other series.—The Federal Government publishes a variety of statistical series covering all or part of the banking system. For purposes of general analysis, these will not necessarily lead to significantly different conclusions, but the differences should be kept in mind. Thus, the all-commercial-bank series should be distinguished from the somewhat larger "all bank" series which includes some 500 mutual savings banks; and from various smaller aggregates such as national banks and insured commercial banks. The all-commercial-bank aggregates here are for continental United States, and the unrounded figures differ slightly from totals which include banks in the possessions, published by the Comptroller of the Currency and the FDIC.

The weekly series covers a substantial segment of the total commercial banks and includes most of the larger banks in larger cities. Although the series is not identical in coverage with any published call report aggregate, it is similar in movement to the aggregate for all member banks other than "country" banks. A recently developed Federal Reserve series showing changes in business loans by type of business of borrower weekly from 1951 is based on a subsample of the weekly reporting banks and ties in with the business-loan figure here published.

Uses and limitations.—The all-commercial-bank figures are useful as a measure of general trends in

Bank Loans and Investments

[Billions of dollars]

End of period [1]	All commercial banks					Weekly reporting member banks—business loans [2]
	Total loans and investments	Bank loans	Investments			
			Total	U. S. Government securities	Other securities	
1914—June 30	16.9	13.2	3.7	0.8	2.9	----------
1915—June 23	17.5	13.5	4.0	.8	3.2	----------
1916—June 30	20.4	15.8	4.6	.8	3.9	----------
1917—June 20	23.9	18.2	5.7	1.5	4.1	----------
1918—June 29	27.4	20.1	7.3	3.2	4.1	----------
1919—June 30	31.8	22.4	9.4	5.1	4.3	----------
1920—June 30	36.3	28.1	8.2	3.7	4.4	----------
1921—June 30	34.2	26.1	8.1	3.4	4.8	----------
1922—June 30	33.9	24.7	9.2	4.0	5.3	----------
1923—June 30	37.1	26.9	10.2	4.7	5.5	----------
1924—June 30	38.1	27.6	10.5	4.4	6.1	----------
1925—June 30	41.2	29.6	11.7	4.6	7.0	----------
1926—June 30	43.5	31.4	12.1	4.6	7.5	----------
1927—June 30	45.1	32.2	12.9	4.6	8.4	----------
1928—June	48.5	34.0	14.5	5.2	9.3	----------
1929—June	49.4	35.7	13.7	4.9	8.7	----------
1930—June	48.9	34.5	14.4	5.0	9.4	----------
1931—June	44.9	29.2	15.7	6.0	9.7	----------
1932—June	36.1	21.8	14.3	6.2	8.1	----------
1933—June	30.4	16.3	14.0	7.5	6.5	----------
1934—June	32.7	15.7	17.0	10.3	6.7	----------
1935—June	34.6	14.9	19.7	12.7	7.0	----------
1936—December	39.5	16.4	23.1	15.3	7.8	----------
1937—December	38.3	17.1	21.2	14.2	7.1	5.1
1938—December	38.7	16.4	22.3	15.1	7.2	4.2
1939—December	40.7	17.2	23.4	16.3	7.1	4.7
1940—December	43.9	18.8	25.1	17.8	7.4	5.3
1941—December	50.7	21.7	29.0	21.8	7.2	7.1
1942—December	67.4	19.2	48.2	41.4	6.8	6.3
1943—December	85.1	19.1	66.0	59.8	6.1	6.4
1944—December	105.5	21.6	83.9	77.6	6.3	6.5
1945—December	124.0	26.1	97.9	90.6	7.3	7.2
1946—December	114.0	31.1	82.9	74.8	8.1	[3] 11.3
1947—December	116.3	38.1	78.2	69.2	9.0	14.7
1948—December	114.3	42.5	71.8	62.6	9.2	15.6
1949—December	120.2	43.0	77.2	67.0	10.2	13.9
1950—December	126.7	52.2	74.4	62.0	12.4	17.9
1951—December	132.6	57.7	74.9	61.5	13.3	21.6
1952—December	141.6	64.2	77.5	63.3	14.1	[3] 23.4

[1] June dates prior to 1936 because end-of-year data not available for U. S. Government obligations; December dates thereafter. For weekly reporting member banks, Wednesday date nearest end of year.
[2] Not available prior to 1937; includes agricultural loans.
[3] Series revised to extend coverage; previous figures not entirely comparable.

NOTE.—Detail may not add to totals because of rounding. Monthly data are available beginning with October 1947.

Source: Board of Governors of the Federal Reserve System.

bank credit. The weekly series is more frequent and more prompt than that for all commercial banks. It is available in greater detail, including a total for "business loans"—a significant current indicator of business activity. The weekly series also is a more sensitive indicator of developments in the short-term money market, because it covers the larger banks in the more important centers. It is not supposed to reflect developments in the smaller centers.

