

AUGUST 1947

SURVEY OF

CURRENT BUSINESS



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The Business Situation

By the
Office of Business Economics

FIRMING of commodity prices during July was accompanied by seasonal declines in retail trade and manufacturing activity. At the same time, total employment was at a high point, as a result of the summer rise in agriculture, construction, and various service trades, and the flow of personal income was being bolstered by further upward adjustment of wage rates.

With consumer, business, and foreign demand remaining relatively steady, apart from seasonal influences, and with Government purchases showing only minor variations, there was apparently little change—other than that resulting from the upward drift of prices—in the aggregate value of production as the economy entered the second half of the year. In the second quarter of 1947 gross national product was at an annual rate of 226 billion dollars, according to the estimates presented in this issue. This dollar rate is somewhat higher than the war peak, reflecting the substantial price increases during the postwar period.

The recent advances in the weekly wholesale price index have occurred not merely in the volatile farm and food sectors, but in the industrial sector as well. Thus, the 3-month period of relative steadiness in the over-all price index for commodities other than farm products and foods was terminated in July as new increases were made effective for a wide range of industrial products. Among the increases which will affect raw material costs for an important segment of industry was the advance in prices of principal steel products, amounting to about 6 dollars a ton, on the average.

Inventory Rise Slackens, Foreign Investment Stepped Up

Data now available covering the second quarter show the magnitude of the counterbalancing changes that served to sustain private expenditures. On the downside was the decline in the rate of inventory accumulation which, on a national product basis, dropped from an annual rate of 2.7 billion dollars in the first quarter to 1.5 billion dollars in the second quarter. The month-to-month changes in the book value of total business inventories were minor in both May and June, with actual declines—largely seasonal—being recorded at the distributive level in the 2 months.

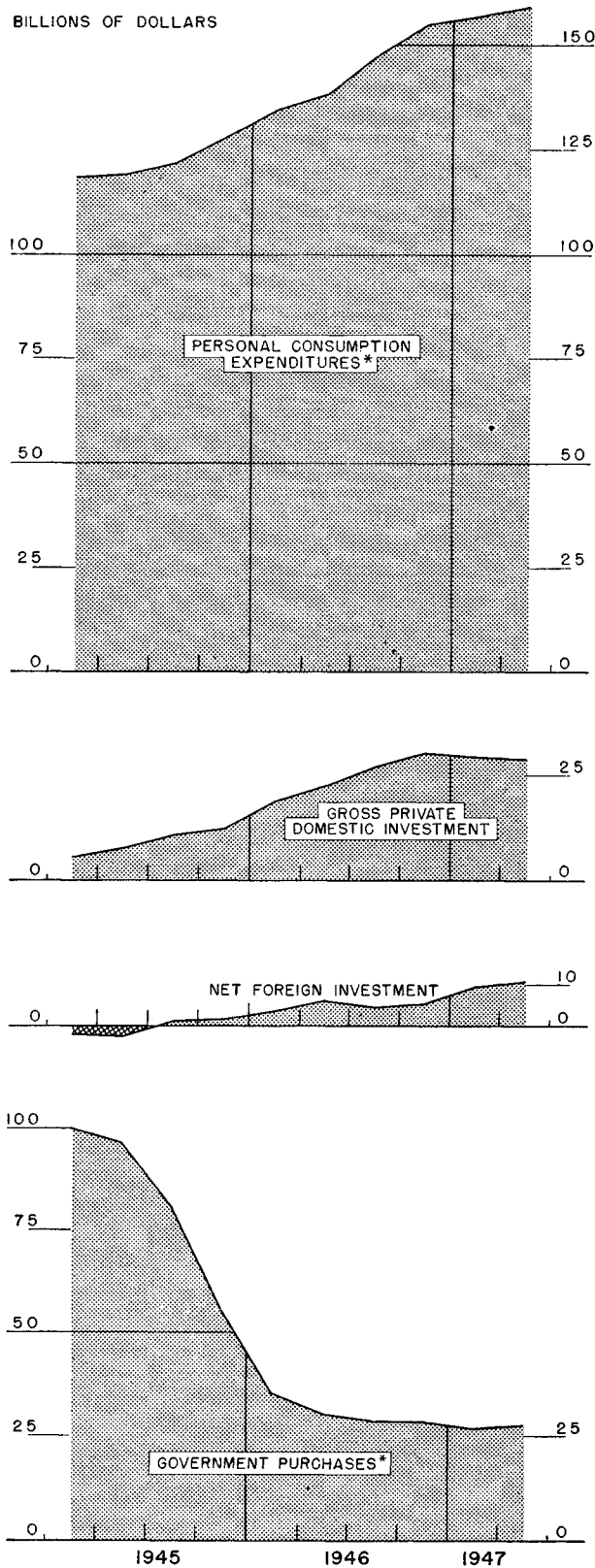
On the upside, net foreign investment in the second quarter rose to 10.6 billion dollars, at seasonally adjusted annual rates, an increase more than sufficient to offset the drop in net inventory buying. Although the value of shipments abroad in June was lower than in the 3 preceding months, it seems that the decline was associated with the 3-day work stoppage at many ocean ports.

Developments in International Field

There were two significant economic events in the international field in July: First, the establishment of convertibility of sterling received by other countries in payment for exports of

Chart I.—COMPOSITION OF GROSS NATIONAL PRODUCT

BILLIONS OF DOLLARS



1945 1946 1947

QUARTERLY TOTALS, SEASONALLY ADJUSTED, AT ANNUAL RATE

*GOODS AND SERVICES.

47-400

goods and services to the United Kingdom; and, second, the sale of debentures by the International Bank for Reconstruction and Development.

The requirement to convert sterling paid out on current transactions into dollars or other "hard" currencies beginning with July 15, 1947, is part of the loan agreement between the United States and the United Kingdom which was signed on July 15, 1946. The latest step makes currently earned sterling balances generally transferable in world trade even when the United Kingdom is not a partner. Over the last several months, however, the list of countries whose sterling receipts could be converted had been gradually extended, so that only very few additional countries remained to be added when the deadline of July 15th arrived. It is important to note that the obligation to exchange dollars for sterling does not apply to previous obligations, particularly to sterling obligations incurred during the war, except in so far as specific agreements with the creditor countries made them convertible. At the present time the loan arrangement with the United States is meeting the current deficit, but these dollar resources are being depleted at a more rapid rate than contemplated at the time the loan was negotiated, for a variety of reasons. These include the inability of the United Kingdom to meet the projected export schedule at the same time that increased prices of goods obtained from the United States and other countries raised the expenditures for imports.

Initial Borrowing by International Bank

A new source of dollars for foreign countries was opened up by the successful first offering in July of 250 million dollars of debentures by the International Bank for Reconstruction and Development. Two types of bonds were issued in the amounts of 100 million dollars at 2½ percent for 10 years and 150 million dollars at 3 percent for 25 years. Both issues were admitted at once to trading on the New York Stock Exchange where they were quoted at a premium.

The 250 million dollars would meet the bank's requirements for the recently granted loan to France in the same amount. Further bond issues, and the 725 million dollars obtained from the members' subscriptions (including 635 million dollars from the United States) would be required to meet additional requirements when action is taken on further loan requests which so far amount to over 2 billion dollars.

Construction Activity Up, Awards Lag

On the construction front, activity continues to show the usual seasonal gains, with the largest relative increases occurring in residential building and public highway construction. The cumulative dollar value of new construction this year through July was 35 percent above the value in the same period of 1946. The year-to-year gains in June and July were 22 and 16 percent, respectively.

Both the number of new permanent private dwelling units started and the number completed in June were higher than in the preceding month. June "starts" totalled 75,000, probably the highest for any month since the period of the twenties, and completions were 63,000.

The value of contract awards for construction declined from May to June to about the same volume as in March and April, even though some rise is normally expected during this season of the year. For the first half of the year, the total value of contract awards was about 10 percent below the value in the same period a year ago. Awards for nonresidential building, due partly to official restrictions in effect this year, were almost one-fourth less than last year's volume, but contracts for public utilities and heavy engineering construction were running ahead of a year ago.

Little Change in Retail Sales

Retail sales have shown the least variation since the first of the year of all elements in the total demand picture. June sales, at a seasonally adjusted annual rate of 106 billion dollars, were at about the same rate as in the 2 preceding months and 15 percent above the figure for June 1946.

The major area of strength in the sales picture continued to be in the durable goods group. Sales at home furnishings and building materials and hardware stores advanced 10 and 5 percent, respectively, from May to June, after adjustment for seasonality. Automotive dealers reported little change, however, due to the lower volume of new car deliveries in the latest months.

Sales at nondurable goods stores were generally unchanged in June, although some falling off in business volume was noticeable at eating and drinking places. The year-to-year gain for the nondurable goods group was smaller than in the preceding month even though food sales in June 1946 were held down by the limited meat supply.

Pick-up in Department Store Orders

As already noted, the accumulation of inventories by department stores and

other retail outlets was halted during the second quarter of the year. This development came about as a result of the shift in buying policy instituted by the larger merchandisers in the latter part of 1946, as a result of developments which influenced other retailers with some lag. Late this spring, however, there was evidence that this policy had produced the desired stock-sales ratios in some segments so that new orders began to pick up to a point more in line with current sales. The widespread renewal of summer sales indicates the return of prewar policies of not carrying over seasonal merchandise, but these clearances are being accompanied by the building up of fall stocks.

Federal Reserve Board statistics covering stocks, sales, and outstanding orders of 296 large department stores indicate an increase in new orders in both May and June from the low point reached in April. Although some pick-up in order placing is customarily expected at this time, the increase this year was larger percentage-wise than that which took place between April and June a year ago. The rise in new orders, in addition to the low level of merchandise receipts in June, brought about the first increase in total outstanding commitments of these stores since the first of the year.

Industrial Production Edges Downward

Industrial production continued to edge downward in June and July, chiefly as a result of slackening activity in some nondurable goods manufacturing industries and the temporary slow down in steel operations which stemmed from uncertainty over the signing of the new work contract in the coal industry. The Federal Reserve Board seasonally adjusted index of nondurable goods manufacturing at midyear was about 5 percent below the first quarter average. Durable goods manufacturing showed only minor variations over the half-year period, with supply difficulties still limiting the output of finished goods. Assemblies of passenger cars and trucks, for example, dropped from 398,000 in June to about 380,000 units in July, or 4 percent, despite the fact that there was one more working day in the latter month. On a daily average basis, output in July was the lowest since January.

The dollar value of manufacturers' shipments was lower in June than in the preceding 2 months, but the index of shipments, which is adjusted for the number of working days, rose during the month. Daily average shipments were higher in both the durable and nondurable goods industries.

Seasonal Gains Lift Employment Total

As a result of influences largely seasonal in nature, total civilian employment increased in June, with approximately 60 million persons reported by the Bureau of the Census as holding civilian jobs, as compared with somewhat over 56 million in June 1946.

The volume of employment is normally at a seasonal high in the summer months, and the labor force also undergoes a rise as schools close down for the vacation period. Thus, the 1.7 million rise in employment from May to June was accompanied by an increase in unemployment associated with these temporary entries. At 2.6 millions, unemployment was at the same level as a year ago, but the Census week came several days later this year and caught a larger number of persons just out of school.

Farm work accounted for an increase of 1.4 million jobs from May to June, as employment in agriculture reached 10.4 million, 400,000 more than a year ago. June was the second consecutive month in which the number of farm workers exceeded the number in the corresponding month of 1946.

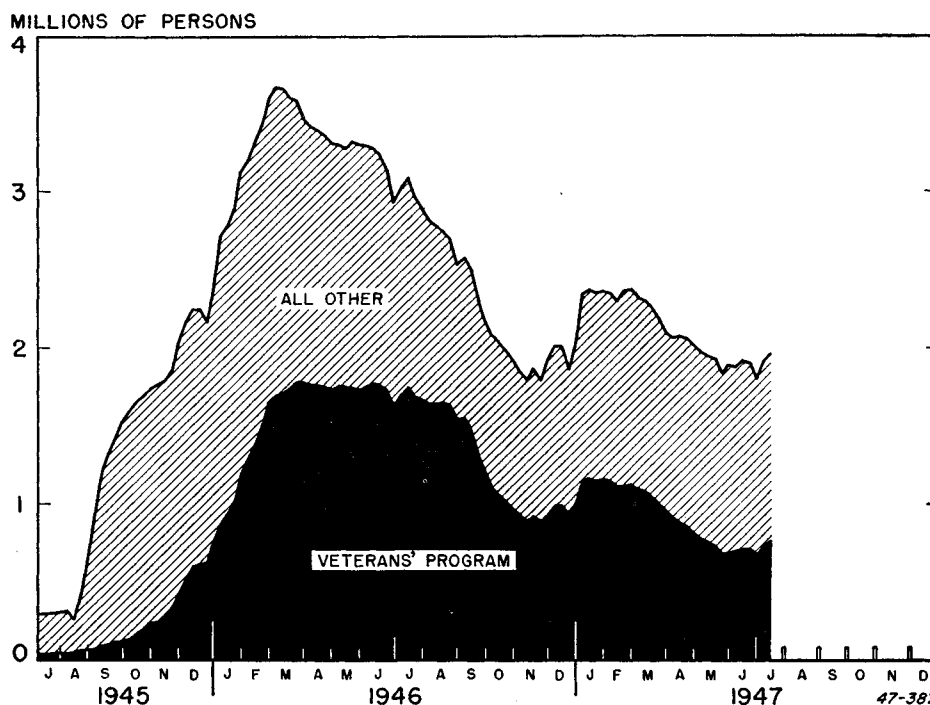
Among the seasonal changes affecting nonfarm employment, most important were the further rise in construction employment and the advances scored in mining, transportation, trade, and services. A further factor was the return of the remaining telephone workers who had been on strike.

No Change in Factory Employment

Manufacturing employment, according to Bureau of Labor Statistics estimates, showed little change from May to June, a period in which some seasonal increase was to be expected. Thus, the seasonally adjusted index continued the slow decline in evidence since March of this year. It should be pointed out, however, that the appropriate seasonal adjustments are sometimes difficult to determine because of changes in the long-term seasonal pattern of operations in some industries.

Within manufacturing, the recent changes have been comparatively small and were largely in the nature of offsetting seasonal movements. Among the industries reporting gains were food processing and lumbering. The decline in textile and apparel employment apparent since the early months of the year appeared to have been about halted in June. The small declines in such industries as radio, nonferrous metals, and rubber, however, could not be ascribed to seasonal factors.

Chart 2.—Weekly Insured Unemployment



Source of data: Bureau of Employment Security, Social Security Administration.

Unemployment Rises Seasonally

The increase of almost 600,000 in the persons unemployed in June occurred primarily in the school-age brackets and represented for the most part summer job hunting by students just out of school. Over the past twelve months unemployment has moved within the narrow range of from 1.9 to 2.6 million persons, with most of the variation accounted for by the seasonal shifting in job opportunities.

As may be seen from chart 2, insured unemployment in mid-July was slightly under 2 million persons, a level which has prevailed since early May. The insured unemployment statistics are derived from reports on continued claims (i. e., all claims other than initial claims) filed under the State and Railroad unemployment insurance programs and under the Veterans' Unemployment Allowance program and are not directly comparable with the Census estimates of unemployment derived from the monthly sample survey of the labor force. The more obvious differences between the two sets of figures stem from the limited coverage of the unemployment programs, the exhaustion of benefit rights, the treatment of workers with jobs but not at work, the handling of part-time workers, and the definition of unemployment.

The low point over the last year in the number receiving State unemployment benefits was reached in November 1946.

By the end of the year, the number had risen to slightly over 1 million, and it has remained above that level for the last 6 months. On the other hand, the number of veterans receiving unemployment allowances has been declining almost steadily for more than a year, as former servicemen found peacetime occupations in the active job market which has prevailed, or, in some cases, exhausted their benefit rights. Some 760,000 were receiving veterans' allowances in mid-July, as compared with 1.7 million a year earlier.

Personal Income Moves Upward

Higher wage rates and farm product prices were the principal factors responsible for the rise in personal income in June to an annual rate of 193 billion dollars, after seasonal correction, but the termination of the strike in the telephone industry also influenced the month-to-month change. The rate was under 192 billion dollars in May and about 173 billion dollars in June of last year.

The contribution of increases in average hourly wage earnings to the rise in personal income so far during 1947 is described in the quarterly analysis of the income flow which appears in a later section of this review. Wage rate adjustments, affecting the cost of both basic raw materials and fabricated products, have also influenced the recent upward move in industrial prices.

Wholesale Prices Top March Average

The advance in wholesale prices which took place in July resulted from increases in the three broad groups of commodities: farm products, foods, and industrial commodities. Unlike the price indexes for farm and food products, which reached high points in March, receded somewhat, and then rose again, the index for the nonfarm, nonfood group had shown practically no change for 3 months prior to July.

New highs in fuel and lighting products prices, reflecting primarily the July increase in bituminous prices, in addition to advances in the prices of iron and steel products, leather, and hides and skins accounted for most of the in-

crease in the industrial price average. As a result of developments abroad, crude rubber prices which had been under steady downward pressure earlier in the year, moved forward again in July, showing a net gain of 14 percent for the month. It may be noted that the recent price increases for steel and coal were not fully reflected in the price indexes during July.

The rise in prices of farm products during July reflected for the most part higher livestock and poultry prices. Late June and early July declines in grain prices were wiped out in following weeks and by the end of the month grain prices were again close to the postwar highs of last March. Except for fruits and vegetables, prices of foods continued their

rise, the wholesale food price index at the end of July standing 3 percent above the end-of-June level.

Prices of building materials continued to edge down slightly in July, while substantially lower prices for oils and fats and drugs and pharmaceuticals reduced the index of chemicals and allied products prices by 4 percent over the month.

Food Prices Lead Rise at Retail

On June 15, the BLS Consumers' Price Index stood at 157 (1935-39=100).¹ Most of the increase of about 1 percent over the index for the previous month was attributable to the higher cost of food. In the case of meats, for example, the May-to-June advance averaged 6 percent at retail.

National Product and Income in the First Half of 1947

In the second quarter of 1947, the gross national product, which measures the market value of the output of goods and services produced by the Nation, was flowing at an annual rate of 226 billion dollars. This represented an increase over the first quarter, but the rate of growth had slackened as compared with 1946.

In terms of current dollars, the level of production is at an all time high, exceeding by 4 billion the war peak of 222 billion dollars reached in the first quarter of 1945. To a considerable extent, however, these dollar values reflect higher postwar prices. The volume of production—though far above prewar levels—was below its wartime peak because less urgent demand led to shorter hours of work and withdrawals from the labor force.

As can be seen from chart 3, the postwar dip in national product was small and the recovery rapid. The major forces responsible for maintaining economic activity in spite of the rapid liquidation of war production can be summarized with the aid of table 1.