References.—The monthly estimates for all commercial banks appear initially about a month after the date of the report in a set of releases of the Board of Governors of the Federal Reserve System (G7, G7a, G7b) showing the major balance-sheet

items and changes during the past month and year for all banks, all commercial banks, and for member bank categories. The *Federal Reserve Bulletin* also carries the estimates for recent months, with call report data for selected years back to 1939. Although the estimating procedures for the monthly estimates are not described in any publication of the Board, the composition of the current all-bank call report data is indicated in notes to the statistical tables in the annual reports of the Federal Deposit Insurance Corporation. All-bank statistics are also discussed in *Banking and Monetary Statistics*, published by the Federal Reserve Board in 1943.

The Wednesday data for the weekly reporting member banks appear initially on the following Wednesday in a release of the Federal Reserve Board (H.4.2) showing changes in assets and liabilities over the last week and year. A simultaneous release (H.4.2a) shows assets and liabilities by Federal Reserve districts. Data for New York City and Chicago are available the day after the date of the report (H.4.3). The *Bulletin* carries the weekly data and monthly averages for the last 3 months. The series is discussed fully in *Banking and Monetary Statistics;* recent revisions are explained in the *Federal Reserve Bulletin* for June 1947 and April 1953.

CONSUMER CREDIT

Description of series.—These series are estimates of total short- and intermediate-term consumer credit, and of major types. Federal Reserve publishes additional detail by type of credit and by type of financial institution or retail outlet to which the debt is owed.

"Consumer credit" is defined as "all credit used to finance the purchase of commodities and services for personal consumption or to refinance debts originally incurred for such purposes." Credit covers both loans and sales involving deferred payment. Personal consumption is defined so as to exclude consumption not only by businesses but by nonprofit organizations. The estimates exclude home-mortgage credit, which is traditionally considered separately.

"Installment credit," accounting for the bulk of consumer credit, is that scheduled to be repaid in two or more payments. Installment credit classified as "Automobile paper" and "Other consumer goods paper" includes credit for the purchase of, and secured by, such goods regardless of whether originating as loans or as credit sales, and regardless of whether the paper is held by a merchant or a financial institution. "Repair and modernization loans" includes such loans held by financial institutions but not by merchants. "Personal installment loans" covers loans by financial institutions for all other consumer purposes, such as to consolidate debts, to pay medical expenses, or for education. Consumers' "noninstallment credit" is classified by Federal Reserve into three types: charge accounts; single-payment loans; and service credit, which includes consumer debts to a variety of creditors, including hospitals, doctors, utilities, and service establishments.

The definition of consumer credit cited above is followed in general but not rigidly in the construction of the series. In the absence of sufficiently refined data, certain arbitrary decisions must be made. For example, all bank credit to farmers is excluded even though an undetermined part is for consumption. On the other hand, all credit for the purchase of automobiles *by individuals* is included even though an undetermined part of the use is for business purposes.

The consumer credit series have recently undergone a thorough revision involving a revision of concepts, adjustment to the latest Census benchmark (1948), and improved estimating techniques involving some new current data. The revision involved an upward adjustment of about 7 percent in the figure for total consumer credit as of December 31, 1952, with greater relative changes in component series. Prior to the revision, the data were classified on the basis of the type of firms originating the credit, and a major distinction was made between loan credit and sale credit. The data are now presented in terms of the financial or other institutions holding the paper, regardless of origin.

Statistical procedures.—The consumer credit series are aggregates of separate estimates of the consumer credit held by a number of different types of creditors—financial institutions, retail and service establishments, and others. The procedures are complex, and vary for the different groups.

In general, estimates for retail trade are based on the 1948 Census of Business, which provides information on credit held by the various retail lines. These figures have been adjusted to exclude estimated amounts of nonconsumer credit. Monthly figures are then arrived at by estimating, on the basis of sample monthly data, what change has taken place since the benchmark date. For the more important credit-granting lines, monthly data on credit receivables are collected from a sample of the firms. For other lines, monthly receivables are estimated by means of a formula based on sales during the previous few months. Annual sample data on receivables, collected from many lines, provide a basis for correcting the monthly estimates.

Consumer Credit

[Millions of dollars]

End of year	Total consumer credit outstanding	Installment credit					Noninstallment credit		
		Total	Automobile paper [1]	Other consumer goods paper [1]	Repair and modernization loans [2]	Personal loans	Total	Charge accounts	Other [3]
1929	6,444	3,151	(4)	(4)	(4)	(4)	3,293	1,602	1,691
1930	5,767	2,687	(4)	(4)	(4)	(4)	3,080	1,476	1,604
1931	4,760	2,207	(4)	(4)	(4)	(4)	2,553	1,265	1,288
1932	3,567	1,521	(4)	(4)	(4)	(4)	2,046	1,020	1,026
1933	3,482	1,588	(4)	(4)	(4)	(4)	1,894	990	904
1934	3,904	1,871	(4)	(4)	(4)	(4)	2,033	1,102	931
1935	4,911	2,694	(4)	(4)	(4)	(4)	2,217	1,183	1,034
1936	6,135	3,623	(4)	(4)	(4)	(4)	2,512	1,300	1,212
1937	6,689	4,015	(4)	(4)	(4)	(4)	2,674	1,336	1,338
1938	6,338	3,691	(4)	(4)	(4)	(4)	2,647	1,362	1,285
1939	7,222	4,503	1,497	1,620	298	1,088	2,719	1,414	1,305
1940	8,338	5,514	2,071	1,827	371	1,245	2,824	1,471	1,353
1941	9,172	6,085	2,458	1,929	376	1,322	3,087	1,645	1,442
1942	5,983	3,166	742	1,195	255	974	2,817	1,444	1,373
1943	4,901	2,136	355	819	130	832	2,765	1,440	1,325
1944	5,111	2,176	397	791	119	869	2,935	1,517	1,418
1945	5,665	2,462	455	816	182	1,009	3,203	1,612	1,591
1946	8,384	4,172	981	1,290	405	1,496	4,212	2,076	2,136
1947	11,570	6,695	1,924	2,143	718	1,910	4,875	2,353	2,522
1948	14,411	8,968	3,054	2,842	843	2,229	5,443	2,713	2,730
1949	17,104	11,516	4,699	3,486	887	2,444	5,588	2,680	2,908
1950	20,813	14,490	6,342	4,337	1,006	2,805	6,323	3,006	3,317
1951	21,468	14,837	6,242	4,270	1,090	3,235	6,631	3,096	3,535
1952	25,827	18,684	8,099	5,328	1,406	3,851	7,143	3,342	3,801

[1] Includes all consumer credit extended for the purpose of purchasing automobiles and other consumer goods and secured by the items purchased.
[2] Includes only such loans held by financial institutions; those held by retail outlets are included in "other consumer goods paper."
[3] Single payment loans and service credit.
[4] Not available.

NOTE.—Revised series; see *Federal Reserve Bulletin*, April 1953 and November 1953. Detail will not necessarily add to totals because of rounding. Monthly data are available beginning with 1929.

Source: Board of Governors of the Federal Reserve System.

For most types of financial institution, benchmark data are provided by the 1950 registration of installment credit grantors under Regulation W and by annual or more frequent statistics on a complete coverage basis. Monthly data on receivables are available from reporting samples of various types of lenders.

Service credit is in general based on less substantial data. The methods vary among the different types. Although virtually complete monthly data are received for telephone bills, the largest category (medical debt) is based on an annual sample survey of consumers, and is "moved" by statistics of industrial illness.

Uses and limitations.—The widespread interest in consumer credit is due in part to its importance as a source of consumer purchasing power, and especially its significance in the market for consumer goods frequently bought on the installment plan. In part it is due to the fact that consumer credit reflects one aspect of the financial position of consumers. Consumer credit is also an important element in the demand for funds in the financial community.

In the face of problems of adapting available data to the precise definition of consumer credit outlined above, Federal Reserve points out that the estimate of total short- and intermediate-term consumer credit probably understates somewhat the true total. Problems of definition and estimation are discussed fully in the descriptive material on the series, cited below.

References.—The data appear originally in a monthly release entitled "Consumer Credit (Short and Intermediate Term)," which shows credit by type, with change during the month and year. Installment credit is further classified by holder. Tables in the *Federal Reserve Bulletin* give back data and more detailed cross-classification by type and holder. The April 1953, issue of the *Federal Reserve Bulletin* explains the recent revision and gives monthly data back to 1939 (and in less detail to 1929). A supplementary technical discussion of estimating methods is available in pamphlet form from Federal Reserve.

BOND YIELDS AND INTEREST RATES

3-Month Treasury Bills

This series measures the average rate at which 3-month Treasury bills have been issued during the month.

An average discount rate is computed for each weekly issuance, on the basis of the varying rates at which portions of the issue are awarded, in order, to the highest bidders. The monthly figure is a simple average of the average rates for the four or five issues during the month.

The series is useful as a measure of a short-term rate on relatively riskless borrowing. Issuance rates, while related to, are typically not identical with market rates on outstanding issues of comparable maturity.

The monthly averages appear in the *Federal Reserve Bulletin*, and in an advance monthly Federal Reserve release, G 13. Rates for the individual issues appear in the *Treasury Bulletin*.

Taxable Bonds

The "Old series" is the average yield of all taxable Treasury bonds due or callable in from 12 to 20 years. There are 4 such bonds currently, all bearing a 2½-percent coupon. The "New series" by definition measures the yield of bonds due or callable in 20 years or more—but at present only a single issue, the 3¼-percent 30-year bond issued in May 1953, is covered. Prior to the appearance of this issue there was a single series covering bonds not due or callable before 12 years.

Both series are based on daily closing-bid quotations in the over-the-counter market as reported to the Federal Reserve Bank of New York by leading dealers in New York City. The old series is an unweighted average of the yields of the four issues included. The new series was begun and the old series redefined in order not to destroy the homogeneity of the group of bonds comprising the old series.

These indexes measure the interest rates on the highest grade of long-term investments of different maturity classes, which are normally below that on the highest grade of corporate securities.