Postwar Expenditure Pattern

Table 1, which compares the second quarter of 1947 with the second quarter of 1945, is similar to the table on the "Nation's Economic Budget" published in recent annual Budget messages of the President and in his Economic Reports to Congress. It represents a rearrangement of the basic national income and product data so as to show the impact of the four major sectors of the econ-

omy—consumers, businesses, government, and foreign nations—upon the flow of income and production. The main difference between table 1 and the regular gross national product statement is that it shows not only the expenditures for gross national product by the various sectors, but also their receipts and net expenditures.

It can be seen from this table that in the second quarter of 1947 personal con-

sumption expenditures—at an annual rate of 159 billion dollars—accounted for 70 percent of total expenditures for gross national product. In the second quarter of 1945, immediately before the end of the war, they constituted only 54 percent.

To put the comparison in a somewhat different manner, in the second quarter of 1947 individuals saved 11 billion dollars at annual rates out of a total disposable income of 170 billion. Two years

Table 1.—Receipts and Expenditures for Gross National Product by Major Sectors of Economy, Second Quarter of 1945 and 1947; Seasonally Adjusted Quarterly Totals at Annual Rates

[Billions of dollars]

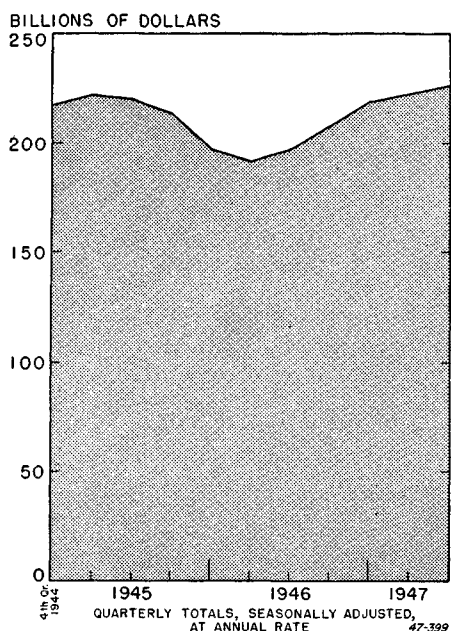
	Second quarter 1945			Second quarter 1947		
	Receipts	Expenditures	Net expenditures	Receipts	Expenditures	Net expenditures
Persons:						
Disposable income.....	152.9			170.1		
Consumption expenditures.....		118.8			159.0	
Net expenditures.....			-34.1			-11.1
Private business:						
Undistributed corporate profits and other reserves ¹	19.1			14.9		
Gross domestic investment.....		7.6			28.8	
Net expenditures.....			-11.5			13.9
Rest of the world:						
Net foreign investment.....		-2.6	-2.6		10.6	10.6
Government:						
Receipts.....	56.1			55.7		
Expenditures.....		104.3			42.3	
Net expenditures.....			48.2			-13.4
Adjustment for nongross-national-product receipts and expenditures ²	-7.9	-7.9	0	-14.7	-14.7	0
Gross National Product or Expenditure.....	220.2	220.2	0	226.0	226.0	0

¹ Consists of undistributed corporate profits, corporate inventory valuation adjustment, capital consumption allowances, and the statistical discrepancy.

² Consists of Government expenditures other than for gross national product—viz., transfer payments, net interest payments, and subsidies minus surplus of Government enterprises.

Note: The main difference between table 1 and the "Nation's Economic Budget" as published in recent annual Budget messages of the President and in his Economic Reports to Congress lies in the treatment of Government receipts and expenditures. The measurement of Government receipts and expenditures in table 1 conforms to national income and product definitions (cf. footnote 1 to table 8 in the National Income Supplement to the July Survey of Current Business); in the "Nation's Economic Budget" the "Receipts from and payments to the public" concept is employed.

Chart 3.—Gross National Product



Source of data : Office of Business Economics.

earlier, under the influence of wartime incentives, shortages, and price controls, they had saved 34 billion dollars, or three times as much, out of a disposable income of only 153 billion. This postwar shift in consumption outlays, influenced to a considerable extent by the shortages created by war, was one of the most important factors supporting economic activity at a high level after Government demand for war output had been withdrawn.

The high volume of domestic business investment has been another. As can be seen from the table, domestic business investment, at an annual rate of 29 billion dollars, represented 13 percent of gross national product in the second quarter of the current year. In the second quarter of 1945 it amounted to only 8 billion, or 3 percent of total production. It will be recalled, of course, that at that time the capital formation privately financed measured only a fraction of total additions to capital equipment.

The increase in net sales to foreign countries, also rebuilding their peacetime economies, further added to the postwar demand for the output of American business. In the second quarter, the net demand on this score was 11 billion dollars, as contrasted with a negative of 3 billion dollars two years earlier, when the rest of the world was, on balance, a seller of goods to the United States.

The shift in the situation is also shown by the net receipts and expenditures of each sector. In the second quarter of

1947, American business and foreign countries made a net addition of more than 24 billion to the income stream. This was offset by personal savings of 11 billion and a government surplus (calculated according to national income definitions) of 13 billion. In the second quarter of 1945, a Government deficit of 48 billion dollars was the main expansionary factor. Consumers, businesses, and foreign countries had an excess of receipts over expenditures offsetting the government deficit.

Heavy postwar consumption and investment demand, bidding for a diminished labor supply in the framework of a productive organization that had not yet made a complete adjustment to postwar conditions, was sufficient in terms of dollars not only to offset the sharp reduction of government demand for war output, but, in addition, to give rise to

Table 2.—National Income and Product, First and Second Quarters of 1947

	[Billions of dollars]			
	Unadjusted		Seasonally adjusted, at annual rates	
	I	II	I	II
NATIONAL INCOME BY DISTRIBUTIVE SHARES				
National income.....	48.9	(1)	197.6	(1)
Compensation of employees	30.9	31.6	124.9	125.8
Wages and salaries.....	29.5	30.1	119.4	120.3
Private.....	24.9	25.7	101.5	103.0
Military.....	1.2	1.0	4.6	4.1
Government, civilian.....	3.4	3.4	13.3	13.1
Supplements to wages and salaries.....	1.4	1.4	5.4	5.5
Proprietors' and rental income ²	11.8	11.8	47.0	47.0
Business and professional	5.6	5.5	22.4	21.8
Farm.....	4.4	4.5	17.6	18.0
Rental income of persons	1.8	1.8	7.0	7.2
Corporate profits and inventory valuation adjustment.....	5.5	(1)	22.4	(1)
Corporate profits before tax.....	7.1	(1)	29.0	(1)
Corporate profits tax liability.....	2.9	(1)	11.6	(1)
Corporate profits after tax.....	4.3	(1)	17.4	(1)
Inventory valuation adjustment.....	-1.7	-1.0	-6.6	-4.1
Net interest.....	.8	.8	3.3	3.3
Addendum: Compensation of general Government employees.....	4.5	4.3	17.5	16.7
GROSS NATIONAL PRODUCT OR EXPENDITURE				
Gross national product.....	53.5	55.5	222.2	226.0
Personal consumption expenditures.....	36.5	39.2	156.8	159.0
Durable goods.....	4.1	4.8	19.0	20.0
Nondurable goods.....	21.5	23.4	94.0	95.0
Services.....	11.0	11.0	43.8	44.0
Gross private domestic investment.....	8.0	6.5	29.6	28.8
New construction.....	2.1	2.4	10.3	9.5
Residential nonfarm.....	.9	1.0	4.4	4.1
Other.....	1.3	1.3	5.8	5.4
Producers' durable equipment.....	4.2	4.5	16.6	17.8
Change in business inventories.....	1.7	-.3	2.7	1.5
Net foreign investment.....	2.3	2.7	9.2	10.6
Government purchases of goods and services.....	6.7	7.1	26.6	27.6
Federal.....	4.4	4.4	17.7	17.7
Less: Government sales.....	.6	.5	2.2	1.8
State and local.....	2.8	3.1	11.2	11.7

Table 2.—National Income and Product, First and Second Quarters of 1947—Continued

	[Billions of dollars]			
	Unadjusted		Seasonally adjusted, at annual rates	
	I	II	I	II
DISPOSITION OF PERSONAL INCOME				
Personal income.....	47.1	48.0	190.9	191.6
Less: Personal tax and non-tax payments.....	8.6	3.8	21.4	21.6
Federal.....	8.1	3.3	19.8	20.0
State and local.....	.5	.4	1.6	1.6
Equals: Disposable personal income.....	38.5	44.3	169.4	170.0
Less: Personal consumption expenditures.....	36.5	39.2	156.8	159.0
Equals: Personal saving.....	2.0	5.0	12.6	11.0
RELATION OF GROSS NATIONAL PRODUCT, NATIONAL INCOME, AND PERSONAL INCOME				
Gross national product.....	53.5	55.5	222.2	226.0
Less: Capital consumption allowances.....	2.9	3.0	11.7	11.8
Indirect business tax and non-tax liability.....	4.1	4.1	16.8	16.6
Business transfer payments	.1	(1)	.5	.5
Statistical discrepancy.....	-2.6	(1)	-4.5	(1)
Plus: Subsidies less current surplus of government enterprises.....	.0	.0	-.2	.1
Equals: National income.....	48.9	(1)	197.6	(1)
Less: Corporate profits and inventory valuation adjustment.....	5.5	(1)	22.4	(1)
Contributions for social insurance.....	1.5	1.5	5.9	5.9
Excess of wage accruals over disbursements.....	.0	.0	.0	.0
Plus: Government transfer payments.....	2.6	2.5	10.4	10.1
Net interest paid by Government.....	1.1	1.3	4.5	4.5
Dividends.....	1.4	1.5	6.2	6.2
Business transfer payments	.1	.1	.5	.5
Equals: personal income.....	47.1	48.0	190.9	191.6

¹ Not available.

² Includes noncorporate inventory valuation adjustment.

NOTE.—Amounts of less than 50 million dollars shown as .0 in the table.

heavy inflationary pressures which after the abolition of price controls pushed prices up to the extent shown in chart 4. As can be seen from this chart, the rise in prices had levelled off in the few months prior to June. Further price increases, however, have occurred recently both in farm and industrial markets. They have been called forth less by general demand factors than by particular supply shortages and by increases in costs.

In conjunction with the movement of prices, the progressive slackening in those types of demand which have propelled national output to its present levels is of particular significance. This slackening is revealed by a study of the main branches of the expenditure stream summarized in the chart on the introductory page of this issue.

Inventory Rise Slackens

The behavior of business inventories constituted one of the main contrasts

between the economic situation in 1946 and 1947. The year 1946 had been characterized by a rapidly increasing accumulation of inventories which reached its peak in the last quarter of the year. This accumulation slackened noticeably in the first quarter of 1947. In the second quarter, the net increase, measured in current prices, amounted to about 1½ billion dollars, as compared with a peak rate of about 5½ billion dollars in the last quarter of 1946. The major part of the reduction was due to a virtual cessation of inventory accumulation in retail and wholesale trade. The rate of accumulation in manufacturing as a whole was reduced much less sharply.

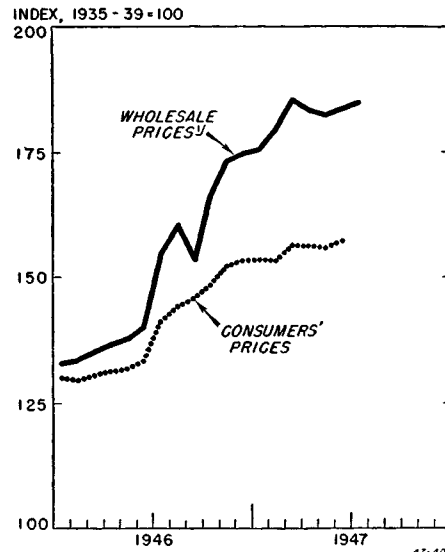
There occurred, however, a significant change in the composition of manufacturing inventories. Whereas in 1946 stocks of purchased materials and goods in process accounted for the bulk of the increase, and finished products were of decidedly smaller importance, the 1947 increase was mainly in finished goods. In the second quarter, manufacturers' stocks of purchased raw materials actually declined and goods in process showed little change.

It would appear that the impetus behind the recent movement of business inventories stems from retailers who, witnessing the easing of supplies at a time when they anticipated a leveling off of trade, cut their purchases from wholesalers in order to prevent or at least to minimize further increases in their inventories. Wholesalers, in turn, proceeded to diminish their purchases from manufacturers. The consequent increase in manufacturers' stocks of finished items was offset by sharp restrictions upon the accumulation of purchased raw materials, and, to a lesser extent, of goods in process.

It should be noted, of course, that this pattern, though descriptive of industry as a whole, did not apply to all branches of activity. It was typical of those non-durable goods lines where wartime deficiencies had been made good. It did not hold in segments of the economy in which shortages persisted, for instance in the production and distribution of still scarce durable goods.

So far inventory buying has slackened in a gradual manner without depressing the over-all level of economic activity. The main reason for this lies in the fact that the expansion was limited at a stage of the postwar business cycle at which the demand situation was still generally strong. As will be seen from the following discussion, other components of national expenditure expanded to compensate for the smaller demand for business inventories. Most important in this connection was net foreign investment, though a cushioning effect was exercised

Chart 4.—Wholesale and Consumers' Price Indexes



¹ Preliminary estimates for July 1947 based upon weekly indexes through July 26.

Sources: Basic data, U. S. Department of Labor; conversion of wholesale prices to a 1935-39 base and estimate for July 1947, Office of Business Economics.

also by fixed domestic investment and increased personal consumption expenditures for items that had been scarce since the war and gradually became available again. Wage rate increases also maintained consumer demand.

Foreign Demand at Peak

In the first two quarters of 1947 net sales to foreigners were at unprecedented annual rates of 9 and 11 billion dollars, respectively—almost twice the level of the last quarter of 1946. In part, foreign demand replaced domestic demand that would have been exercised in the absence of foreign bidders. In part, however, it served as an outlet for products for which domestic demand was softening at prevailing prices, and thus prolonged the period at which economic activity could proceed at peak levels without the necessity of price adjustments.

At the current rate of sales, dollar and gold resources of foreign countries are being drawn down rapidly, and it is apparent that a reduction in exports is impending unless these resources are replenished by further loans. The rate at which remaining available gold and dollar balances are spent depends on many factors, including the prospects of financial aid, and the course of foreign purchases in the near future may vary within wide limits. However, import and foreign exchange restrictions imposed recently by a number of American and European countries show that attempts to restrict imports from the United States are already being made.

Producers' Durable Equipment

Producers' purchases of durable equipment have continued to increase in 1947, but a slackening also was apparent in this component of national expenditure. From the first to the second quarter the expansion was at an annual rate of only one billion dollars, as against the rate of two billion which had been typical during 1946. In some instances the leveling off of purchases was due to a softening of demand after immediate postwar requirements had been filled. In others, however, demand continued urgent and the attainment of a plateau of production reflected the fact that capacity operations had been reached and that, due to shortages of basic materials and other factors, only gradual further expansion of output is possible.

Rise in Construction Interrupted

Private construction has moved sideways in 1947, small increases in the first quarter being offset by decreases in the second. Virtually all categories of private construction shared this pattern. The rapid rise in construction costs and in prices charged to ultimate purchasers which occurred over the past year was an important factor limiting demand for construction. In the second quarter construction costs were relatively stable, and data on starts for residential and on contract awards for nonresidential construction indicated a moderate uptrend in private construction activity.

It was apparent, however, that the level of construction activity was inadequate, both in terms of housing needs and in terms of the volume of construction that will be required in the future to maintain high levels of income and production. Private construction currently forms a very low proportion of capital formation and of gross national product as compared with previous periods of prosperity. In 1929, when the peak of construction was well passed, private construction accounted for 50 percent of gross private domestic investment and 8 percent of gross national product, as compared with 32 percent and 4 percent in the second quarter of 1947.

Consumer Expenditures Level Off

Consumer demand remained generally firm in the first half of 1947. It continued to be in excess of supply for many types of durable goods. Nondurable goods and services also showed further expansion, but here mixed tendencies were apparent, demand losing some of its urgency as goods became more readily available.

Competition for the consumer's dollar is becoming important over a growing segment of the economy. Even though

purchases of scarce durable goods can be expected to expand further merely in response to improvements in the supply situation, it is apparent that expenditures in general are tending to parallel consumers' disposable income. Nevertheless, it seems probable that the post-war personal restocking movement has continued to be a factor making for a high level of consumer expenditures, which are to that extent, therefore, bolstered by an element that is temporary in character.

Role of Government

Federal government expenditures in 1947 had ceased to play their spectacular wartime role of being the most important single determinant of the size and pattern of national economic activity. Government purchases of gross national product were near the levels to which they had dropped rapidly after the cessation of hostilities, and no substantial change in this situation appears to be due in the near future. The fact that these purchases are comparatively stable at rates which are low as compared with the war period does not mean that Federal finances have ceased to be an important factor in the economic picture. Most relevant for the immediate economic situation was the large Federal Government surplus which exceeded the 13 billion dollar annual rate shown for the combined Federal and State and local surplus in table 1. Given the general excess of demand over supply in the rest of the economy taken as a whole, this surplus served as a check upon inflationary developments.

In addition to this particular influence, however, the increase of Federal expenditures and receipts as compared

with prewar tends to decrease the sensitivity of the economic structure to the impact of cyclical disturbances. Currently Federal purchases of gross national product are at annual rates of 18 billion dollars or 8 percent of the total, as compared with 1 percent in 1929 and 6 percent in 1939. These substantial purchases are less influenced than other purchases of national output by changes in the level of economic activity and can thus be expected to exercise a stabilizing influence. The tax structure which supports the increased level of Federal expenditures has a similar influence. The effect of initial changes in economic activity and income on disposable income is mitigated, because taxes absorb part of the change. Hence, the effect upon spending is dampened and the secondary changes in income and economic activity are smaller.

State and local government expenditures continued to expand in the first half of 1947 as a result of higher costs of government operations and some increase in construction. Though State and local construction has about tripled since the end of the war it is still low both in terms of past achievements and also in terms of State and local plans for postwar construction.

Flow of Income

The flow of income has been maintained at high levels thus far in 1947, with noteworthy stability both in the aggregate and in the major components. Wages and salaries reflected mainly the gradual stabilization of production. The total increased moderately each quarter, private pay rolls more than compensating the reduction in government. Within the private sphere a large part of the

increase was concentrated in durable goods manufacturing. Expansion in other industries was noticeably slower.

Increases in average hourly earnings contributed to the increase in pay rolls. They were accelerated in May and June, but even earlier were a factor in the economic situation, tending to increase purchasing power and to sustain consumer expenditure. Available data indicate that in manufacturing and trade combined, which currently account for more than one-half of private pay rolls, the change in pay rolls between the fourth quarter of 1946 and the first quarter of 1947 which was attributable to changes in average earnings amounted to about one and a half billion dollars at annual rates, and to about three billion between the fourth quarter of 1946 and the second quarter of 1947.

With the rise in the volume and value of business, first quarter profits of corporations and of unincorporated enterprises increased as compared with the last quarter of 1946.

The profit record of various industries continues to be divergent. In general, the reconversion industries in the durable field are now experiencing the favorable results of expanding production. The position of the railroads has changed markedly for the better. Other public utilities showed a moderate rise. The nondurable manufacturing industries in the aggregate are just about holding even. In the distributive trades, profits remained high, though below the peaks attained in the strong sellers' market last year.

Data on corporate profits for the second quarter are as yet fragmentary, but no sizable change from the first quarter figure is expected.

Redemption of Armed Forces Leave Bonds

Redemption of Armed Forces Leave Bonds on or after September 2, 1947, permitted under legislation passed in late July, may be expected to provide a temporary stimulus to personal consumption expenditures in the immediate future. In signing the bill, the President issued a statement urging veterans not to cash their bonds unless they are in urgent need of the money now.

The Armed Forces Leave Act, enacted August 9, 1946, had provided for the payment of unused leave due enlisted men when demobilized in bonds maturing in 5 years and bearing interest at 2½ percent. The bonds were issued, one to a veteran, in multiples of 25 dollars (and a minimum of 50 dollars) with odd

amounts paid in cash. In order to prevent a substantial addition to purchasing power at that particular time, the law stipulated that the bonds be non-negotiable and nonredeemable. Bond payments were based upon accrued leave, rank at time of discharge, subsistence and quarters allowances, and length of service, with payment limited to a maximum of 120 days leave.

Bonds Total 1.8 Billion Dollars

As of June 30, 1947, approximately 8,500,000 veterans held Armed Forces Leave Bonds having a face value plus accrued interest of 1,838 million dollars (see chart 5). Fifty-four million dollars had been redeemed through death and

applications to insurance premiums. Although it is difficult to estimate how many of the remaining 6,000,000 veterans of World War II are eligible for bond payments and may be expected to make applications before September 1, 1948 (the new deadline replacing September 1, 1947), indications are that the bonds already issued constitute the bulk of the Government liability.

The average holding (face value plus interest) is 216 dollars and 82 percent of the total bond value is in denominations of 400 dollars or less. While the size of bonds ranges from 50 dollars to 1,000 dollars and more, the greatest concentration of total bond value is in the smaller denominations, with almost 30 percent

Table 3.—Distribution of Armed Forces Leave Bonds Outstanding as of June 30, 1947

Bond denomination ¹	Veterans holding bonds			Bond value (face value plus accrued interest)		
	Number	Cumulative number	Cumulative percentage distribution	Amount	Cumulative amount	Cumulative percentage distribution
	Thousands			Millions of dollars		
\$50-100.....	1,762	1,762	20.7	142	142	7.7
125-200.....	3,284	5,046	59.4	544	686	37.3
225-300.....	2,016	7,062	83.1	529	1,215	66.1
325-400.....	812	7,874	92.6	295	1,510	82.1
425-500.....	336	8,210	96.6	157	1,667	90.7
525-1,000.....	275	8,485	99.8	152	1,819	99.0
1,025 and over.....	15	8,500	100.0	19	1,838	100.0

¹ Bonds are in \$25 multiples (and a minimum of \$50) with one bond to a veteran.
Source: U. S. Treasury Department.

of the total bond value in 125 to 200 dollar bonds, and an additional 29 percent in 225 to 300 dollar bonds. The concentration of veterans holding bonds in the smaller denominations is even greater, with 93 percent of the veterans holding bonds in denominations of 400 dollars or less, and 39 percent in denominations ranging from 125 to 200 dollars. The distribution of bond value and veterans holding bonds, by denomination of bond, is shown in table 3.

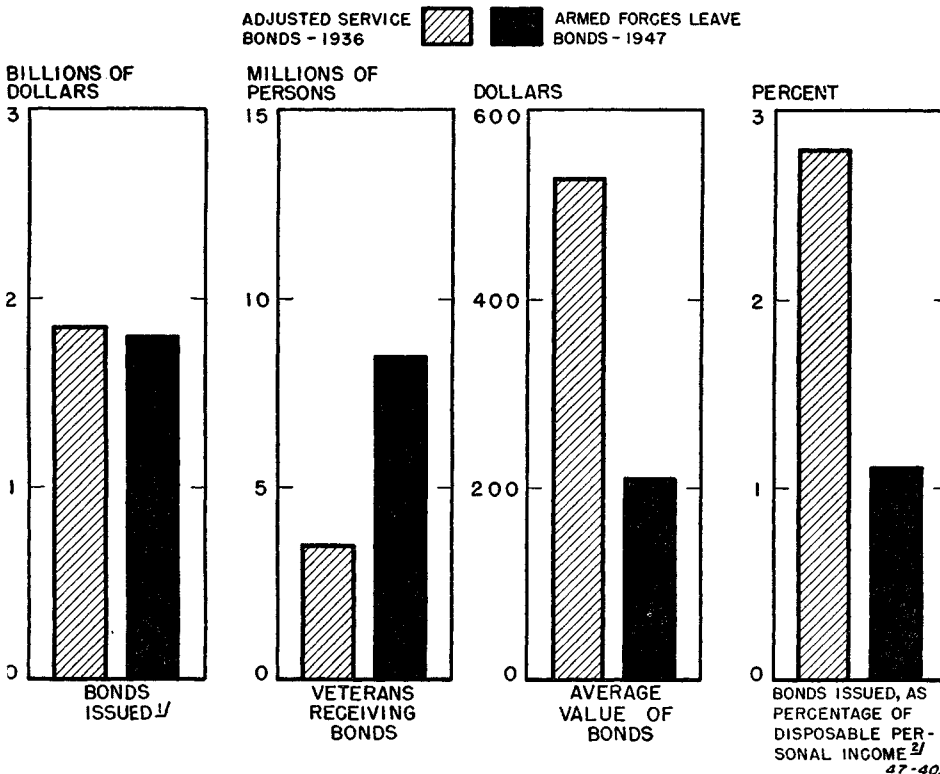
Parallel Experience in 1936

A parallel to the permissive redemption of Armed Forces Leave Bonds on

September 2, 1947, is to be found in the payment of the Adjusted Service Certificates in 1936. The World War Veterans Adjusted Compensation Act of 1924 provided "adjusted service credit" to veterans on the basis of length of service in excess of 60 days during World War I—\$1.25 for each day of service overseas and \$1 per day for service at home—with a maximum of 625 dollars for overseas veterans and 500 dollars for nonoverseas veterans.

The Adjusted Compensation Act of 1936 provided for the immediate payment of the face amount of Adjusted Service Certificates, which had been is-

Chart 5.—Adjusted Service Bonds and Armed Forces Leave Bonds

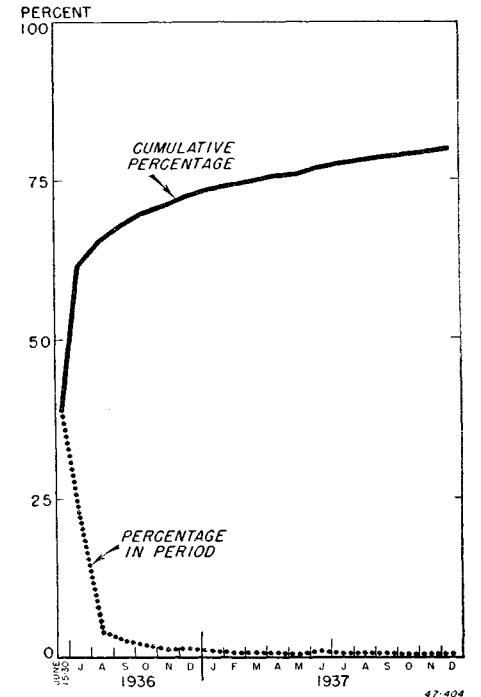


¹ Represents adjusted service bonds issued during and after 1936, and armed forces leave bonds issued through June 30, 1947, less a small amount paid on death or applied to payment of insurance premiums.

² Data for disposable personal income are totals for first half of 1936 and 1947, seasonally adjusted, at annual rates.

Sources of data: U. S. Treasury Department and Office of Business Economics.

Chart 6.—Redemptions of Adjusted Service Bonds: Percentage of Total Issued



Source of data: U. S. Treasury Department

sued pursuant to the 1924 law, less outstanding loans and accrued interest to September 30, 1931. Payment was authorized to be made on or after June 15, 1936, by the issuance of nonnegotiable but immediately redeemable bonds in the denomination of 50 dollars with odd amounts between 50-dollar multiples paid by check. Bonds were dated June 15, 1936, to mature on June 15, 1945, and accrued interest at the rate of 3 percent, with no interest payable prior to June 15, 1937.

Under the Act, veterans received bonds totaling 1,850 million dollars and checks totaling 84 million dollars. In all, approximately 3,500,000 veterans of World War I received Adjusted Service Bonds averaging about 530 dollars.

Rapid Cashing in of 1936 Bonds

The bulk of the bonds were cashed in almost immediately: 39 percent in the first 15 days, 61 percent in the first 45 days, and 75 percent in the first year. The actual distribution of redemptions over the 1936-37 period is illustrated in chart 6. How much of the bonds cashed was actually spent within given time periods is not known since there is no way of determining what expenditures would have been without this stimulus. Retail sales data show some unusual rise in sales of apparel stores and general merchandise stores in July, 1936, but in

(Continued on p. 24)

State Income Payments in 1946

By Charles F. Schwartz and Robert E. Graham, Jr.

DURING 1946 income payments to individuals were at a record high in nearly every State.¹

For the continental United States as a whole, total income received by individuals in 1946 amounted to more than 169 billion dollars, approximately one-tenth above the previous all-time high of 155 billions in 1945. In four-fifths of the States, the 1945-46 increase in individual incomes was 5 percent or more (see table 1). In 15 States, it was as much as 12 percent or more, with Iowa's gain of 27 percent ranking highest. In the three Southern States where 1946 total incomes failed to rise—Florida, Louisiana, and Mississippi—the declines were fractional.

Income gains of 10 to 12 percent were scored in the Central, New England, and Middle Eastern regions. In the Far West, Southeast, and Southwest—the three areas where the war effort had provided the greatest impetus to the expansion of incomes—the 1945-46 gains were of less-than-average proportions.

Total income payments in 1946 were also high throughout the country by comparison with the peak war year 1944. With the national total of income payments last year 12 percent above 1944, throughout the Nation generally the flow of income to individuals was appreciably higher than during the war. Exceptions are found principally in several of the Southern and Western States. In such States, the lag behind the Nationwide 1944-46 expansion resulted directly from the drastic curtailment of a specific war activity (such as shipbuilding, aircraft production, or the concentration of

¹ Technical notes defining State income payments are provided at the end of the article. Attention is called in particular to the explanation of the status of the State income series in relation to the revised national income and product series published in the National Income Supplement to the July 1947 SURVEY.

NOTE.—Mr. Schwartz and Mr. Graham are members of the National Income Division, Office of Business Economics.

Summary

In nearly every State the flow of dollar income in 1946 was at a record level, appreciably higher than during the war.

Largest relative income gains during 1946 were scored in the Central, New England, and Middle Eastern regions. In the Far West, Southeast, and Southwest—the three areas where individual incomes had been boosted to an unusual degree by the stimulus of the war effort—the 1945-46 gains were of less-than-average proportions.

Comparison of the State distributions of income payments for 1946 and 1940 reveals a significant redistribution of income from New England and the Middle Eastern States to the South and West. In general, this was an acceleration of 1929-40 trends.

This article continues the series of reports on State income payments which have been published annually in the SURVEY.

military and naval establishments) that had become a major source of income. Even in these States, however, aggregate 1946 incomes were close to peak wartime levels.

It is fully apparent, then, that on a State and regional basis, as well as for the Nation as a whole, the year 1946 was one of high prosperity. The State income data reflect generally swift adjustments to peacetime conditions in all parts of the country. This is a generalization of prime importance that nevertheless does not deny the severity of readjustment problems in specific local areas and the unequal impact of the transition period on various income groups or classes of the population.

Developments on National Scale

Prior to a further discussion of State income payments in 1946 as compared with those in previous years, a summary picture of developments on a national scale should prove useful. Moreover, for the purpose of analyzing the principal shifts in the geographic distribution of income from prewar 1940 through postwar 1946, a knowledge of the more dynamic elements in the Nation's income flow is essential. These elements stemmed in large measure from Federal war spending, an income generating force of "national origin" that conditioned geographic changes in income payments to a considerable degree.

Table 2 shows, for the continental United States for selected years since 1940, total income payments and the principal components to which the changes in total income can be traced.

From 1940 to 1943 the aggregate income received by individuals rose from 76 billion dollars to 140 billions. Three-fifths of this unprecedented 64-billion-dollar expansion was contributed by "war" manufacturing payrolls, pay of the armed forces, Federal civilian pay rolls, and agricultural income. The upsurge of these four sources of income resulted directly—particularly for those other than agricultural income—from the rapid climb of Federal war spending. Their uneven expansion among the States contributed markedly to an acceleration of the prewar redistribution of income in favor of the South and Far West.

In 1944, however, these four sources of income accounted for only one-sixth of the 11-billion increase in total income payments. War production having levelled off, expansion of total income stemmed mostly from payments by trade and service establishments, military allowances and allotments, and Federal interest payments. Their geographic expansion was rather uniform, and the State distribution of income payments in 1944 was closely similar to that in 1943.

The annual data for 1945 reflect the summary effects of the strikingly different developments before and after VJ-day. On a Nation-wide basis, neither the level nor composition of income payments changed markedly from 1944 through the second quarter of 1945. With the surrender of Japan and the immediate curtailment of war production, income payments in the fourth quarter of 1945 were nevertheless maintained at the wartime level by (1) greatly expanded volumes of mustering-out payments to discharged servicemen and unemployment benefits, (2) an income spurt in the trade and service sectors as consumer spending turned sharply upward, and (3) a continued

advance of income payments by most other private nonagricultural industries. These developments are manifested in the State distribution of income by the slightly reduced shares of the Nation's 1945 total received by States where war spending had boosted income payments to an unusual degree. The distribution of income in 1945, however, was very similar to that in 1944.

Income Flow in 1946

Comparison of the 1946 and 1945 data shown in table 2 reveals, for the most part, an accentuation of the 1944-45 income changes. These are, on the one hand, contracted pay rolls in "war" manufacturing, sharply reduced military

payments, and lower Federal civilian pay rolls; and, on the other, an impressive 10-billion-dollar increase in income from trade and service, a rise of one-fifth in pay rolls of "nonwar" manufacturing industries, a greatly enlarged volume of veterans' pensions and benefits, and a sharp increase in agricultural income.

Prices were an important element in the 1946 income expansion. The underlying economic pressures continued to be inflationary. When these were unleashed by the elimination of price controls, prices climbed rapidly in the latter half of the year. The consumers' price index of the Bureau of Labor Statistics, which had advanced 4 percent over the 3-year period 1943-45, rose 15 percent from June to December in 1946, and for the year as a whole averaged 8 percent above 1945.

Particularly to be noted from table 2 are the marked shifts in the composition of income payments from 1944 to 1946 and the sources of the 18-billion-dollar growth of total income. The aggregate of "war" manufacturing pay rolls, military payments, and Federal civilian pay rolls was 17 billion dollars less in 1946 than in 1944. This reduction, amounting to almost two-fifths, was much more than offset by the 35-billion-dollar income expansion in "nonwar" sectors of the economy. The principal role of trade and service in this expansion is clearly evident.

Changes in Income Sources

In broad outline, this national pattern prevailed on a State basis. In every State, income payments in 1946 approximated or exceeded the 1944 total mainly by virtue of a rise in income from trade and service, "nonwar" manufactures, and agriculture replacing—or sometimes far outstripping—the loss of income from "war" manufactures, military payments, and Federal civilian pay rolls. Further generalization would involve oversimplification, as there were wide differences among the States in the relative importance of these several sources in the 1944 income stream and in the rates at which they changed from 1944 to 1946. These differences are summarized in table 3. This table permits analysis by States and regions of the major changes in the levels and sources of income payments that occurred in the transition from war to peace.