The series are published in the monthly *Treasury Bulletin*, with an advance release in the monthly Federal Reserve release (G 13) entitled *Open Market Money Rates*. The series are discussed in the *Treasury Bulletin*, March 1944, and in current footnotes to the *Bulletin* tables.

Corporate Aaa Bonds (Moody's)

This is a measure of the currently prevailing maturity yield on long-term corporate debt of the highest quality, as reflected in the yields of selected bonds rated Aaa by Moody's Investors Service.

It is an unweighted average of three averages computed separately for industrial, railroad, and public-utility bonds. Each of these component series in turn is an unweighted average of the yields of the selected bonds comprising these series. Monthly figures are averages of daily figures, computed from closing prices.

The plan of the index calls for 10 bonds in each of the 3 industrial categories. However, there are not necessarily 10 suitable issues in each category; currently only 6 railroad and 4 industrial bonds are covered.

This index is a useful general indicator of the level and movement of average yields of selected bonds of the highest grade with sufficiently long maturities and other features to afford an adequate measure of long-term interest rates. It is not a measure of average yield of all Aaa bonds available to the investor.

The daily Aaa corporate bonds yield averages are published in *Moody's Bond Survey*, a weekly publication, which includes from time to time the list of bonds. A brief statement may be found in *Business Statistics, 1953*, a Supplement to the *Survey of Current Business*, and Moody's will supply a similar short statement on request.

Prime Commercial Paper

This series measures the prevailing rate on prime 4 to 6 months commercial paper.

The Federal Reserve Bank of New York determines the prevailing daily selling rate quotation of New York City dealers handling the bulk of the volume of commercial paper of the inventory type. The bank receives less frequent reports from dealers outside New York, which occasionally necessitate retroactive revisions of the series. Monthly figures are averages of weekly prevailing rates.

The series is useful as a measure of the cost of open-market short-term credit available to large business borrowers of the highest credit standing.

It is published in the *Federal Reserve Bulletin* and in the advance Federal Reserve monthly release, G 13.

Bond Yields and Interest Rates

[Percent per annum]

Year	U. S. Government security yields		Corporate Aaa bonds (Moody's)	Prime commercial paper, 4–6 months
	3-month Treasury bills [1]	Taxable bonds [2]		
1919			5. 49	5. 37
1920			6. 12	7. 50
1921			5. 97	6. 62
1922			5. 10	4. 52
1923			5. 12	5. 07
1924			5. 00	3. 98
1925			4. 88	4. 02
1926			4. 73	4. 34
1927			4. 57	4. 11
1928			4. 55	4. 85
1929			4. 73	5. 85
1930			4. 55	3. 59
1931	1. 402		4. 58	2. 64
1932	. 879		5. 01	2. 73
1933	. 515		4. 49	1. 73
1934	. 256		4. 00	1. 02
1935	. 137		3. 60	. 76
1936	. 143		3. 24	. 75
1937	. 447		3. 26	. 94
1938	. 053		3. 19	. 81
1939	. 023		3. 01	. 59
1940	. 014		2. 84	. 56
1941	. 103		2. 77	. 54
1942	. 326	2. 46	2. 83	. 66
1943	. 373	2. 47	2. 73	. 69
1944	. 375	2. 48	2. 72	. 73
1945	. 375	2. 37	2. 62	. 75
1946	. 375	2. 19	2. 53	. 81
1947	. 594	2. 25	2. 61	1. 03
1948	1. 040	2. 44	2. 82	1. 44
1949	1. 102	2. 31	2. 66	1. 48
1950	1. 218	2. 32	2. 62	1. 45
1951	1. 552	2. 57	2. 86	2. 17
1952	1. 766	2. 68	2. 96	2. 33

[1] Rate on new issues within period.
[2] Old series; 2½ percent bonds, 15 years and over prior to April 1952; 12 years and over beginning in April.

NOTE.—Monthly data are available beginning with 1931 (scattered issues beginning December 1929) for 3-month Treasury bills, November 1941 for Government taxable bonds (old series; new series of 3¼ percent bonds of 1978–83, first issued in 1941), 1919 for Corporate Aaa bonds (Moody's) and 1890 for prime commercial paper, 4–6 months.

Source: Board of Governors of the Federal Reserve System.

MONEY SUPPLY

Description of series.—These data measure the supply of money as an aggregate of several types of assets of the highest liquidity. The concept includes not only pocket money but bank deposits, both demand and time, as well as deposits in the Postal Savings System. The table in *Economic Indicators* covers "privately held" deposits and currency (including the holdings of States and political subdivisions but excluding those of banks) and deposits to the credit of the Federal Government. The table is derived from a Federal Reserve tabulation of "Deposits and currency," which covers in addition cash held by the Treasury and net deposits due to foreign banks.

Monthly estimates are for the final Wednesday of the month, except that the June and December estimates are later replaced by reported figures as of the last day of the month.