No less interesting than a comparison of wartime and postwar incomes is an analysis of the changes which occurred between the immediate prewar period and 1946. Table 4 measures for each State and region the proportion of total income payments in 1940 and 1946 formed by agricultural income, manufacturing wages and salaries, trade and

Table 1.—Percent Distribution of, and Relative Changes in, Total Income Payments, by States and Regions, Selected Years, 1929-46¹

State and region	Percent distribution						Percent change				
	1929	1940	1943	1944	1945	1946	1929 to 1940	1940 to 1946	1940 to 1944	1944 to 1946	1945 to 1946
Continental United States.....	100.00	100.00	100.00	100.00	100.00	100.00	-8	+123	+90	+12	+9
New England.....	8.22	8.07	7.31	7.08	7.00	7.08	-10	+96	+75	+12	+10
Connecticut.....	1.77	1.87	1.89	1.79	1.70	1.70	-3	+103	+92	+6	+9
Maine.....	.54	.57	.61	.57	.55	.54	-4	+113	+101	+6	+8
Massachusetts.....	4.58	4.36	3.68	3.60	3.62	3.70	-13	+90	+65	+15	+11
New Hampshire.....	.37	.35	.27	.28	.30	.32	-11	+102	+56	+30	+18
Rhode Island.....	.70	.67	.66	.64	.62	.59	-12	+97	+88	+4	+5
Vermont.....	.26	.25	.20	.20	.21	.23	-13	+105	+63	+26	+16
Middle East.....	33.70	32.06	27.66	27.77	28.08	28.35	-13	+98	+73	+14	+10
Delaware.....	.26	.31	.27	.27	.25	.25	+10	+80	+68	+7	+9
District of Columbia.....	.77	1.19	1.03	1.00	1.04	1.02	+42	+92	+67	+15	+8
Maryland.....	1.34	1.61	1.72	1.68	1.61	1.60	+10	+122	+108	+7	+9
New Jersey.....	3.96	4.14	3.84	3.83	3.72	3.64	-4	+96	+85	+6	+7
New York.....	17.53	15.60	12.59	12.76	13.18	13.52	-18	+94	+63	+19	+12
Pennsylvania.....	8.88	8.21	7.33	7.33	7.33	7.34	-15	+100	+78	+12	+9
West Virginia.....	.96	1.00	.88	.90	.95	.98	-4	+118	+80	+21	+13
Southeast.....	10.51	11.92	13.88	14.20	14.35	13.81	+4	+159	+138	+9	+5
Alabama.....	.97	1.00	1.27	1.29	1.30	1.22	-5	+172	+155	+7	+3
Arkansas.....	.68	.65	.70	.74	.78	.78	-12	+169	+128	+18	+9
Florida.....	.84	1.19	1.50	1.57	1.56	1.40	+29	+163	+163	(2)	-2
Georgia.....	1.16	1.30	1.53	1.56	1.58	1.51	+3	+160	+141	+8	+5
Kentucky.....	1.17	1.16	1.20	1.21	1.26	1.28	-9	+146	+107	+19	+10
Louisiana.....	1.04	1.12	1.34	1.32	1.28	1.17	-2	+134	+136	-1	(2)
Mississippi.....	.66	.58	.77	.79	.78	.70	-18	+167	+168	-1	-2
North Carolina.....	1.17	1.49	1.61	1.66	1.69	1.79	+17	+168	+122	+21	+16
South Carolina.....	.53	.72	.81	.84	.84	.83	+24	+158	+132	+11	+8
Tennessee.....	1.10	1.22	1.42	1.51	1.57	1.60	+2	+174	+146	+11	+4
Virginia.....	1.19	1.49	1.73	1.71	1.71	1.63	+14	+144	+130	+6	+4
Southwest.....	5.03	5.15	6.09	6.11	6.08	5.73	-6	+140	+136	+5	+4
Arizona.....	.30	.31	.43	.38	.37	.37	-3	+164	+145	+8	+6
New Mexico.....	.19	.25	.27	.28	.29	.29	+18	+158	+121	+17	+10
Oklahoma.....	1.31	1.09	1.14	1.20	1.16	1.09	-23	+123	+118	+2	+3
Texas.....	3.23	3.50	4.25	4.25	4.21	3.98	-1	+154	+143	+5	+3
Central.....	29.32	28.56	27.97	27.64	27.62	28.26	-11	+121	+93	+14	+12
Illinois.....	8.52	7.57	6.68	6.79	6.89	7.10	-18	+109	+79	+17	+12
Indiana.....	2.27	2.45	2.66	2.60	2.64	2.59	-1	+136	+111	+12	+7
Iowa.....	1.63	1.63	1.61	1.45	1.53	1.78	-9	+144	+77	+38	+27
Michigan.....	4.29	4.51	4.90	4.74	4.38	4.36	-3	+115	+109	+3	+9
Minnesota.....	1.75	1.88	1.62	1.59	1.68	1.82	-1	+116	+69	+28	+18
Missouri.....	2.67	2.52	2.40	2.39	2.43	2.57	-13	+127	+89	+20	+15
Ohio.....	5.95	5.86	5.96	5.90	5.87	5.79	-10	+120	+100	+10	+8
Wisconsin.....	2.24	2.14	2.14	2.18	2.20	2.25	-12	+134	+103	+15	+11
Northwest.....	4.75	4.44	4.96	4.95	4.96	4.99	-14	+151	+123	+13	+10
Colorado.....	.77	.78	.81	.76	.82	.81	-7	+134	+95	+20	+9
Idaho.....	.28	.31	.34	.35	.34	.35	+1	+153	+127	+11	+12
Kansas.....	1.20	1.00	1.27	1.30	1.23	1.17	-24	+163	+161	+1	+4
Montana.....	.39	.42	.37	.35	.36	.40	-1	+108	+65	+27	+21
Nebraska.....	.92	.75	.83	.86	.86	.88	-26	+162	+128	+15	+12
North Dakota.....	.32	.31	.36	.37	.36	.37	-10	+163	+135	+12	+10
South Dakota.....	.35	.32	.32	.36	.39	.40	-16	+178	+126	+23	+13
Utah.....	.33	.35	.49	.42	.42	.41	-3	+160	+140	+8	+6
Wyoming.....	.19	.20	.17	.18	.18	.20	-2	+122	+77	+25	+17
Far West.....	8.47	9.80	12.13	12.25	11.95	11.78	+6	+169	+149	+8	+8
California.....	6.31	7.39	8.79	8.91	8.79	8.78	+7	+165	+140	+10	+9
Nevada.....	.09	.12	.15	.14	.14	.14	+24	+155	+124	+14	+12
Oregon.....	.73	.84	1.12	1.08	1.05	1.02	+5	+173	+158	+6	+6
Washington.....	1.34	1.45	2.07	2.12	1.97	1.84	(2)	+184	+191	-3	+2

¹ Computed from data shown in table 12.

² Less than five-tenths of 1 percent.

service income, and government income payments. The table thus provides data for analysis of prewar to postwar changes in the principal industrial sources of income payments and, correlatively, the comparative importance of these sources in contributing to the 1940 to 1946 income expansion.

It is clear, for example, that agriculture provided the greatest impetus to the 1940-46 growth of total income payments in the Northwest and in several of the farm States of the Central and South-eastern areas. The influence of manufacturing on the growth of aggregate incomes from 1940 to 1946 was most pronounced in New England, the Middle East, and the Southwest.

Trade and service were more important in the Middle East, Southwest, and Far West than elsewhere in contributing to the rise in incomes from 1940 to 1946. In every part of the country, income payments by Federal and State and local governments accounted for a larger share of all income in 1946 than in 1940. But the influence of government was most pronounced in the South. This was due mainly to military payments, which even in postwar 1946 formed as much as 5 percent of total income in the two Southern regions.

Redistribution of Income

The probable nature of the geographic distribution of income in the immediate postwar period was a principal subject of analysis in the reports on State income payments of the last few years.

Table 2.—Income Payments to Individuals in Continental United States, 1940 and 1943-46

[Billions of dollars]

Item	1940	1943	1944	1945	1946
"War" manufacturing pay rolls ¹	7.3	27.1	28.2	22.8	18.0
"Nonwar" manufacturing pay rolls ²	7.9	13.2	14.0	14.7	17.7
Pay of armed forces ³	.4	5.5	5.2	4.2	2.3
Military allowances and allotments ⁴	.....	3.0	6.2	8.5	4.0
Federal civilian pay rolls ⁵	1.7	6.9	7.3	7.0	5.8
Agricultural income ⁶	5.4	12.8	13.4	14.0	16.7
Trade and service income ⁷	18.2	28.1	31.5	35.1	44.8
Unemployment benefits ⁸	.5	.1	.1	.4	1.1
Veterans' pensions and benefits ⁹	.4	.4	.6	1.1	4.4
All other income	34.1	42.9	44.7	47.4	54.6
Total income payments	75.9	140.0	151.2	155.2	169.4

¹ "War" manufacturing industries include chemicals and allied products, rubber products, iron and steel and their products, ordnance and accessories, transportation equipment (except automobiles), nonferrous metals and their products, electrical machinery, machinery (except electrical), and automobiles and automobile equipment.

² "Nonwar" manufacturing industries consist of food and kindred products, tobacco manufactures, textile-mill products, apparel and other finished fabric products, lumber and timber basic products, paper and allied products, printing and publishing, products of petroleum and coal, leather and leather products, stone, clay, and glass products, and miscellaneous manufacturing industries.

³ Net of allotments of pay to individuals and of contributions to family-allowance payments.

⁴ Include family-allowance payments, allotments of pay to individuals, mustering-out payments, and enlisted men's cash terminal leave payments.

⁵ Include pay of employees (net of their contributions to retirement funds) in the Federal Executive Service in the continental United States.

⁶ Includes net income of farm operators (adjusted for change in inventories of crops and livestock), farm wages, and net rents to landlords living on farms.

⁷ Includes wages and salaries (net of employee contributions to social insurance programs) and proprietors' income.

⁸ Include State unemployment compensation benefits and railroad unemployment insurance benefits.

⁹ Include pensions and disability compensation, readjustment allowances, self-employment allowances, cash subsistence allowances, and State government bonuses to veterans of World War II.

Source: Office of Business Economics.

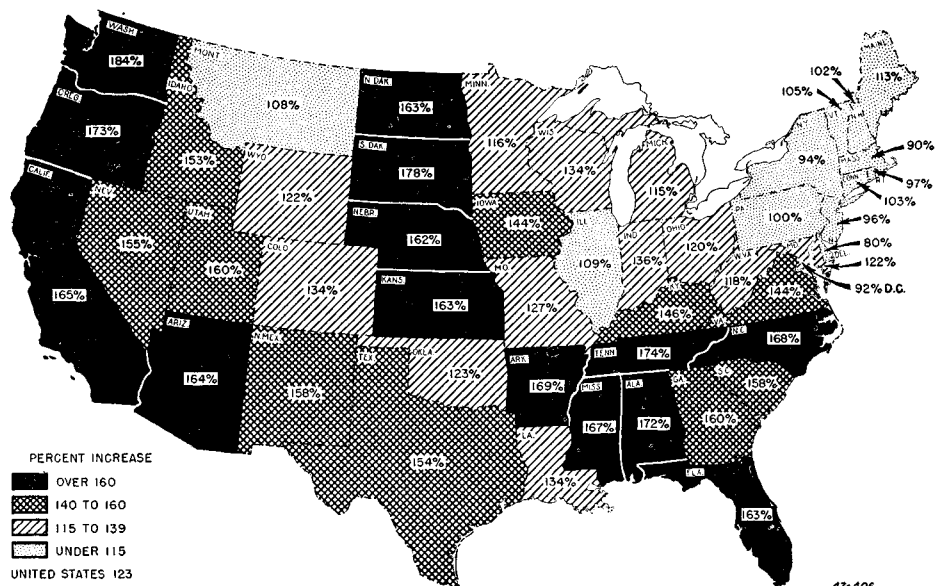
The nature of developing war-period shifts, the appraisal of regional differences in sources of war-period income growth, and the geographic income distribution in the fourth quarter of 1945 shown by special compilations presented in the August 1946 SURVEY all furnished the general preview of a significant redistribution of income from New England and the Middle Eastern States to the South and West.

These are the main shifts in the geographic distribution of income now indi-

cated by a comparison of the 1946 and 1940 State income totals. They are clearly portrayed in map 1. Of the 24 States which scored 1940-46 increases in income payments falling in the two top brackets depicted on the map, 23 are located in the Southeast, Southwest, Northwest, and Far West. On the other hand, all but two States falling within the lowest bracket are in New England and the Middle East. Aggregate income received in the four Southern and Western regions rose 159 percent from 1940 to 1946. This contrasts with the 97 percent gain for the New England and Middle Eastern areas combined. The income gain of the Central region closely approximated the Nation-wide average.

This pattern of change in the geographic distribution of income accords, in general, with that occurring over the prewar period 1929 to 1940. In the prewar period, as well as from 1940 to 1946, New England and the Middle East received declining shares of the country's total income and the two Southern regions and the Far West received increasing shares. Over the span of both periods, the share received by the large Central region was relatively constant. The Northwest, however, furnishes an exception to the generalization that changes in the geographic distribution of income between 1940 and 1946 were in accord with developments of the prewar decade. This region's income share was reduced over the 1929-40 period, but it rose appreciably from 1940 to 1946.

Map 1.—Percentage Increase in Total Income Payments, 1946 from 1940



47-406

Source of data : Office of Business Economics.

Regions with Declining Trends

Over the period 1929 to 1946 comparative stability and a declining trend relative to the Nation characterized New England's income payments. The regional movements were dominated by Massachusetts, which receives about half of New England's total income. The relative income decline of the region was slight from 1929 to 1940 but was accelerated from 1940 to 1946.

The declining relative trend of the Middle East was slight in the prewar period but was more accentuated over the 1940-46 period. The relative decline centered in New York and Pennsylvania in the prewar years but was quite general throughout the region in the later period. The 1940-46 decline in the region's income share was a composite of a sharply accelerated relative decline from 1940 to 1944 and a better-than-average income record from 1944 to 1946. These were determined by New York and are attributable mainly to the lesser role of direct war activities in the State's economy.

While for market analysis significance should be attached to the long-term declining relative trends of income payments in New England and the Middle East, two facts of correlative importance will not be overlooked. These are that the two regions have comparatively high per capita incomes and are principal centers of population.

Gains in South and Far West

The marked improvement in the relative income position of the Southeast between 1940 and 1946 was an acceleration of prewar developments. In the 1929-40 period total income payments increased 4 percent in this region, as contrasted with the 10 percent decline in the rest of the country. In the 1940-46 period, income growth in the Southeast was second only to that in the Far West. Strides in industrialization and expanded flows of government income payments were major elements in the income gains in both periods. During the war military payments were of unusually large volume in the Southeast, and their reduction with the end of the war was the main reason why the Southeast's income share was reduced between 1944 and 1946.

In the Southwestern region, Texas, New Mexico, and Arizona scored 1940-46 gains in income payments substantially bettering the national average, while that of Oklahoma matched it. Each of them except Oklahoma improved its income position in the prewar decade. As in the Southeast, growth of manufactures and relatively large government income payments were the principal fac-

Table 3.—Selected Components of Total Income Payments, by States and Regions: Percent of Total Income in 1944 and Percent Change, 1944 to 1946

State and region	Percent of total income payments in 1944					Percent change, 1944 to 1946				
	"War" manufacturing pay rolls ¹	Federal pay rolls and military allowances ²	"Non-war" manufacturing pay rolls ³	Agricultural income ⁴	Trade and service income ⁵	"War" manufacturing pay rolls ¹	Federal pay rolls and military allowances ²	"Non-war" manufacturing pay rolls ³	Agricultural income ⁴	Trade and service income ⁵
Continental United States.....	18.8	12.6	9.4	8.9	21.0	-36	-35	+26	+24	+42
New England.....	23.7	10.4	13.6	2.4	19.7	-30	-43	+31	+33	+38
Connecticut.....	39.3	5.0	7.8	2.0	16.7	-28	-36	+31	+23	+40
Maine.....	16.3	14.8	17.1	7.5	18.9	-74	-48	+35	+50	+33
Massachusetts.....	19.6	11.7	14.4	1.4	21.3	-27	-43	+30	+27	+38
New Hampshire.....	6.0	10.0	26.6	4.2	22.1	+6	-36	+30	+46	+45
Rhode Island.....	21.1	15.8	16.3	.8	18.4	-34	-51	+34	+8	+29
Vermont.....	12.7	6.3	14.9	13.1	19.8	-35	-10	+29	+29	+50
Middle East.....	18.8	11.0	11.7	2.2	22.6	-32	-27	+27	+28	+41
Delaware.....	29.2	7.9	6.4	7.9	16.2	-25	-45	+50	-19	+41
District of Columbia.....	.1	50.8	2.2	.....	23.2	+3	-5	.....	.....	+36
Maryland.....	23.5	15.9	7.6	3.5	19.9	-43	-20	+28	+20	+46
New Jersey.....	31.5	8.8	11.8	1.6	18.2	-37	-21	+25	+43	+40
New York.....	13.2	8.8	14.1	1.9	26.4	-30	-36	+26	+26	+41
Pennsylvania.....	23.5	9.6	10.5	2.6	19.6	-29	-34	+28	+28	+41
West Virginia.....	13.0	8.8	7.7	4.8	16.9	-9	-29	+33	+48	+45
Southeast.....	8.3	22.3	9.7	15.4	19.2	-49	-44	+30	+19	+41
Alabama.....	15.2	19.9	8.3	13.4	18.6	-47	-42	+32	+15	+38
Arkansas.....	3.0	20.9	7.0	26.3	20.4	-71	-46	+19	+29	+45
Florida.....	8.2	28.8	4.5	11.5	22.2	-79	-54	+26	+14	+39
Georgia.....	9.5	23.6	12.1	12.7	20.4	-72	-49	+34	+20	+45
Kentucky.....	8.6	15.2	6.6	18.8	18.6	-38	-31	+34	+26	+45
Louisiana.....	10.3	20.4	8.5	9.8	20.2	-71	-49	+22	+4	+35
Mississippi.....	4.6	25.2	7.0	27.7	17.2	-30	-50	+20	-18	+41
North Carolina.....	4.7	18.8	18.1	22.2	17.0	-58	-38	+34	+25	+49
South Carolina.....	1.3	28.6	18.1	17.1	17.3	-28	-55	+31	+36	+36
Tennessee.....	12.3	14.1	8.6	12.3	19.8	-19	-31	+32	+35	+42
Virginia.....	7.8	30.2	7.5	10.2	18.7	-24	-33	+28	+19	+36
Southwest.....	9.2	20.1	5.1	14.8	20.5	-64	-45	+27	+4	+41
Arizona.....	6.9	23.3	3.2	14.0	21.1	-75	-54	+8	+30	+44
New Mexico.....	1.2	28.6	1.7	16.9	18.7	+132	-46	+45	+10	+65
Oklahoma.....	8.6	19.1	4.5	17.9	20.2	-71	-47	+17	-6	+31
Texas.....	10.1	19.5	5.7	13.9	20.6	-63	-44	+17	+5	+42
Central.....	27.4	7.5	8.7	9.0	20.1	-27	-26	+24	+44	+42
Illinois.....	21.7	8.7	10.7	6.0	22.1	-21	-28	+26	+53	+38
Indiana.....	32.7	7.5	8.2	9.2	18.2	-29	-24	+19	+46	+49
Iowa.....	8.1	7.4	7.4	31.0	19.3	-28	-28	+14	+68	+54
Michigan.....	44.5	5.5	5.6	4.7	18.2	-31	-32	+22	+23	+34
Minnesota.....	11.4	6.7	9.4	19.7	22.0	-38	-7	+24	+38	+65
Missouri.....	13.5	10.9	10.1	12.3	23.6	-37	-28	+20	+38	+35
Ohio.....	34.1	7.4	7.5	4.4	18.8	-26	-27	+30	+40	+42
Wisconsin.....	24.0	5.4	11.4	14.1	19.3	-27	-23	+18	+25	+45
Northwest.....	6.3	14.0	4.4	27.7	18.6	-58	-39	+19	+13	+49
Colorado.....	5.4	16.6	4.7	15.4	21.8	-4	-26	+26	+19	+52
Idaho.....	.5	17.7	5.8	32.7	17.4	+46	-60	+25	+2	+58
Kansas.....	14.6	13.1	4.9	23.2	16.6	-74	-45	+15	+8	+40
Montana.....	2.6	9.0	4.0	31.2	18.6	-14	-19	+22	+27	+60
Nebraska.....	5.9	13.3	5.2	29.2	19.9	-64	-47	+15	+25	+46
North Dakota.....	.1	5.7	1.7	57.8	17.0	+50	-13	+11	-8	+51
South Dakota.....	.4	11.4	3.0	47.4	18.3	+9	-38	+17	+21	+46
Utah.....	3.9	23.1	4.0	12.8	19.1	-28	-31	+26	+3	+50
Wyoming.....	.1	15.7	4.5	22.3	17.8	+25	-49	+26	+38	+61
Far West.....	18.8	13.3	6.7	9.2	23.2	-64	-30	+27	+20	+46
California.....	18.6	13.5	5.7	8.6	24.1	-59	-29	+32	+21	+49
Nevada.....	7.1	22.9	1.3	8.2	21.2	-73	-58	+59	+45	+75
Oregon.....	19.2	8.1	13.1	11.6	21.4	-80	-34	+20	+23	+43
Washington.....	20.4	14.7	8.3	10.3	20.2	-74	-28	+16	+12	+36

¹ "War" manufacturing industries include chemicals and allied products, rubber products, iron and steel and their products, ordnance and accessories, transportation equipment (except automobiles), nonferrous metals and their products, electrical machinery, machinery (except electrical), and automobiles and automobile equipment.