Statistical procedures.—The bulk of the aggregate of deposits and currency consists of deposits in commercial banks. Monthly estimates of these deposits are prepared in approximately the same manner as those for loans and investments, discussed above. Data for the "weekly reporting member banks" are combined with monthly reports from other commercial member banks, and an estimate is made for nonmember banks on the basis of the reports from the "country" (generally smaller) member banks. Semiannual "all bank" figures later replace the Wednesday figures for June and December. The monthly estimate for deposits in mutual savings banks, which are largely outside the Federal Reserve System, is based on monthly statistics of the National Association of Mutual Savings Banks covering the bulk of mutual savings banks deposits. Figures for United States Government cash holdings are taken from the *Daily Statement of the United States Treasury*. Preliminary figures for Government bank deposits are estimates based also on the Treasury *Daily Statement*, subject to later correction on the basis of bank records. Currency outside banks is based on the Treasury figures for currency held outside the Treasury and the Federal Reserve System, from which are deducted monthly estimates of cash held by the commercial and savings banks.

Although the present series on deposits and currency, including cash held by the Treasury and net deposits due to foreign banks, has been calculated for selected dates back to 1929, it has appeared currently as a monthly series only since 1949. Prior to that year Federal Reserve published a less comprehensive table for deposits and currency.

Relation to other series.—The money supply aggregate shown here is quite different from the well-known "Money in Circulation" figure published monthly by the Treasury. The latter covers only coins and paper money, and consists of the total outside the Treasury and the Federal Reserve banks, less an estimate of the amount of coin held abroad. The money supply data differ in that they add bank deposits, but exclude currency held by the banks.

This table, and the more detailed Federal Reserve deposits and currency table, are derived from data in general available in other banking or Treasury statistics. Because of adjustments and special groupings of items, however, the component series of these two tables cannot necessarily be identified precisely with series found elsewhere.

Uses and limitations.—The data on deposits and currency permit an adequate measurement of the level and general trend of the supply of money as one of the important factors affecting the functioning of the economic system.

There is no one accepted definition of money. The Federal Reserve presentation of deposits and currency makes it possible for the user to adapt the data to his particular use by excluding one or more component series. Thus the *Economic Indicators* excludes deposits of foreign banks and Treasury cash holdings. A more restrictive definition of money supply excludes time deposits. On the other hand, a broader definition might include savings and loan shares or Government savings bonds, for which data are available elsewhere.

References.—The money supply data come from a monthly table entitled "Consolidated Condition Statement for Banks and the Monetary System" in the *Federal Reserve Bulletin*, showing deposits and currency detail and data for related asset and capital accounts of the banking and monetary institutions. The basis for the table is discussed in the *Federal Reserve Bulletin* for January 1948. Historical data to 1892 are available in *Banking and Monetary Statistics*.

Money Supply

[Billions of dollars]

End of period	Total deposits and currency	U. S. Government deposits [1]	Total excluding U. S. Government deposits (privately held money supply) [2]			
			Total	Currency outside banks	Demand deposits adjusted [3]	Time deposits [4]
1903—June	11.5	0.1	11.3	1.5	6.0	3.8
1904—June	12.0	.1	11.9	1.6	6.3	4.0
1905—June	13.2	.1	13.2	1.6	7.1	4.5
1906—June	14.1	.1	14.0	1.8	7.5	4.8
1907—June	15.1	.2	14.9	1.7	7.9	5.4
1908—June	14.7	.1	14.6	1.7	7.4	5.5
1909—June	15.8	.1	15.7	1.7	7.8	6.3
1910—June	17.0	.1	16.9	1.7	8.3	6.9
1911—June	17.8	[5]	17.7	1.7	8.7	7.3
1912—June	18.9	.1	18.8	1.8	9.2	7.9
1913—June	19.4	[5]	19.4	1.9	9.1	8.4
1914—June	20.0	.1	20.0	1.5	10.1	8.4
1915—June	20.7	[5]	20.6	1.6	9.8	9.2
1916—June	24.3	.1	24.2	1.9	12.0	10.3
1917—June	28.4	1.1	27.3	2.3	13.5	11.5
1918—June	31.5	1.6	29.9	3.3	14.8	11.7
1919—June	35.7	1.0	34.6	3.6	17.6	13.4
1920—June	39.9	.3	39.6	4.1	19.6	15.8
1921—June	37.8	.5	37.4	3.7	17.1	16.6
1922—June	39.0	.2	38.8	3.3	18.0	17.4
1923—December	43.5	.3	43.2	3.7	19.1	20.4
1924—December	47.1	.3	46.8	3.7	20.9	22.2
1925—December	50.3	.3	50.0	3.8	22.3	23.9
1926—December	51.1	.3	50.9	3.8	21.7	25.3
1927—December	54.1	.3	53.8	3.7	22.7	27.4
1928—December	55.7	.3	55.4	3.6	23.1	28.7
1929—December	54.7	.2	54.6	3.6	22.8	28.2
1930—December	53.6	.3	53.2	3.6	21.0	28.7
1931—December	48.4	.5	47.9	4.5	17.4	26.0
1932—December	45.4	.5	44.9	4.7	15.7	24.5
1933—December	42.6	1.0	41.5	4.8	15.0	21.7
1934—December	48.1	1.8	46.3	4.7	18.5	23.2
1935—December	52.7	1.5	51.3	4.9	22.1	24.2
1936—December	57.6	1.2	56.4	5.5	25.5	25.4
1937—December	56.8	1.0	55.8	5.6	24.0	26.2
1938—December	59.9	1.8	58.1	5.8	26.0	26.3
1939—December	64.7	1.5	63.3	6.4	29.8	27.1
1940—December	71.1	1.1	70.0	7.3	34.9	27.7
1941—December	79.1	2.8	76.3	9.6	39.0	27.7
1942—December	100.5	9.2	91.3	13.9	48.9	28.4
1943—December	123.4	11.0	112.4	18.8	60.8	32.7
1944—December	151.4	21.2	130.2	23.5	66.9	39.8
1945—December	176.4	25.6	150.8	26.5	75.9	48.5
1946—December	167.5	3.5	164.0	26.7	83.3	54.0
1947—December	172.3	2.3	170.0	26.5	87.1	56.4
1948—December	172.7	3.6	169.1	26.1	85.5	57.5
1949—December	173.9	4.1	169.8	25.4	85.8	58.6
1950—December	180.6	3.7	176.9	25.4	92.3	59.2
1951—December	189.8	3.9	186.0	26.3	98.2	61.4
1952—December	200.4	5.6	194.8	27.5	101.5	65.8

[1] Beginning with 1916, includes U. S. Government deposits at Federal Reserve banks; beginning with 1938, includes U. S. Treasurer's time deposits open account.
[2] Includes deposits and currency held by State and local governments.
[3] Demand deposits other than interbank and U. S. Government, less cash items reported as in process of collection.
[4] Includes deposits in commercial banks, mutual savings banks, and the Postal Savings System other than interbank time deposits, United States Treasurer's time deposits open account, and postal savings redeposited in banks.
[5] Less than $50 million.

NOTE.—Detail may not add to totals because of rounding. Monthly data are available beginning with 1943.

Source: Board of Governors of the Federal Reserve System.

FEDERAL BUDGET RECEIPTS AND EXPENDITURES

Description of series.—Budget receipts represent the cash income of the Federal Government and are derived from various kinds of taxes, fees, fines, proceeds from the sale of property, etc. Budget expenditures represent current payments for Government programs, including grants and contributions and capital outlays. Budget expenditures are payable out of budget receipts or out of borrowing. Transactions of trust funds are excluded from budget receipts and expenditures.

Budget expenditures, budget receipts, and the public debt are compiled daily from records of the United States Treasury and published in the Daily Statement of the United States Treasury. The figures are compiled from the latest daily reports received by the Treasurer of the United States from Government depositaries, Treasury disbursing officers, and the Departments of the Army and the Air Force. For disbursements made by Treasury disbursing officers, the figures for expenditures represent checks issued, but where checks-issued data are not available currently (now over 50 percent of the total expenditures), the figures represent checks paid, as reported in daily transcripts received from Treasury depositaries. A few items included in budget expenditures are in the form of debt issuances (for example, Armed Forces leave bonds issued in 1947) or increases in the public debt (such as the current increase in redemption value of savings bonds).

"Budget expenditures" cover the general fund, the special funds, and the revolving and management funds. Expenditures for the revolving and management funds are on a net basis; that is, the collections received by each fund are deducted from the total of the payments made for goods and services received, and the resulting figure is shown as the expenditure. Where the collections are larger than the payments from such a fund, the net amount included in the expenditures is a negative item. Budget expenditures do not include retirement of Government debt, nor do they include net investments in United States Government securities (which occur sometimes in the case of Government corporations). "Major national security programs" is a special classification of budget expenditures first published by the Bureau of the Budget in 1952, in the 1953 Budget Document. It comprises: (1) Military services, including Armed Forces, stockpiling of strategic and critical materials, selective service, and the National Advisory Committee for Aeronautics; (2) international security and foreign relations, including military and economic assistance; (3) development and control of atomic energy; (4) civil defense; (5) merchant marine; and (6) defense production and economic stabilization activities.

"Budget receipts" include all money paid into the Treasury to the credit of the general fund and of special funds. They do not include money obtained from borrowing; nor do they include receipts of revolving and management funds, since these funds are reported on a net basis in the expenditure figures.

"Budget surplus or deficit" represents the difference between the budget receipts and budget expenditures.

The "public debt" is affected not only by the budget surplus or deficit, but by other factors as well. The amount which it is necessary to borrow or which it is possible to repay is also influenced by the amount of the Treasury cash balance; the result of trust-fund transactions; the use of Government corporation borrowing directly from the public as a means of financing budget expenditures of the corporations (and vice versa in the case of direct repayments of borrowing by the corporations); and the change in the amount of checks outstanding and other items in process of clearance through the accounts.