² Comprise pay of Federal civilian employees, net pay of armed forces, family-allowance payments to dependents of enlisted military personnel, voluntary allotments of military pay to individuals, mustering-out payments to discharged servicemen, and enlisted men's cash terminal leave payments.

³ "Nonwar" manufacturing industries consist of food and kindred products, tobacco manufactures, textile-mill products, apparel and other finished fabric products, lumber and timber basic products, paper and allied products, printing and publishing, products of petroleum and coal, leather and leather products, stone, clay and glass products, and miscellaneous manufacturing industries.

⁴ Includes net income of farm operators (adjusted for changes in inventories of crops and livestock), farm wages, and net rents to landlords living on farms.

⁵ Includes wages and salaries and net income of proprietors.

Source: Office of Business Economics.

tors in the region's substantial progress over the entire period 1929-46.

In both the 1929-40 and 1940-46 periods, the top-ranking regional increase in total income payments was registered by the Far West. This record performance reflected larger-than-average gains

in nearly every type of income. Of greatest importance were those stemming from the manufacturing, government, and trade sectors. Large population growth was also a fundamental factor. Whereas in other sections of the country population increased on the average

by 12 percent between 1929 and 1946, the population of the Far West expanded by two-thirds.

The considerably more-than-average advance in total income payments by the agricultural Northwest from 1940 to 1946 contrasts with the relatively unfavorable experience of this area in the preceding decade. In both periods, the income trends were determined largely by the widely varying fortunes of Northwestern agriculture.

Stability of Central States' Share

The long-term tendency of the Central States to receive a comparatively constant share of total income payments is an interesting composite of differing State trends. These stemmed mainly from the widely different emphases within the region placed upon agriculture and heavy industry as sources of income.

The influence of agriculture and heavy industry is clearly stamped on recent-year changes in income payments in individual States of the Central region. From 1944 to 1946, when pay rolls in their "war" manufacturing industries were reduced about one-fourth, the industrial States of Michigan, Indiana, and Ohio received smaller shares of income payments. In Iowa, Minnesota, Missouri, and Wisconsin substantial expansions of farm income resulted in increased shares of income payments in 1945 and 1946. For most of these States the relative movements were not in conformity with longer-term trends, but they very probably should not be construed as reversals of those trends. This is because of the "short-run" nature of the factors—contracting war-industry pay rolls and sharply rising farm income—that determined the movements.

Manufactures and Government

The following two sections provide data for analysis of the roles of manufacturing and government in the geographic shifts of total income payments over the period 1929-46. The manufacturing industry is of obvious and basic importance in conditioning both short-term and long-term changes in the State distribution of income. World War II has resulted in the considerably greater influence of government on State income payments. In 1946, the 36.5-billion-dollar total of factory pay rolls and the 29.5 billion-dollar volume of income payments by Federal and State and local governments together comprised almost two-fifths of all income payments to individuals.

Distribution of Factory Pay Rolls

A principal fact revealed by table 5 is that the pattern of shifts in the State

distribution of factory pay rolls from 1929 to 1940 and from 1940 to 1946 was much the same as that noted for total income payments. New England and the Middle East received a declining share of the national total; and the Southeast, Southwest, and Far West received increasing shares. The relative declines in New England and the Middle East, however, were not appreciable. More pronounced was the substantial progress in industrialization made by the South and Far West—a continuation of up-

trends traced by the Census of Manufactures as far back as 1889.

From 1929 to 1946, the South and Far West increased their combined share of the Nation's manufacturing pay rolls from 15.5 percent to 20.3 percent. This was a relative gain of one-third. It represented largely a relative shift of manufactures to these areas from the "Old Manufacturing Belt" (comprising the eleven States of Michigan, Ohio, Illinois, Indiana, Wisconsin, Connecticut, Massachusetts, New York, New Jersey, Penn-

Table 4.—Major Industrial Sources of Income Payments in Each State and Region: Selected Components as a Percent of Total Income, 1940 and 1946

State and region	Manufacturing pay rolls		Agricultural income ¹		Trade and service income ²		Government income payments ³	
	1940	1946	1940	1946	1940	1946	1940	1946
Continental United States.....	20.3	21.3	7.2	9.8	25.2	26.6	12.4	17.0
New England.....	26.7	30.7	2.0	2.9	23.4	24.2	11.8	15.9
Connecticut.....	34.0	36.3	2.0	2.4	21.3	22.1	8.4	10.6
Maine.....	23.3	25.6	6.0	10.6	23.5	23.6	14.2	19.4
Massachusetts.....	23.8	28.8	1.1	1.5	24.5	25.4	12.7	17.8
New Hampshire.....	26.8	31.6	2.7	4.7	23.5	24.6	14.2	15.4
Rhode Island.....	30.6	34.3	.8	.8	21.8	22.8	12.5	17.1
Vermont.....	18.8	21.9	10.5	13.4	23.3	23.5	11.9	14.1
Middle East.....	21.2	24.2	1.9	2.4	25.3	27.8	12.5	16.6
Delaware.....	25.3	29.4	5.6	6.0	17.6	21.4	7.8	12.1
District of Columbia.....	2.8	2.7	.....	.....	23.8	27.4	42.0	49.3
Maryland.....	21.1	21.6	3.6	4.0	24.0	27.1	11.9	20.2
New Jersey.....	30.4	32.7	1.6	2.1	22.1	23.9	10.4	16.3
New York.....	17.8	22.8	1.4	2.0	28.1	31.4	12.0	14.3
Pennsylvania.....	25.8	26.9	2.2	2.9	23.1	24.7	11.1	15.8
West Virginia.....	18.5	18.2	5.6	5.9	19.4	20.2	9.7	16.4
Southeast.....	15.7	15.5	15.4	16.8	25.2	24.9	13.0	21.5
Alabama.....	18.7	17.8	14.7	14.5	25.2	24.0	11.7	22.4
Arkansas.....	8.4	7.8	30.3	28.6	24.1	25.0	11.6	20.8
Florida.....	7.3	7.4	8.4	13.1	31.6	30.8	13.0	22.9
Georgia.....	16.5	17.3	15.8	14.0	26.9	27.4	12.5	20.7
Kentucky.....	12.0	12.0	15.8	19.9	23.8	22.3	12.4	19.3
Louisiana.....	12.4	13.4	10.2	10.3	25.8	27.6	13.6	21.4
Mississippi.....	10.0	11.6	28.0	22.8	22.7	24.4	13.6	24.9
North Carolina.....	24.6	21.7	17.5	23.0	22.2	21.0	10.8	17.8
South Carolina.....	21.7	22.2	18.4	20.9	22.7	21.3	14.5	21.0
Tennessee.....	18.6	19.2	14.5	15.0	26.0	25.2	12.7	19.6
Virginia.....	16.2	14.7	9.9	11.4	24.7	24.0	16.7	27.1
Southwest.....	8.0	8.9	15.9	14.7	25.2	27.5	12.5	21.1
Arizona.....	4.6	4.8	13.7	16.9	26.0	28.2	18.6	20.1
New Mexico.....	2.4	4.5	20.9	15.9	23.5	26.4	16.1	26.8
Oklahoma.....	7.3	7.6	18.1	16.5	24.0	26.0	14.6	23.2
Texas.....	9.0	10.0	15.1	13.9	25.6	27.9	11.1	20.2
Central.....	25.8	26.7	7.8	11.3	24.5	24.9	10.8	14.0
Illinois.....	23.1	26.3	4.6	7.9	26.6	26.1	10.5	13.6
Indiana.....	30.7	29.5	7.4	12.0	21.7	24.3	10.6	13.8
Iowa.....	10.6	10.4	28.4	37.8	22.6	21.6	11.1	12.2
Michigan.....	38.2	36.6	4.4	5.6	22.3	23.6	10.3	14.6
Minnesota.....	11.8	14.5	16.9	21.2	26.0	28.4	13.5	15.5
Missouri.....	16.6	17.1	9.5	14.1	28.2	26.4	10.6	16.2
Ohio.....	30.5	31.8	4.0	5.6	23.6	24.3	10.1	13.6
Wisconsin.....	26.1	26.9	11.7	15.2	23.2	24.2	12.2	12.5
Northwest.....	7.1	7.1	20.3	27.7	23.9	24.5	15.1	17.3
Colorado.....	8.4	9.2	10.9	15.2	26.8	27.6	17.6	21.3
Idaho.....	8.1	7.2	24.1	30.0	23.6	24.6	14.5	16.0
Kansas.....	8.7	9.3	18.8	24.9	22.6	23.0	14.4	17.1
Montana.....	6.4	5.6	22.4	31.4	21.2	23.5	14.7	15.4
Nebraska.....	6.9	7.0	20.4	31.9	25.4	25.4	14.2	15.0
North Dakota.....	2.4	1.8	38.0	47.1	23.0	22.9	13.3	13.9
South Dakota.....	4.0	3.3	31.5	46.7	23.1	21.7	15.0	14.1
Utah.....	8.8	7.2	11.5	12.1	25.5	26.5	15.4	25.5
Wyoming.....	4.3	4.7	23.1	24.6	19.5	23.0	16.5	14.6
Far West.....	13.6	14.2	7.0	10.2	29.3	31.5	14.6	18.2
California.....	12.5	13.7	6.5	9.5	30.1	32.4	14.4	17.9
Nevada.....	1.8	3.5	9.0	10.4	25.3	32.6	15.9	16.6
Oregon.....	18.4	18.5	10.3	13.5	27.4	28.9	13.0	15.0
Washington.....	17.6	15.4	7.3	11.8	26.3	28.1	16.3	21.9

¹ Includes net income of farm operators (adjusted for change in inventories of crops and livestock), farm wages, and net rents to landlords living on farms.

² Includes wages and salaries and net income of proprietors.

³ Consists of pay of State and local and of Federal civilian employees, net pay of the armed forces, family-allowance payments to dependents of enlisted military personnel, voluntary allotments of military pay to individuals, mustering-out payments to discharged servicemen, enlisted men's cash terminal leave payments, interest payments to individuals, public assistance and other direct relief, work relief, veterans' pensions and benefits, State government bonuses to World War II veterans, and benefit payments from social insurance funds.

Source: Office of Business Economics.

Table 5.—Percent Distribution of, and Relative Changes in, Total Manufacturing Wages and Salaries, by States and Regions, Selected Years, 1929–46

State and region	Percent distribution						Percent change			
	1929	1940	1943	1944	1945	1946	1929 to 1940	1940 to 1944	1940 to 1946	1944 to 1946
Continental United States.....	100.00	100.00	100.00	100.00	100.00	100.00	-6	+177	+134	-15
New England.....	11.34	10.63	9.98	9.39	9.46	10.22	-12	+145	+126	-8
Connecticut.....	2.74	3.13	3.27	3.00	2.84	2.89	+8	+165	+117	-18
Maine.....	.56	.65	.74	.68	.63	.65	+11	+187	+134	-18
Massachusetts.....	5.99	5.13	4.58	4.34	4.55	5.01	-19	+135	+129	-3
New Hampshire.....	.56	.47	.32	.32	.37	.48	-21	+90	+138	+26
Rhode Island.....	1.20	1.02	.87	.85	.86	.96	-20	+130	+121	-4
Vermont.....	.29	.23	.20	.20	.21	.23	-25	+139	+138	-----
Middle East.....	34.62	33.52	30.28	30.06	31.28	32.31	-9	+149	+126	-9
Delaware.....	.20	.39	.34	.34	.32	.35	+88	+137	+109	-2
District of Columbia.....	.16	.17	.09	.09	.11	.13	+2	+46	+85	+26
Maryland.....	1.17	1.68	2.05	1.85	1.76	1.63	+35	+207	+128	-26
New Jersey.....	5.49	6.20	5.89	5.89	5.77	5.59	+7	+163	+111	-20
New York.....	15.94	13.74	12.41	12.39	13.43	14.48	-19	+150	+147	-1
Pennsylvania.....	10.83	10.43	8.84	8.84	9.12	9.29	-9	+135	+109	-11
West Virginia.....	.83	.91	.66	.66	.77	.84	+4	+102	+115	+7
Southeast.....	7.77	9.23	8.61	9.06	9.62	10.04	+12	+172	+155	-6
Alabama.....	.79	.93	1.04	1.07	1.10	1.03	+11	+220	+159	-19
Arkansas.....	.31	.27	.24	.26	.28	.29	-19	+171	+149	-8
Florida.....	.46	.43	.67	.71	.62	.49	-12	+359	+168	-42
Georgia.....	.91	1.05	1.08	1.20	1.22	1.23	+9	+214	+174	-13
Kentucky.....	.66	.69	.59	.65	.68	.72	-1	+163	+146	-6
Louisiana.....	.74	.68	.78	.88	.85	.74	-13	+258	+153	-29
Mississippi.....	.34	.29	.30	.32	.34	.38	-20	+208	+208	-----
North Carolina.....	1.27	1.81	1.35	1.34	1.50	1.82	+35	+106	+136	+15
South Carolina.....	.53	.77	.59	.58	.68	.87	+37	+108	+164	+27
Tennessee.....	.90	1.12	1.00	1.12	1.33	1.35	+18	+176	+182	+2
Virginia.....	.86	1.19	.97	.93	1.02	1.12	+30	+117	+121	+2
Southwest.....	1.94	2.04	2.84	3.11	2.94	2.41	-1	+323	+176	-35
Arizona.....	.10	.07	.10	.14	.14	.08	-36	+435	+173	-49
New Mexico.....	.03	.03	.03	.03	.05	.06	+12	+167	+383	+80
Oklahoma.....	.45	.39	.50	.55	.54	.39	-18	+293	+133	-41
Texas.....	1.36	1.55	2.21	2.39	2.21	1.88	+7	+328	+184	-34
Central.....	36.60	36.43	35.08	35.39	35.16	35.48	-6	+169	+123	-15
Illinois.....	9.89	8.63	7.25	7.80	8.26	8.76	-18	+151	+138	-5
Indiana.....	3.36	3.71	3.78	3.77	3.63	3.59	+4	+181	+127	-19
Iowa.....	.87	.85	.78	.80	.84	.87	-8	+159	+140	-8
Michigan.....	6.72	8.51	8.80	8.41	7.43	7.48	+19	+174	+106	-25
Minnesota.....	1.19	1.81	1.16	1.17	1.27	1.24	-14	+198	+167	-10
Missouri.....	2.24	2.06	2.01	2.00	2.16	2.06	-13	+169	+134	-13
Ohio.....	9.26	8.82	8.71	8.71	8.78	8.64	-10	+174	+130	-16
Wisconsin.....	3.07	2.76	2.59	2.73	2.79	2.84	-15	+175	+141	-12
Northwest.....	1.90	1.55	1.87	1.89	1.88	1.65	-23	+237	+150	-26
Colorado.....	.37	.32	.35	.27	.33	.35	-18	+133	+156	+10
Idaho.....	.15	.12	.07	.08	.09	.12	-26	+78	+125	+26
Kansas.....	.51	.43	.80	.91	.77	.52	-22	+484	+182	-52
Montana.....	.17	.14	.09	.08	.09	.10	-23	+70	+83	+7
Nebraska.....	.35	.25	.31	.34	.35	.29	-31	+269	+168	-27
North Dakota.....	.06	.04	.02	.02	.03	.03	-42	+79	+102	+13
South Dakota.....	.07	.06	.04	.04	.05	.06	-9	+95	+126	+16
Utah.....	.17	.15	.16	.12	.13	.14	-16	+115	+113	-1
Wyoming.....	.05	.04	.03	.03	.04	.04	-20	+92	+143	+26
Far West.....	5.83	6.60	11.34	11.10	7.89	7.89	+7	+366	+180	-40
California.....	3.84	4.57	7.90	7.66	7.74	5.65	+12	+365	+190	-38
Nevada.....	.01	.01	.06	.04	.02	.02	-----	+918	+382	-53
Oregon.....	.69	.76	1.29	1.24	1.09	.89	+3	+354	+175	-39
Washington.....	1.29	1.26	2.09	2.16	1.81	1.33	-8	+374	+148	-48
Addendum: U. S. totals (millions of dollars).....	16,299	15,372	40,693	42,621	37,903	36,045	-----	-----	-----	-----

Source: Office of Business Economics.

sylvania, and Maryland). The aggregate share of the Nation's factory pay rolls received in this Belt declined from 74.5 percent in 1929 to 72.8 percent in 1940, and to 70.1 percent in 1946.

Of considerable interest are the data on rates of changes in manufacturing wages and salaries for the periods 1940–44 and 1944–46. These measure geographic differences in the impact of war production and of subsequent reconversion. For example, spectacular increases in factory pay rolls of 366 percent and 323 percent, respectively, are shown for the Far West and Southwest for the 1940–44 period. So great were these war-period expansions that sharp contrac-

tions of two-fifths from the 1944 levels left factory pay rolls in these regions in 1946 nearly three times as large as in 1940.

Another point of interest is that in nearly every State where manufacturing growth during the war lagged behind that of the Nation the experience from 1944 to 1946 was relatively favorable. This readjustment of wartime distortions explains much about interstate differences in 1944–46 changes in total income payments.

Shifts in Manufactures

For more detailed analysis, the data in table 5 can be supplemented by those

in table 6, which shows percentage distributions by States of manufacturing wages and salaries separately for nineteen types of manufactures.

The substantial relative gains already noted for the Far West, Southeast, and Southwest are apparent also from this table. Each of these regions increased its share of the Nation's total from 1940 to 1946 in fifteen of the nineteen types of manufactures. These relative gains were shared by nearly all States of the regions. On the other hand, New England, the Middle East, and the Central States sustained relative declines from 1940 to 1946 in most manufacturing industries.

Comparisons of the 1940 and 1946 distributions of pay rolls for the several groups of manufactures show a number of significant geographic shifts.

In some cases, the geographic shifts, as measured by relative gains and losses in wage-and-salary payments, represent simply interchanges among established centers of production. In the production of textile-mill products, there was further concentration in the Southeast, mainly in Georgia and South Carolina, with a corresponding relative decline in the Middle East, mainly in Pennsylvania. All of these States are major textile centers. In lumber manufacturing, the pronounced relative shift from the Far West to the Southeast involved the two largest lumber-producing areas. The two leading tobacco-manufacturing States, North Carolina and Pennsylvania, substantially improved their relative positions, while Kentucky, New Jersey, and New York (also important in tobacco manufactures) sustained relative losses. Similarly, New York State, with nearly one-half the Nation's apparel industry, scored an appreciable gain in apparel from 1940 to 1946 that was matched by relative losses in several of the comparatively few other States, such as Illinois, New Jersey, and Massachusetts, in which a significant portion of the industry is located. Also in industries such as iron and steel, electrical machinery, and products of petroleum and coal, such shifts as occurred were restricted for the most part to the established producing areas.