In these tables the amounts refunded by the Government (principally for the overpayment of taxes) are reported as deductions from total budget receipts rather than as expenditures. Investments in revolving and management funds, and dividends and repayment of investment in such funds are excluded from both receipts and expenditures.

Relation to other series.—Annual data on receipts and expenditures of the Government are also reported by the Treasury Department in the Combined Statement of Receipts, Expenditures, and Balances of the United States Government. The receipts data in the Combined Statement include those collections which have been credited in the accounts of the Treasurer of the United States, and the expenditures data include the checks which have been issued during the fiscal year in payment of Government obligations. The figures reported in the Combined Statement are not available until several months after the close of the fiscal year to which they relate. They differ somewhat from those in the Daily Statement of the United States Treasury, principally because the greater time lag in publication makes it possible to include only those transactions which occurred in the particular fiscal year.

Data on tax receipts of the Government are also published monthly by the Internal Revenue Service, and appear in the *Treasury Bulletin*. The Internal

Federal Budget Receipts and Expenditures

[Billions of dollars]

Year	Budget expenditures		Net budget receipts	Budget surplus (+) or deficit (−)	Public debt (end of period) [2]
	Total	Major national security programs [1]			
Fiscal year 1929	3.1	([3])	3.9	+0.7	16.9
Fiscal year 1930	3.3	([3])	4.1	+.7	16.2
Fiscal year 1931	3.6	([3])	3.1	−.5	16.8
Fiscal year 1932	4.7	([3])	1.9	−2.7	19.5
Fiscal year 1933	4.6	([3])	2.0	−2.6	22.5
Fiscal year 1934	6.7	([3])	3.1	−3.6	27.7
Fiscal year 1935	6.5	([3])	3.7	−2.8	32.8
Fiscal year 1936	8.5	([3])	4.1	−4.4	38.5
Fiscal year 1937	7.8	([3])	5.0	−2.8	41.1
Fiscal year 1938	7.0	([3])	5.8	−1.2	42.0
Fiscal year 1939	9.0	1.1	5.1	−3.9	45.9
Fiscal year 1940	9.2	1.6	5.3	−3.9	48.5
Fiscal year 1941	13.4	6.5	7.2	−6.2	55.3
Fiscal year 1942	34.2	27.5	12.7	−21.5	77.0
Fiscal year 1943	79.6	73.6	22.2	−57.4	140.8
Fiscal year 1944	95.3	88.2	43.9	−51.4	202.6
Fiscal year 1945	98.7	88.7	44.8	−53.9	259.1
Fiscal year 1946	60.7	47.2	40.0	−20.7	269.9
Fiscal year 1947	39.3	20.9	40.0	+.8	258.4
Fiscal year 1948	33.8	16.4	42.2	+8.4	252.4
Fiscal year 1949	40.1	19.1	38.2	−1.8	252.8
Fiscal year 1950	40.2	17.8	37.0	−3.1	257.4
Fiscal year 1951	44.6	26.4	48.1	+3.5	255.3
Fiscal year 1952	66.1	47.2	62.1	−4.0	259.2
Fiscal year 1953	74.6	52.8	65.2	−9.4	266.1

[1] Includes expenditures for military services, international security and foreign relations, development and control of atomic energy, promotion of the merchant marine, promotion of defense production and economic stabilization, and civil defense. Data not available for years prior to 1939.
[2] Includes guaranteed securities, except those held by the Treasury. Part of total shown is not subject to statutory debt limitation.
[3] Not available.

NOTE.—Detail will not necessarily add to totals because of rounding.
For data beginning with 1789, see "Historical Statistics of the United States, 1789–1945," Series P 89–108.

Sources: Treasury Department and Bureau of the Budget.

Revenue series is based upon reports of the District Directors of Internal Revenue. It is not directly comparable with data on tax receipts reported in the Daily Statement series, since withheld taxes deposited by employers on a current basis with depositaries are not recorded and reported by District Directors until quarterly tax returns are filed, but are reported in the Daily Statement when the deposit is made. Amounts collected directly by District Directors are recorded and reported when collected for the internal-revenue series, but are not included in the Daily Statement series until they are received and acknowledged by a Federal depositary.

Uses and limitations.—Data on budget receipts and expenditures are useful in appraising the impact of Federal financial operations. For purposes of economic analysis, however, they have limitations, some of which have been corrected by deriving other statistical series from the budget receipts and expenditures data. For example, the series on Federal cash receipts from and payments to the public (see the following section) is based upon the data on budget receipts and expenditures, together with trust fund transactions, with certain adjustments to arrive at the cash flow of funds to and from the public.

Budget receipts and expenditures are also the basis for the Government accounts included in the Department of Commerce income and product statistics (see p. 42 and p. 4). Since budgetary figures are reported on a cash rather than an accrual accounting basis, the budgetary figures are adjusted to the accrual accounting basis used in the income and product accounts; for example, corporation profits taxes are adjusted to show tax liabilities instead of tax collections. The expenditure data are also adjusted for the lag between production of goods ordered by the Government and the actual payment for those goods by the Treasury.

References.—The basic release of the budget receipts and expenditures data is the Daily Statement of the United States Treasury. A description of the basis was published in the Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year 1952, pages 501–504.

FEDERAL CASH RECEIPTS FROM AND PAYMENTS TO THE PUBLIC

Description of series.—This series is derived from the same sources as the series on budget receipts and expenditures, described above. The Government is defined to include transactions of the Treasurer of the United States as agent for certain quasi-governmental corporations, such as the Federal Deposit Insurance Corporation, home-loan banks, Federal land banks, etc. These transactions are excluded from the series on budget receipts and expenditures. The public is defined to include individuals; banks, including the Federal Reserve and Postal Savings Systems; businesses; private corporations; State, local, and foreign governments; and international organizations.

In deriving this series, the transactions of trust funds are added to those included in budget receipts and expenditures. Intragovernmental transactions (for example, payments of interest on securities held by trust funds which are budget expenditures and also trust-fund receipts) are then eliminated to obtain receipts from and payments to the public. Receipts of the Government from the exercise of its monetary authority (mainly seigniorage on silver) are excluded, because they are not cash received from the public. A few items included in budget expenditures which are in the form of debt issuances or increases in the public debt are also excluded from this series. The most important of these is the current increase in redemption value of savings bonds. At the time of redemption the amount of interest paid is included as a payment to the public.

The excess of receipts or payments is sometimes referred to as the cash surplus or deficit.

Conceptual and statistical revisions of this series were made in 1947. A few changes have been made since then to reflect similar changes made in the concept of budget receipts and expenditures, such as the change in the reporting of refunds of receipts.

Relation to other series.—This series is similar to the series on cash operating income and outgo published monthly in the *Treasury Bulletin*. The only difference between the two series is that receipts from the exercise of monetary authority (i. e., seigniorage) are included in cash operating income, but excluded from receipts from the public. The figures published in *Economic Indicators* have been adjusted to the concept of receipts from the public.

Uses and limitations.—The series on receipts from and payments to the public measures the flow of cash between the public and the United States Government as a whole more accurately than does the series on budget receipts and expenditures. Thus, for purposes of economic analysis it is a somewhat better and more complete measure of the economic impact of Federal financial transactions. However, certain Federal financial operations which are not measured by this series or by the series on budget receipts and expenditures also influence economic activity. For example, Federal guaranties and insurance of private loans have relatively little effect on payments to the public but have a significant effect on economic activity. Similarly, the enactment of large appropriations for defense after the attack on Korea stimulated business activity long before the authorized funds were spent and reported as payments to the public.

References.—Current quarterly data on Federal cash receipts from and payments to the public are prepared for *Economic Indicators*. The related series on Treasury cash income and outgo is published monthly in the *Treasury Bulletin*. Annual data for both series, by fiscal years back to 1929, are published in the *Statistical Abstract*.

The adjustments made in the figures for budget receipts and expenditures to obtain the concept of cash receipts from and payments to the public are listed in detail in an annual release of the Bureau of the Budget entitled "Receipts From and Payments to the Public, Supporting Tables." These adjustments are also summarized in tables 1 to 5, "Treasury Cash Income and Outgo," of the monthly *Treasury Bulletin*.

Federal Cash Receipts From and Payments to the Public

Year	Federal cash receipts from the public	Federal cash payments to the public	Excess of receipts (+) or payments (−)
	Billions of dollars		
Fiscal years:			
1929	3.8	2.9	+0.9
1930	4.0	3.1	+.9
1931	3.2	4.1	−1.0
1932	2.0	4.8	−2.7
1933	2.1	4.7	−2.6
1934	3.1	6.5	−3.3
1935	3.8	6.3	−2.4
1936	4.2	7.6	−3.5
1937	5.6	8.4	−2.8
1938	7.0	7.2	−.1
1939	6.6	9.4	−2.9
1940	6.9	9.6	−2.7
1941	9.2	14.0	−4.8
1942	15.1	34.5	−19.4
1943	25.1	78.9	−53.8
1944	47.8	94.0	−46.1
1945	50.2	95.2	−45.0
1946	43.5	61.7	−18.2
1947	43.5	36.9	+6.6
1948	45.4	36.5	+8.9
1949	41.6	40.6	+1.0
1950	40.9	43.2	−2.2
1951	53.4	45.8	+7.6
1952	68.0	68.0	+.1
1953	71.3	76.6	−5.3
	Millions of dollars		
Calendar years:			
1943[1]	37,863	88,987	−51,124
1944	48,131	94,810	−46,679
1945	49,423	86,142	−36,719
1946	41,441	41,399	+42
1947	44,282	38,616	+5,666
1948	44,922	36,897	+8,027
1949	41,346	42,642	−1,295
1950	42,419	41,969	+450
1951	59,278	58,034	+1,244
1952	71,339	72,980	−1,641

[1] First year for which data are available.

NOTE.—Detail will not necessarily add to totals because of rounding.

Sources: Bureau of the Budget and Treasury Department.