In several types of manufactures, however, there appear to be relative shifts to newer areas. In paper production, the importance of the South increased over the period 1940–46, while that of New England declined. In the manufacture of chemicals and allied products, there were relative decreases in the large producing States of New York, New Jersey, Massachusetts, Illinois, and Ohio. Significant relative gains occurred in Tennessee and Texas. In the manufacture of food, the South and Far West achieved gains, in contrast

come payments. Conversely, in the States with high per capita incomes the share of government income payments received was generally smaller than the share of private income payments. A notable exception is the Far West, where higher-than-average incomes were associated with a relatively large share of government income payments.

Larger Role of Government in 1946

The share of all government income payments received by New England and

the Middle East declined from 1929 to 1940, and from 1940 to 1946. Over this period increasing shares accrued to the Southeast, Southwest, and Far West. In each of these five regions, changes in the share of government income received were in the same direction—and indeed contributed to—changes in the share of total income payments. An interesting exception to pattern, however, is the Northwest. Whereas the region's share of total income payments rose sharply

from 1940 to 1946 by virtue of a large expansion of farm income, its share of government income declined, mainly because of reduced Government payments to farmers.

For the country as a whole government income payments increased substantially from 1929 to 1940—from 6.1 billions to 10.1 billions. From 1940 to 1946, however, the volume of government income payments was tripled, whereas total private income payments were slightly more than doubled. Reflecting a generally higher rate of increase in government income payments than in private income payments, in all regions except the Northwest income payments by government formed a larger percentage of total income payments in 1946 than in 1940. As already noted, government provided a larger impetus to total income expansion in the South than in any other area of the country.

Table 7.—Percent Distribution of Private Income Payments and Total Government Income Payments, and Total Government Income Payments as Percent of Total Income Payments, by States and Regions, 1929, 1940, and 1946

State and region	Percent distribution						Total government income payments as a percent of total income payments		
	Private income payments ¹			Total government income payments ²			1929	1940	1946
	1929	1940	1946	1929	1940	1946			
Continental United States.....	100.00	100.00	100.00	100.00	100.00	100.00	7.3	13.4	17.4
New England.....	8.23	8.21	7.20	8.16	7.20	6.53	7.3	11.9	16.1
Connecticut.....	1.79	1.98	1.84	1.41	1.18	1.04	5.9	8.4	10.7
Maine.....	.54	.56	.53	.60	.62	.62	8.1	14.6	19.8
Massachusetts.....	4.58	4.39	3.67	4.75	4.17	3.78	7.6	12.8	17.8
New Hampshire.....	.36	.35	.33	.44	.38	.29	8.8	14.4	15.7
Rhode Island.....	.70	.68	.60	.67	.63	.59	7.0	12.5	17.2
Vermont.....	.26	.25	.23	.29	.22	.21	8.2	12.2	16.1
Middle East.....	33.89	32.33	28.58	31.22	30.28	27.28	6.8	12.6	16.8
Delaware.....	.27	.33	.27	.21	.19	.18	5.7	8.0	12.4
District of Columbia.....	.58	.80	.63	3.16	3.75	2.90	30.0	42.0	49.3
Maryland.....	1.34	1.63	1.54	1.38	1.46	1.88	7.6	12.1	20.5
New Jersey.....	3.96	4.28	3.68	3.92	3.22	3.42	7.3	10.4	16.4
New York.....	17.73	15.84	14.00	14.72	14.04	11.22	6.2	12.0	14.4
Pennsylvania.....	9.04	8.41	7.47	6.94	6.88	6.75	5.7	11.2	16.0
West Virginia.....	.97	1.04	.99	.89	.74	.93	6.8	9.9	16.6
Southeast.....	10.37	11.64	13.07	12.20	13.74	17.39	8.5	15.4	22.0
Alabama.....	.97	.98	1.15	1.04	1.16	1.59	7.8	15.4	22.7
Arkansas.....	.67	.62	.75	.77	.83	.96	8.3	17.1	21.4
Florida.....	.82	1.19	1.30	1.16	1.20	1.86	10.1	13.5	23.2
Georgia.....	1.15	1.27	1.45	1.24	1.47	1.83	7.8	15.1	21.0
Kentucky.....	1.16	1.15	1.24	1.21	1.22	1.47	7.6	14.1	20.1
Louisiana.....	1.03	1.08	1.11	1.16	1.36	1.48	8.2	16.2	22.0
Mississippi.....	.65	.53	.63	.77	.94	1.03	8.6	21.4	25.8
North Carolina.....	1.16	1.51	1.77	1.32	1.36	1.87	8.3	12.2	18.2
South Carolina.....	.51	.68	.79	.74	.96	1.01	10.3	17.8	21.3
Tennessee.....	1.09	1.21	1.45	1.19	1.33	1.73	8.0	14.6	20.2
Virginia.....	1.16	1.42	1.43	1.60	1.91	2.56	9.9	17.1	27.5
Southwest.....	5.00	5.02	5.43	5.32	6.04	7.17	7.8	15.7	21.8
Arizona.....	.28	.29	.36	.49	.47	.44	12.0	20.2	20.6
New Mexico.....	.18	.24	.25	.33	.35	.46	12.5	18.6	27.6
Oklahoma.....	1.30	1.04	1.00	1.34	1.45	1.51	7.5	17.7	24.2
Texas.....	3.24	3.45	3.82	3.16	3.77	4.76	7.2	14.4	20.8
Central.....	29.52	29.10	29.21	26.92	25.07	23.68	6.7	11.7	14.6
Illinois.....	8.67	7.77	7.40	6.58	6.24	5.65	5.7	11.0	13.9
Indiana.....	2.27	2.50	2.69	2.35	2.15	2.13	7.6	11.8	14.3
Iowa.....	1.62	1.59	1.86	1.73	1.83	1.40	7.8	15.0	13.7
Michigan.....	4.26	4.65	4.48	4.66	3.62	3.76	8.0	10.7	15.0
Minnesota.....	1.73	1.81	1.82	2.01	2.30	1.80	8.4	16.4	17.2
Missouri.....	2.70	2.57	2.59	2.39	2.25	2.48	6.6	11.9	16.8
Ohio.....	6.03	6.06	6.04	5.03	4.60	4.62	6.2	10.5	13.9
Wisconsin.....	2.24	2.15	2.33	2.17	2.08	1.84	7.1	13.0	14.3
Northwest.....	4.63	4.10	4.90	6.27	6.61	5.40	9.7	19.9	18.9
Colorado.....	.75	.72	.76	1.03	1.12	1.05	9.9	19.2	22.5
Idaho.....	.27	.29	.35	.38	.41	.35	10.1	18.1	17.8
Kansas.....	1.17	.93	1.17	1.57	1.44	1.23	9.5	19.2	18.2
Montana.....	.38	.39	.40	.62	.61	.39	11.5	19.2	17.2
Nebraska.....	.91	.68	.89	.97	1.23	.84	7.7	21.9	16.7
North Dakota.....	.31	.28	.37	.48	.55	.37	11.0	23.7	17.3
South Dakota.....	.34	.28	.40	.51	.54	.37	10.7	22.7	16.4
Utah.....	.32	.34	.36	.42	.43	.62	9.4	16.5	26.4
Wyoming.....	.18	.19	.20	.29	.28	.18	11.4	18.9	16.0
Far West.....	8.36	9.60	11.61	9.91	11.06	12.55	8.6	15.1	18.6
California.....	6.26	7.26	8.70	7.07	8.21	9.16	8.2	14.8	18.2
Nevada.....	.09	.12	.14	.15	.15	.13	11.9	16.1	16.9
Oregon.....	.71	.83	1.04	.95	.87	.91	9.6	13.9	15.5
Washington.....	1.30	1.39	1.73	1.74	1.83	2.35	9.6	16.8	22.2

¹ Represents total income payments to individuals minus government income payments to individuals.

² Consist of all income payments to individuals by the Federal Government, State and local governments, and social insurance programs. For specific composition see footnotes to table 8. Differ in definition from total government income payments shown in table 4 by the inclusion of Government payments to farmers. For the special purpose of this table Government payments to farmers are included in government income payments rather than in private income payments as part of agricultural income.

Source: Office of Business Economics.

Per Capita Income

State estimates of per capita income payments to individuals are shown in table 13 for the years 1929-40, 1945, and 1946. These are computed by dividing total income payments by total population.³ Per capita income is thus a "per person," and not a "per family" or "per worker" average.

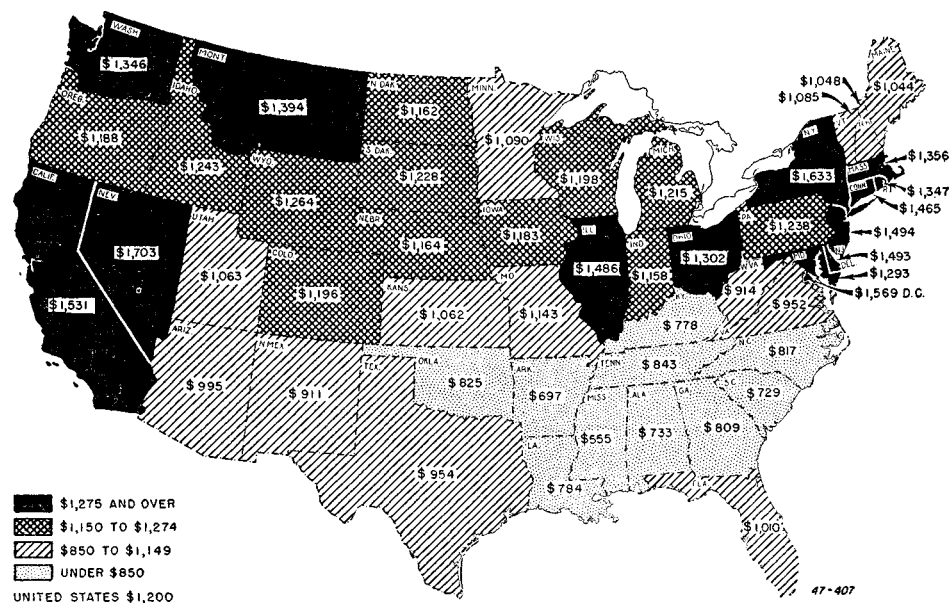
Since revised population data for 1941-44 are not yet available from the Bureau of the Census, per capita estimates for those years are omitted from the table. They will be published in a special table in the September issue of the SURVEY. The cooperation of the Census Bureau in furnishing advance tabulations of the State population data for 1945 and 1946 makes possible the presentation of per capita income for those years in the present report.

Per capita income, unlike total income payments, makes adjustment for geographic differences in size of population and population change. This adjustment assumes special significance for the period 1940-46 because of the extensive shifts in residence that occurred in the prosecution of the war effort and then in the reabsorption of servicemen into civilian pursuits and the relocation of migrant war workers. As these shifts, for the most part, had been completed by the middle of 1946, the per capita income estimates for that year are of primary interest.

The per capita income of the continental United States in 1946 was \$1,200. This was 2 percent higher than the 1945

³ See note 3 of the appended section on "Technical Notes."

Map 2.—Per Capita Income Payments to Individuals, 1946



Source of data : Office of Business Economics.

figure of \$1,177. In this connection, it should be noted that the increase (7 percent) in the population of the Continental United States last year—due chiefly to the return of servicemen from overseas—was almost as large as the increase (9 percent) in total income payments.

This 7 percent Nation-wide increase in population by no means held uniformly throughout the States. Relative to Nation-wide developments, therefore, for some States the 1945-46 change in per capita income differed appreciably from that in total income.

State estimates of per capita income for 1946 are shown in map 2. For most States, per capita income last year was at a peak level. In every section of the country average incomes of individuals approached or bettered war-time highs.

For the country as a whole, per capita income payments to individuals in 1946 were 109 percent above the average of \$575 for 1940. In 37 of the 49 States, the average income of individuals in 1946 was at least double the 1940 level. In a number of agricultural States of the South and Northwest, it was two-and-a-half to three times as large as the 1940 average.

Per capita incomes in 1946 ranged from \$555 in Mississippi to \$1,703 in Nevada. Others in the top rank included New York (\$1,633), the District of Columbia (\$1,569), California (\$1,531), New Jersey (\$1,494), Delaware (\$1,493), Illinois (\$1,486), and Connecticut (\$1,465).

Among the several regions, highest per capita incomes were received in the Far West (\$1,465), Middle East (\$1,432), and New England (\$1,320). The Southeast's per capita income of \$801 was one-third

below the national average and two-fifths below the composite average for the other six regions. The per capita income of the Southwest was one-fourth below the Nation-wide average. This concentration of low-income States in the South is the most striking fact revealed by the map. An array of the States in respect to size of per capita income places all 15 Southern States among the 16 States in the Nation with the lowest averages.

Reduction of Inequality

Although the 1946 per capita income data reveal broad geographic differences in the levels of average income, these were relatively somewhat less than those prevailing before the war. Wartime developments had the effect of reducing the relative, if not the absolute, differences among the States in respect to size of per capita income.³

Table 9 shows that from 1940 to 1946 per capita income declined in relation to the national average in the three highest of the four "high-income" regions (those with per capita incomes above the Nation's) and rose in relation to the national average in the three "low-income" regions. This partial reduction of geographic inequality—which is an acceleration of prewar developments—is evident also on a State basis. Of the 32 States with per capita incomes below the na-

³ The average deviation of the per capita incomes of the individual States from the United States average (each State being weighted by its population) increased from \$170 in 1940 to \$234 in 1946. Relative to the United States per capita income, however, the average deviation declined from 30 percent in 1940 to 20 percent in 1946.

tional average in 1940, 29 scored 1940-46 percentage advances exceeding that for the country as a whole. Conversely, of the 17 States having above-average per capita incomes in 1940, 16 registered gains from 1940 to 1946 that fell short of the Nation-wide average.

Nearly all the low-income States, it is to be noted, place unusual, if not primary, dependence upon agriculture as a source of income. For most of them, maintenance of the relative income gains achieved since 1940 will depend on a continued high demand for farm products. In view of the sensitivity of farm prices and income to general business activity, this in turn will depend in large measure upon continued prosperity and full employment.

In table 10 are shown, for the United States and the several regions, total income payments, population, and per capita income payments in 1946 as a percentage of 1940. In order to facilitate comparison of the ratios of total income, population, and per capita income for each region with those for the country as a whole, the regional percentages are also expressed in terms of the percentage for the United States taken as 100.

Most striking is the very large increase in population (37 percent) that accompanied the upsurge of total income payments in the Far West between 1940 and 1946. Although the Far West experienced the largest growth in total income of any region, its rise in per capita was of less-than-average proportion—considerably below the gains scored by the Northwest, Southeast and Southwest.

Disposable Income by Regions

The Commerce Department's national estimates of "disposable income" (the income remaining to persons after deduction of personal tax and certain other payments to governments) have been used widely in market analysis. Because of several statistical incomparabilities between the State data on income payments and the available State data on taxes, it has not been possible to develop reliable measures of disposable income by States.

Study has shown, however, that the incomparabilities are minimized on a larger-than-State basis and that for the regions a satisfactory and reasonably comparable series on income-tax payments by individuals can be derived. In table 11 are presented, for the first time, regional estimates of income payments to individuals after deduction of income-tax payments to Federal and State governments. These data on disposable in-

Table 9.—Differentials and Relative Changes in Per Capita Income Payments, by States and Regions¹

State and region	Percent of national per capita income				Percent change		
	1929	1940	1945	1946	1929 to 1940	1940 to 1946	1945 to 1946
Continental United States.....	100	100	100	100	-15	+109	+2
New England.....	123	126	111	110	-13	+82	+1
Connecticut.....	135	144	125	122	-10	+77	(2) -
Maine.....	83	89	89	87	-10	+105	(2) -
Massachusetts.....	132	133	114	113	-15	+77	+1
New Hampshire.....	96	95	83	87	-16	+92	+7
Rhode Island.....	125	124	113	112	-16	+88	+1
Vermont.....	88	91	86	90	-13	+108	+8
Middle East.....	136	131	119	119	-10	+90	+2
Delaware.....	135	156	121	124	-2	+67	+4
District of Columbia.....	175	188	117	131	-9	+45	+14
Maryland.....	103	124	111	108	+1	+81	-1
New Jersey.....	139	140	129	125	-15	+86	-1
New York.....	165	150	135	136	-23	+89	+3
Pennsylvania.....	113	109	104	103	-18	+97	+1
West Virginia.....	68	69	74	76	-14	+130	+5
Southeast.....	51	56	88	67	-6	+149	(2) -
Alabama.....	45	47	63	61	-12	+174	-2
Arkansas.....	45	44	56	58	-12	+177	+6
Florida.....	71	82	89	84	-3	+114	-4
Georgia.....	48	55	69	67	-4	+157	(2) -
Kentucky.....	55	54	64	65	-17	+153	+4
Louisiana.....	61	62	71	65	-14	+120	-6
Mississippi.....	40	35	48	46	-26	+175	-3
North Carolina.....	45	55	64	68	+2	+159	+9
South Carolina.....	37	50	58	61	+13	+155	+6
Tennessee.....	51	55	74	70	-9	+166	-3
Virginia.....	62	78	83	79	+7	+112	-2
Southwest.....	68	69	80	77	-14	+132	-2
Arizona.....	84	82	87	83	-17	+110	-3
New Mexico.....	56	62	72	76	-8	+156	+7
Oklahoma.....	67	62	72	69	-22	+132	-3
Texas.....	68	72	83	80	-11	+131	-2
Central.....	106	105	104	105	-16	+109	+3
Illinois.....	137	126	121	124	-22	+105	+4
Indiana.....	86	94	99	97	-7	+114	-1
Iowa.....	80	84	85	99	-11	+144	+19
Michigan.....	110	113	103	101	-13	+87	(2) -
Minnesota.....	83	89	85	91	-10	+114	+10
Missouri.....	90	88	90	95	-17	+126	+8
Ohio.....	110	112	113	109	-14	+102	-2
Wisconsin.....	93	90	98	100	-19	+132	+3
Northwest.....	79	79	95	97	-15	+156	+4
Colorado.....	91	91	101	100	-15	+128	+1
Idaho.....	76	77	94	101	-15	+182	+12
Kansas.....	78	73	91	89	-21	+152	-1
Montana.....	89	100	104	116	-5	+143	+14
Nebraska.....	82	75	92	97	-22	+169	+7
North Dakota.....	57	64	93	97	-5	+216	+6
South Dakota.....	61	65	94	102	-10	+227	+10
Utah.....	79	83	91	89	-11	+121	-1
Wyoming.....	101	105	98	105	-12	+109	+10
Far West.....	127	130	124	122	-13	+95	(2) -
California.....	139	140	128	128	-15	+90	+2
Nevada.....	120	145	128	142	+2	+104	+13
Oregon.....	94	101	105	99	-10	+105	-3
Washington.....	105	110	119	112	-11	+113	-4

¹ Computed from data shown in table 13.² Less than five-tenths of 1 percent.

Source: Office of Business Economics.

Table 10.—Regional Comparisons of Total Income Payments, Population, and Per Capita Income in 1946 With Those in 1940

Region	1946 as percent of 1940			1946 as percent of 1940, expressed on base of U. S. percentage as 100		
	Income payments ¹	Population	Per capita income	Income payments	Population	Per capita income
Continental United States.....	223	107	209	100	100	100
New England.....	196	108	182	88	101	87
Middle East.....	197	104	190	88	97	91
Southeast.....	258	104	249	116	97	119
Southwest.....	249	107	232	112	100	111
Central.....	221	106	200	99	99	100
Northwest.....	251	98	256	113	92	122
Far West.....	269	137	195	121	128	93

¹ To obtain comparability with the population data, the residence adjustments used in the computation of per capita income (see note 3 of "Technical Notes") were applied to total income payments.

Source: Income payments, Office of Business Economics; population, computed from data supplied by Bureau of the Census and War and Navy Departments.

ber of changes in definition. Also, they embody a complete statistical revision of former series that was designed to utilize improved estimating procedures and to base the estimates on the latest source data. Of particular note is that the name of the series on "income payments to individuals" has been changed to "personal income."

It has not as yet been possible to incorporate the revisions into the State income series. The estimates contained in this report conform to the "income payments to individuals" concept. The considerable job of preparing State distributions of personal income and its components for the years 1929-47 cannot be completed before the late summer of 1948.

The State income estimates presented in this report include revisions of estimates previously published for the years 1942-45. These revisions represent partly the incorporation of better and more complete statistical information by States than was available previously, but they stem also from the comprehensive revision of the national series noted above. Beginning with 1942, the State estimates of each of the components of non-agricultural proprietors' income and of property income were adjusted statistically in conformity with the new national totals. Moreover, one conceptual change—generally of some magnitude for the important farm States—was introduced into the 1942-46 estimates. This was the inclusion of the change in all farm inventories in the computation of the net income of farm proprietors. Formerly the change in farm inventories of crops not held for sales was excluded, the definition of the change in farm inventories being restricted to total livestock and to crops held for sale. The estimates of farm inventory change on the revised basis were made available by the Bureau of Agricultural Economics. The value of change in inventories, it may be noted, is included in farm proprietors' net income in order to secure a measure of income from current production.

2. "Income payments to individuals" is a measure of the income received by residents of each State from business establishments and governmental agencies. It comprises income received by individuals in the form of (1) wages and salaries, after deduction of employees' contributions to social security, railroad retirement, railroad unemployment insurance, and government retirement programs; (2) proprietors' incomes, representing the net income of unincorporated establishments, including farms, before owners' withdrawals; (3) property income, consisting of dividends, interest, and net rents and royalties; and (4) "other" income, which includes public assistance and other direct relief; labor income items such as work relief, government retirement payments, veterans' pensions and benefits, workmen's compensation, and social insurance benefits; mustering-out payments to discharged servicemen; family-allowance payments and voluntary allotments of pay to dependents of military personnel; enlisted men's cash terminal leave payments; and State government bonuses to veterans of World War II. Income payments are distributed among the States on a where-received basis (with the exception of wages and salaries, as noted below). Only payments made to residents are included in the estimates for the continental United States and the individual States.

3. Per capita income payments are derived by division of total income payments by total population excluding Federal civilian and military personnel stationed outside the continental United States. In five instances, however, income was transferred from the place of recipients' employment to place of

Table 14.—State Income Payments, by Type of Payment, 1942-46¹—Continued

[Millions of dollars]

State	1942	1943	1944	1945	1946	State	1942	1943	1944	1945	1946
Nevada, total.....	207	211	206	210	235	South Carolina Total.....	959	1,140	1,268	1,303	1,407
Wages and salaries.....	140	146	140	133	143	Wages and salaries.....	669	793	817	794	835
Proprietors' income.....	45	41	38	44	57	Proprietors' income.....	201	217	259	269	359
Property income.....	17	18	19	20	23	Property income.....	53	64	72	76	90
Other income.....	5	6	9	13	12	Other income.....	36	66	120	164	123
New Hampshire, total.....	350	378	419	460	543	South Dakota, total.....	472	448	547	598	673
Wages and salaries.....	243	255	274	290	348	Wages and salaries.....	162	191	199	213	227
Proprietors' income.....	43	51	58	66	87	Proprietors' income.....	263	208	283	304	359
Property income.....	50	52	55	58	65	Property income.....	31	30	35	40	46
Other income.....	14	20	32	46	43	Other income.....	16	19	30	41	41
New Jersey, total.....	4,552	5,381	5,794	5,774	6,161	Tennessee, total.....	1,528	1,983	2,276	2,443	2,535
Wages and salaries.....	3,467	4,182	4,403	4,162	4,310	Wages and salaries.....	947	1,262	1,397	1,428	1,443
Proprietors' income.....	478	518	565	612	779	Proprietors' income.....	377	453	514	558	631
Property income.....	464	485	518	555	620	Property income.....	141	153	165	180	206
Other income.....	143	196	308	445	452	Other income.....	63	115	200	277	255
New Mexico, total.....	299	375	420	448	491	Texas, total.....	4,451	5,962	6,436	6,527	6,748
Wages and salaries.....	173	235	254	261	271	Wages and salaries.....	2,755	3,863	4,078	3,944	3,915
Proprietors' income.....	84	90	99	105	135	Proprietors' income.....	1,122	1,365	1,395	1,407	1,649
Property income.....	27	29	31	33	38	Property income.....	407	449	486	514	579
Other income.....	15	21	36	49	47	Other income.....	167	285	477	662	605
New York, total.....	15,215	17,614	19,304	20,454	22,895	Utah, total.....	527	687	635	649	689
Wages and salaries.....	10,329	12,300	13,286	13,691	15,208	Wages and salaries.....	352	467	417	412	423
Proprietors' income.....	1,999	2,238	2,429	2,643	3,254	Proprietors' income.....	122	159	139	140	158
Property income.....	2,297	2,373	2,528	2,653	2,940	Property income.....	33	35	37	41	46
Other income.....	590	703	1,061	1,467	1,493	Other income.....	20	26	42	56	62
North Carolina, total.....	1,864	2,244	2,514	2,621	3,031	Vermont, total.....	253	286	305	331	383
Wages and salaries.....	1,135	1,425	1,453	1,445	1,672	Wages and salaries.....	155	175	180	184	221
Proprietors' income.....	520	544	671	695	900	Proprietors' income.....	51	59	63	73	86
Property income.....	153	167	191	201	235	Property income.....	39	40	43	45	49
Other income.....	56	108	199	280	224	Other income.....	8	12	19	29	27
North Dakota, total.....	440	505	556	566	624	Virginia, total.....	2,111	2,418	2,597	2,648	2,755
Wages and salaries.....	141	161	179	193	235	Wages and salaries.....	1,555	1,774	1,804	1,746	1,779
Proprietors' income.....	255	296	316	295	309	Proprietors' income.....	344	371	439	470	552
Property income.....	30	31	34	38	44	Property income.....	161	177	185	200	226
Other income.....	14	17	27	40	36	Other income.....	51	96	169	232	198
Ohio, total.....	6,973	8,349	8,917	9,114	9,808	Washington, total.....	2,211	2,894	3,203	3,052	3,118
Wages and salaries.....	4,950	6,114	6,408	6,183	6,566	Wages and salaries.....	1,544	2,097	2,268	2,058	1,944
Proprietors' income.....	963	1,054	1,091	1,271	1,525	Proprietors' income.....	413	511	589	574	686
Property income.....	828	868	923	982	1,086	Property income.....	175	185	200	220	247
Other income.....	232	313	495	678	631	Other income.....	79	101	146	200	241
Oklahoma, total.....	1,322	1,593	1,808	1,801	1,848	West Virginia, total.....	1,068	1,239	1,365	1,472	1,656
Wages and salaries.....	720	969	1,022	992	945	Wages and salaries.....	796	900	965	999	1,119
Proprietors' income.....	412	395	474	428	506	Proprietors' income.....	156	179	183	199	258
Property income.....	119	126	141	150	169	Property income.....	79	84	90	99	114
Other income.....	71	103	171	231	228	Other income.....	55	76	127	175	165
Oregon, total.....	1,193	1,572	1,636	1,631	1,729	Wisconsin, total.....	2,559	2,990	3,295	3,418	3,803
Wages and salaries.....	821	1,109	1,121	1,032	1,058	Wages and salaries.....	1,592	1,902	2,089	2,053	2,238
Proprietors' income.....	249	316	330	374	426	Proprietors' income.....	589	675	718	790	958
Property income.....	86	93	100	110	124	Property income.....	290	306	327	349	387
Other income.....	37	54	85	115	121	Other income.....	88	107	161	226	220
Pennsylvania, total.....	8,847	10,270	11,085	11,376	12,437	Wyoming, total.....	216	245	268	287	335
Wages and salaries.....	6,422	7,501	7,870	7,715	8,222	Wages and salaries.....	128	145	163	165	187
Proprietors' income.....	1,054	1,239	1,362	1,465	1,810	Proprietors' income.....	65	73	72	80	106
Property income.....	1,068	1,117	1,189	1,261	1,402	Property income.....	16	18	19	21	24
Other income.....	303	413	664	935	1,003	Other income.....	7	9	14	21	18
Rhode Island, total.....	826	925	963	956	1,006						
Wages and salaries.....	612	700	704	667	688						
Proprietors' income.....	80	78	84	84	100						
Property income.....	107	111	119	125	138						
Other income.....	27	36	56	80	80						

¹ For definitions see section on "Technical Notes." Comparable estimates for the years 1929, 1933, and 1939-41 were published in the August 1945 issue of the SURVEY OF CURRENT BUSINESS.

Source: Office of Business Economics.

The Business Situation

(Continued from p. 8)

total retail sales the bulge is not readily apparent.

The year 1936 was the period of greatest expansion in economic activity in the 1933-37 recovery from the depression low. While the bonus was one of the lesser expansionary forces, its contribution to the level of production and prices was undoubtedly important. The seasonally adjusted annual rate of personal income rose from 68.0 billion dollars in May to 78.9 billion in June and declined to 71.2 billion in September. The rise in income in 1936, the large average size of the bonds, and the age range of the veterans suggest that a significant proportion of the bonds was used to liquidate

debt, to invest in houses and other capital goods, and to add to liquid assets.

Spending Stimulus

In comparison with 1936, the factors that may lead to a higher propensity to spend the proceeds of bond redemptions are the relatively small average size of the bonds, the young age distribution, the number of veterans in college, and the need to finance the setting up of new households. On the other hand, unemployment is now lower and wages higher than 11 years ago, and durable goods are not now so readily available.

The increase in personal consumption expenditures arising from this source will have some expansionary effect in the economy. Concerning the types of goods and services most likely to be affected, it might seem that nonrecurrent lump

payments such as the present one would tend to favor expenditures for durable goods. In view of the still limited output of many durable goods, however, the effect may be to limit borrowing through increasing the size of down payments. Also to some extent it could be expected to reduce commercial borrowing at higher rates. As in 1936, the bulge in personal consumption expenditures may not be obvious, but there can hardly be any doubt that expenditures in late 1947 will be higher than they would have been without the cashing of leave bonds. It follows that appraisal of current market tendencies should take account of this nonrecurring item, though obviously such appraisals would include the relative magnitude in what is at present a consumer spending market of 159 billion dollars.

Table with columns for years 1947 and 1946, and months June through May. Includes a note: 'Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey'.

BUSINESS INDEXES—Continued

Main data table with columns for months and rows for 'INDUSTRIAL PRODUCTION—Continued', 'MANUFACTURERS' ORDERS, SHIPMENTS, AND INVENTORIES (VALUE)', and 'Inventories'. Rows include categories like 'Leather and products', 'Dairy products', 'Paper and pulp', etc.

* Revised. † Preliminary. ‡ Index is in process of revision.

*New series. Data beginning 1939 for the new series under industrial production are shown on pp. 18 and 19 of the December 1943 Survey. For 1938-45 data for the index of inventories for nonferrous metals and their products, see p. 22 of the August 1946 Survey.

† Revised series. For revisions for the indicated unadjusted indexes and all seasonally adjusted indexes shown above for the industrial production series, see pp. 18-20 of the December 1943 Survey. Seasonal adjustment factors for a number of industries included in the industrial production series shown in the Survey were fixed at 100 beginning various months from January 1939 to July 1942; data for these industries are shown only in the unadjusted series as the "adjusted" indexes are the same as the unadjusted. Data for 1939-44 for the revised indexes of new orders and shipments, except combined indexes for machinery, are shown on p. 23 of the July 1946 Survey, and combined indexes for machinery for these series and for inventories for 1938-45 are on p. 22 of the August 1946 issue; revised figures through August 1945 for inventories of "other durable goods industries," superseding figures in the August 1946 Survey, will be published later.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946						1947				
	June	July	August	September	October	November	December	January	February	March	April	May	

BUSINESS INDEXES—Continued

MANUFACTURERS' ORDERS, SHIPMENTS, AND INVENTORIES, (VALUE)—Continued												
Inventories—Continued.												
Index—Continued.												
Nondurable goods..... avg. month 1939=100	158	169	173	176	184	187	190	195	197	199	* 203	203
Chemicals and allied products..... do	166	170	171	174	180	185	195	199	204	211	222	228
Food and kindred products..... do	150	180	183	184	195	199	202	206	203	202	201	199
Paper and allied products..... do	164	171	178	181	183	183	185	187	192	196	* 201	206
Petroleum refining..... do	118	120	124	129	132	134	133	134	133	136	139	142
Rubber products..... do	192	195	198	204	212	215	216	238	250	262	273	---
Textile-mill products..... do	156	164	168	171	174	173	174	177	178	183	* 188	188
Other nondurable goods industries†..... do	176	182	186	189	200	207	208	217	221	222	223	222
Estimated value of manufacturers' inventories* mil. of dol.	17,175	18,010	18,466	18,886	19,533	19,896	20,259	20,805	21,176	21,612	22,061	22,408
NEW PLANT AND EQUIPMENT EXPENDITURES*												
All industries, total..... mil. of dol.	3,670	2,790		3,310				3,730		3,160		
Electric and gas utilities..... do	410	230		280				360		330		
Manufacturing and mining..... do	1,850	1,530		1,810				1,920		1,600		
Railroad..... do	240	130		160				180		160		
Commercial and miscellaneous..... do	1,160	910		1,070				1,280		1,080		

BUSINESS POPULATION

OPERATING BUSINESSES AND BUSINESS TURN-OVER*													
(U. S. Department of Commerce)													
Operating businesses, total, end of quarter..... thousands	3,494.7			3,595.3			3,644.6						
Contract construction..... do	232.2			241.9			247.9						
Manufacturing..... do	287.8			293.8			307.8						
Retail trade..... do	1,614.5			1,661.8			1,674.1						
Wholesale trade..... do	160.1			165.7			169.0						
Service industries..... do	661.2			681.9			696.6						
All other..... do	538.8			545.1			549.2						
New businesses, quarterly..... do	168.7			146.8			103.5						
Discontinued businesses, quarterly..... do	43.1			46.3			54.2						
Business transfers, quarterly..... do	103.3			108.3			88.5						
INDUSTRIAL AND COMMERCIAL FAILURES													
(Dun and Bradstreet)													
Grand total..... number	69	74	92	96	123	104	141	202	238	254	277	378	
Commercial service..... do	3	7	12	11	11	13	14	17	22	21	23	33	
Construction..... do	13	9	12	17	14	9	18	15	20	13	16	20	
Manufacturing and mining..... do	25	36	37	32	60	38	58	67	92	108	117	155	
Retail trade..... do	24	17	26	28	21	36	35	76	70	88	84	119	
Wholesale trade..... do	4	5	5	8	17	8	16	27	34	24	37	51	
Liabilities, grand total..... thous. of dol.	3,006	3,434	3,799	4,877	6,400	12,511	17,105	15,193	12,976	15,251	16,080	17,326	
Commercial service..... do	7	413	459	311	147	3,202	801	582	651	758	1,015	739	
Construction..... do	262	162	516	1,368	500	136	266	675	766	341	247	321	
Manufacturing and mining..... do	1,996	1,948	2,113	2,510	4,975	8,492	7,217	11,020	7,654	11,336	11,822	10,971	
Retail trade..... do	661	835	297	367	352	392	1,025	1,396	1,674	1,169	1,563	3,037	
Wholesale trade..... do	80	76	414	321	426	289	7,796	1,342	2,569	1,647	1,493	2,258	
BUSINESS INCORPORATIONS													
New incorporations (4 states)..... number	2,893	4,388	3,946	3,550	3,399	3,771	3,068	3,561	4,202	3,018	3,299	2,996	2,870

COMMODITY PRICES

PRICES RECEIVED AND PAID BY FARMERS													
U. S. Department of Agriculture													
Prices received, all farm products†..... 1909-14=100	271	218	244	249	243	273	263	264	260	262	280	276	272
Crops..... do	262	223	240	233	236	244	230	232	236	245	266	269	268
Food grain..... do	253	209	215	203	207	218	220	224	223	235	283	277	276
Feed grain and hay..... do	240	195	244	225	221	222	187	186	184	185	212	223	218
Tobacco..... do	390	370	369	858	396	410	399	406	399	390	390	387	390
Cotton..... do	275	210	249	271	285	304	286	242	240	246	257	260	270
Fruit..... do	228	261	249	203	210	208	186	211	196	205	215	233	222
Truck crops..... do	215	185	163	162	154	151	166	166	238	273	299	295	286
Oil-bearing crops..... do	318	219	242	242	236	255	342	294	336	334	360	358	326
Livestock and products..... do	278	213	247	263	250	299	294	294	281	278	292	282	275
Meat animals..... do	338	230	268	294	249	318	313	311	306	319	345	331	327
Dairy products..... do	233	207	245	257	271	300	307	312	292	270	269	257	241
Poultry and eggs..... do	205	178	196	199	221	257	230	232	201	192	199	204	203
Prices paid:*													
All commodities..... 1910-14=100	244	196	209	214	210	218	224	225	227	234	240	243	242
Commodities used in living..... do	252	201	214	221	217	231	239	242	248	252	252	255	254
Commodities used in production..... do	233	190	202	204	200	202	204	207	207	215	224	227	226
All commodities, interest and taxes..... do	231	188	199	204	200	207	212	213	215	221	227	230	229
Parity ratio*..... do	117	116	123	123	122	132	124	121	119	123	120	119	119

* Revised. † Preliminary.

*New series. For estimated value of manufacturers' inventories for 1938-42, see p. 7 of the June 1942 Survey and p. 8-2 of the May 1943 issue. For data prior to 1945 for the series on operating businesses and business turnover, see pp. 21-23 of the May 1946 Survey and p. 10 of the May 1944 issue. The series on new plant and equipment expenditures are compiled by the Securities and Exchange Commission and the U. S. Department of Commerce and are estimated quarterly totals for all private industry, excluding agriculture, based on reports from a sample including most of the corporations registered with the Commission and a large sample of unregistered manufacturing companies; data are reported actual expenditures. The series on prices paid by farmers and the parity ratio are from the U. S. Department of Agriculture; the latter is the ratio of prices received by farmers to prices paid, interest and taxes; data for 1913-45 will be shown later.

†Revised series. Revised figures for 1938-August 1945 for inventories of "other nondurable goods industries" will be shown later. Indexes of prices received by farmers for 1913-45 are shown on pp. 17-19 of the April 1947 Survey; data for July 15, 1947, are as follows: Total 278; crops, 263; food grain, 251; feed grain and hay, 253; tobacco, 390; cotton, 289; fruit, 215; truck crops, 189; oil-bearing crops, 314; livestock and products, 286; meat animals, 343; dairy, 244; poultry and eggs, 220.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey

EMPLOYMENT CONDITIONS AND WAGES-Continued

Main data table with columns for years (1947, 1946, 1947) and months (June, July, August, September, October, November, December, January, February, March, April, May). Rows include Pay Rolls (Production-worker pay rolls, Nondurable goods industries) and Wages (Average weekly earnings, manufacturing industries).

† Revised. ‡ Preliminary.

1 Data for October 1946 relate to the end of the preceding month. Data for the week ending September 15th are not available. The index has been temporarily discontinued.

§ Sample was changed in November 1942; data are not strictly comparable with figures prior to that month.

¶ Sample was changed in July 1942; data are not strictly comparable with figures prior to that month.

* New series. Indexes of pay rolls beginning 1939 for retail food establishments and 1940 for water transportation are shown on p. 31 of the June 1943 Survey. Data beginning 1932 for the newspapers and printing, book and job, industries will be published later; see November 1943 Survey for data beginning August 1942. Data for the aircraft engine industry beginning 1939 will also be published later.

† Revised series. See note marked "†" on p. S-10 regarding revisions in the indexes of pay rolls in manufacturing industries and reference to revised data and note marked "†" on p. S-11 for reference to revised data for pay rolls in nonmanufacturing industries. The indicated series on average weekly earnings and average hourly earnings (p. S-14) have been shown on a revised basis beginning in the March 1943 Survey (see note in that issue for an explanation of the revision); data prior to 1942 have not been published in the Survey and will be shown in a later issue; there were no revisions in the data for industries that do not carry a reference to this note.

Table header with columns for years 1947 and 1946, and months June, July, August, September, October, November, December, January, February, March, April, May.

FINANCE

Main table containing financial data under the heading 'BANKING'. Includes rows for agricultural loans, bank debits, assets, deposits, investments, and consumer short-term credit.

Footnote area with revision and preliminary symbols, and a long explanatory text block regarding data sources and survey methodology.

Table header for CHEMICALS AND ALLIED PRODUCTS, showing months from June 1947 to May 1947, and descriptive notes.

CHEMICALS AND ALLIED PRODUCTS

Main data table for CHEMICALS AND ALLIED PRODUCTS, including sub-sections like Inorganic chemicals, Organic chemicals, Fertilizers, and Miscellaneous.

Footnotes and explanatory text at the bottom of the page, including asterisked and symbol-coded references to revised data and survey details.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946						1947				
	June	July	August	September	October	November	December	January	February	March	April	May	

LUMBER AND MANUFACTURES—Continued

SOFTWOODS—Continued												
Southern pine—Continued												
Orders, new†.....mil. bd. ft.....	544	602	576	593	601	547	506	588	586	618	631	565
Orders, unfilled, end of month†.....do.....	701	679	633	651	642	633	574	565	551	553	544	449
Prices, wholesale, composite:												
Boards, No. 2 common, 1" x 8" or 8" x 12"†.....dol. per M bd. ft.....	64.333	46.029	46.083	46.083	46.083	53.182	67.163	71.656	72.530	71.460	* 67.790	* 65.694
Flooring, B and better, F. G., 1" x 4" x 12-14"†.....dol. per M bd. ft.....	130.683	65.091	65.091	65.091	65.091	74.723	96.546	106.782	109.979	120.104	* 130.083	* 130.683
Production†.....mil. bd. ft.....	610	625	625	567	668	589	610	578	686	681	693	726
Shipments†.....do.....	589	624	622	575	610	556	565	597	600	616	640	660
Stocks, end of month†.....do.....	1,081	1,082	1,085	1,077	1,135	1,168	1,213	1,194	1,280	1,345	1,398	1,404
Western pine:												
Orders, new†.....do.....	558	583	634	605	580	489	436	461	385	530	540	449
Orders, unfilled, end of month†.....do.....	298	276	258	283	288	275	269	302	278	353	357	247
Price, wholesale, Ponderosa, boards, No. 3 common, 1" x 8".....dol. per M bd. ft.....	54.36	40.07	40.93	40.19	40.35	40.38	40.36	43.30	45.60	48.51	50.99	52.71
Production†.....mil. bd. ft.....	666	671	737	* 632	625	491	394	329	346	420	534	653
Shipments†.....do.....	595	604	649	* 577	573	501	440	428	409	455	536	559
Stocks, end of month†.....do.....	835	901	987	1,041	1,092	1,083	1,038	939	876	841	839	933
West coast woods:												
Orders, new†.....do.....	477	492	514	448	536	445	451	582	618	723	529	* 544
Orders, unfilled, end of month.....do.....	559	545	554	538	576	544	514	523	577	685	646	595
Production†.....do.....	546	507	526	487	* 534	503	461	507	529	598	584	* 604
Shipments†.....do.....	532	493	496	468	* 493	484	489	576	548	569	586	* 607
Stocks, end of month.....do.....	378	378	403	420	462	475	448	377	379	410	374	397
SOFTWOOD PLYWOOD												
Production*.....thous. of sq. ft., 3/8" equivalent.....	139,623	121,412	99,747	126,974	129,270	149,606	129,635	121,816	140,058	129,622	139,779	148,027
Shipments*.....do.....	142,975	125,068	92,288	124,891	128,086	149,583	128,691	129,727	136,064	127,658	140,457	143,295
Stocks, end of month*.....do.....	31,481	24,391	34,189	33,842	35,560	34,959	34,984	26,882	30,712	31,995	32,146	* 35,618
FURNITURE												
All districts, plant operations.....percent of normal.....	62	59	68	68	72	73	70	74	73	78	78	-----
Grand Rapids district:												
Orders:												
Canceled.....percent of new orders.....	2	1	3	2	3	6	17	-----	-----	-----	-----	-----
New.....no. of days' production.....	40	53	47	35	53	27	28	-----	-----	-----	-----	-----
Unfilled, end of month.....do.....	147	137	141	137	141	130	120	-----	-----	-----	-----	-----
Plant operations.....percent of normal.....	69	62	71	70	72	75	77	78	75	82	82	-----
Shipments.....no. of days' production.....	37	33	39	40	42	38	36	-----	-----	-----	-----	-----

METALS AND MANUFACTURES

IRON AND STEEL												
Foreign trade:§												
Iron and steel products:												
Exports (domestic), total.....short tons.....	394,382	396,566	513,595	362,608	293,451	480,752	509,444	549,198	480,975	637,446	641,723	657,852
Scrap.....do.....	18,568	11,620	10,893	9,244	7,187	16,258	15,671	8,381	4,694	9,082	10,160	18,175
Imports, total.....do.....	64,969	131,022	119,664	124,453	110,767	143,378	102,686	137,556	129,994	162,150	* 239,154	137,604
Scrap.....do.....	3,409	103	763	1,896	207	1,159	1,018	1,690	1,511	3,058	3,478	2,184
Iron and Steel Scrap												
Consumption, total*.....thous. of short tons.....	4,214	4,476	4,670	4,449	4,907	4,579	4,239	4,900	4,503	5,136	-----	-----
Home scrap*.....do.....	2,074	2,382	2,594	2,467	2,705	2,535	2,193	2,717	2,406	2,689	-----	-----
Purchased scrap*.....do.....	2,140	2,094	2,076	1,982	2,202	2,044	2,046	2,183	2,097	2,447	-----	-----
Stocks, consumers', end of month, total*.....do.....	4,110	3,660	3,324	3,258	3,163	2,992	3,034	2,886	3,032	3,366	-----	-----
Home scrap*.....do.....	1,269*	1,267	1,142	1,192	1,184	1,121	1,158	1,063	1,061	1,109	-----	-----
Purchased scrap*.....do.....	2,841	2,393	2,182	2,066	1,979	1,870	1,876	1,823	1,971	2,257	-----	-----
Ore												
Iron ore:												
All districts:*												
Production.....thous. of long tons.....	8,850	11,612	11,090	10,742	9,917	6,605	2,274	2,698	2,591	2,846	6,575	10,981
Shipments.....do.....	9,914	12,215	11,083	10,546	9,965	6,830	1,193	1,251	1,322	1,425	7,216	11,755
Stocks, end of month.....do.....	5,367	4,764	4,770	4,966	4,860	4,607	5,688	7,135	8,404	9,825	9,212	8,438
Lake Superior district:												
Consumption by furnaces.....do.....	6,500	4,995	6,460	6,738	6,380	6,625	6,131	5,518	7,024	6,264	6,979	6,579
Shipments from upper lake ports.....do.....	11,457	8,654	10,848	9,774	9,636	9,209	6,701	247	0	0	4,448	10,373
Stocks, end of month, total.....do.....	21,746	26,265	30,439	34,067	37,573	40,435	41,919	37,465	30,514	24,317	17,411	13,555
At furnaces.....do.....	19,594	23,247	27,131	30,540	33,464	35,762	37,063	33,056	26,744	20,938	14,755	11,738
On Lake Erie docks.....do.....	2,152	3,018	3,307	3,617	4,109	4,674	4,857	4,409	3,770	3,379	2,656	1,816
Imports§.....do.....	173	340	371	402	386	329	237	223	198	233	263	439
Manganese ore, imports (manganese content)§.....do.....	34	72	62	70	69	77	55	76	45	32	64	46
Pig Iron and Iron Manufactures												
Castings, gray iron:*												
Shipments, total.....short tons.....	1,038,356	757,268	840,004	973,232	937,401	1,077,838	987,069	909,195	1,077,820	1,009,970	1,089,828	1,097,150
For sale.....do.....	596,874	442,473	487,458	567,164	540,649	626,273	561,626	514,415	632,789	583,252	633,844	636,708
Unfilled orders for sale.....do.....	2,710,918	2,640,430	2,708,385	2,814,430	2,897,105	2,952,705	2,940,199	2,979,658	3,021,141	2,986,741	2,979,326	2,907,694
Castings, malleable iron:†												
Orders, new, for sale.....do.....	31,972	39,388	34,157	41,955	44,369	50,140	36,802	28,542	34,517	55,938	50,194	41,994
Orders, unfilled, for sale.....do.....	248,798	275,845	271,981	272,571	277,309	280,972	278,446	267,661	269,764	274,018	280,724	275,415
Shipments, total.....do.....	78,524	61,650	64,446	67,903	69,507	79,207	68,987	68,314	75,898	74,716	76,614	81,890
For sale.....do.....	45,291	35,468	38,021	41,345	39,631	46,477	39,328	39,327	42,414	41,684	43,488	47,303

* Revised.
 † Since May 1944 the coverage of the malleable iron castings industry has been virtually complete; see note in the February 1947 Survey for further information.
 § Data continue series shown in the 1942 Supplement but suspended during the war period (it should be noted that data for iron and steel are shown in long tons in that volume); data for October 1941-February 1945 will be published later.
 * New series. For data beginning September 1941 for softwood plywood see p. 16 of the September 1944 Survey. For description of the series on scrap iron and steel and 1939-40 data, see note marked "†" on p. S-29 of the November 1942 Survey. The series for iron ore, all districts, are from the Department of the Interior, Bureau of Mines, and cover the entire industry, monthly data beginning 1943 and earlier annual totals will be shown later. Data for 1943-45 for gray iron castings are shown on p. 24 of the January 1947 Survey.
 † Revised series. See notes marked "†" on p. S-31 of the February 1947 Survey and p. S-29 of the April 1946 issue regarding unpublished revisions in data prior to 1945 for the indicated series on lumber production, shipments, orders, and stocks; new orders, production and shipments have been further revised beginning 1945 to conform with Bureau of the Census production data for that year; all revisions through April 1946 will be published later. The southern pine price series are shown on a revised basis beginning in the February 1946 Survey; see note in that issue.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946						1947				
	June	July	August	September	October	November	December	January	February	March	April	May	

METALS AND MANUFACTURES—Continued

IRON AND STEEL—Continued												
Pig Iron and Iron Manufactures—Continued												
Pig iron:												
Consumption*.....thous. of short tons.....	3,623	4,560	4,696	4,571	4,812	4,424	3,888	5,037	4,467	5,015		
Prices, wholesale:												
Basic (furnace).....dol. per long ton.....	33.00	28.00	28.00	28.00	28.00	28.00	28.00	29.60	30.00	30.00	33.00	33.00
Composite.....do.....	33.81	28.67	28.73	28.73	28.73	28.73	30.12	30.86	30.86	33.55	33.81	33.81
Foundry, No. 2, f. o. b. Neville Island*.....do.....	33.50	28.50	28.50	28.50	28.50	28.50	30.50	30.50	30.50	33.50	33.50	33.50
Production*.....thous. of short tons.....	4,810	3,682	4,705	4,898	4,687	4,815	4,435	3,992	5,087	4,550	5,123	4,830
Stocks (consumers and suppliers), end of month*.....thous. of short tons.....	821	810	771	830	881	687	668	674	735	777		
Steel castings:†												
Shipments, total.....short tons.....	139,031	121,522	117,528	129,666	126,471	137,304	130,606	123,907	139,029	125,612	134,909	144,175
For sale, total.....do.....	103,888	89,633	82,975	94,063	90,567	98,265	93,878	88,136	101,140	92,822	99,701	106,127
Railway specialties.....do.....	31,879	25,529	22,405	24,712	25,910	25,619	27,425	22,108	28,699	28,212	27,125	29,185
Steel forgings:*												
Orders, unfilled, for sale, total.....do.....	638,535	635,004	661,277	666,360	670,523	736,482	726,733	707,060	723,158	713,909	717,428	698,615
Drop and upset.....do.....	522,096	512,272	532,401	537,815	543,831	603,833	595,359	579,778	591,558	581,337	586,992	570,130
Press and open hammer.....do.....	116,439	122,732	128,876	128,545	126,692	132,649	131,374	127,282	131,600	132,572	130,436	128,485
Shipments, total.....do.....	200,656	164,921	168,319	184,286	173,934	203,410	183,856	187,375	199,589	195,681	205,085	228,787
Drop and upset, total.....do.....	152,664	117,299	124,718	136,124	132,544	154,277	134,363	138,567	145,943	148,166	156,724	170,993
For sale.....do.....	82,100	59,705	59,941	73,338	72,136	82,796	73,124	75,360	79,061	78,560	83,743	90,076
Press and open hammer, total.....do.....	47,992	47,622	43,601	48,162	41,390	49,133	49,493	48,808	53,646	47,515	48,361	52,794
For sale.....do.....	29,948	33,457	26,640	35,086	29,851	35,901	34,988	37,013	32,444	31,713	31,713	30,014
Steel consumed in production of forgings.....do.....	290,018	226,864	230,238	259,158	247,234	289,518	254,026	259,953	294,594	286,656	296,377	324,949
Steel ingots and steel for castings:												
Production.....thous. of short tons.....	6,952	* 5,674	* 6,619	* 6,925	* 6,576	* 6,952	* 6,458	* 5,761	7,213	6,422	7,307	7,043
Percent of capacity‡.....	93	74	85	89	87	89	85	74	93	92	94	94
Prices, wholesale:												
Composite, finished steel.....dol. per lb.....	.0329	.0303	.0305	.0305	.0305	.0305	.0305	.0312	.0329	.0329	.0329	.0329
Steel billets, rerolling (Pittsburgh).....dol. per long ton.....	42.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	42.00	42.00	42.00	42.00
Structural steel (Pittsburgh).....dol. per lb.....	.0250	.0235	.0235	.0235	.0235	.0235	.0235	.0235	.0250	.0250	.0250	.0250
Steel scrap (Chicago).....dol. per long ton.....	30.88	18.75	18.75	18.75	18.75	18.75	23.13	27.25	29.75	31.63	36.69	33.05
Steel, Manufactured Products												
Barrels and drums, steel, heavy types:⊙												
Orders, unfilled, end of month.....thousands.....	13,612	9,763	9,960	10,318	12,202	13,071	13,612	15,014	15,501	15,867	14,976	14,542
Production.....do.....	2,244	1,786	2,031	2,393	2,039	2,354	2,198	2,091	2,327	2,064	2,291	2,455
Shipments.....do.....	2,242	1,782	2,019	2,405	2,036	2,351	2,213	2,093	2,317	2,066	2,292	2,455
Stocks, end of month.....do.....	23	28	40	28	30	33	19	17	27	25	25	21
Boilers, steel, new orders:‡												
Area.....thous. of sq. ft.....	1,925	1,797	2,000	1,424	1,646	1,973	1,453	1,452	1,421	1,340	* 1,421	1,377
Quantity.....number.....	1,346	1,795	1,480	1,588	1,682	1,890	1,441	1,462	1,393	1,265	* 1,348	1,377
Cans, metal (in terms of steel consumed):*												
Shipments (for sale and own use), total.....short tons.....	232,972	240,089	306,798	343,338	318,304	258,763	192,134	198,406	174,890	157,758	180,256	205,024
Food.....do.....	168,436	204,977	267,434	302,756	282,075	215,247	151,882	157,030	129,914	111,154	125,867	139,718
Nonfood.....do.....	64,536	35,112	39,364	40,582	36,229	43,516	40,252	41,376	44,976	46,604	54,389	65,306
Shipments for sale.....do.....	193,635	205,462	276,459	300,870	277,829	222,307	161,951	167,637	138,203	123,761	142,837	160,245
Commercial closures, production*.....millions.....	845	1,279	1,196	1,391	1,340	1,574	1,401	1,323	* 1,476	* 1,154	1,176	* 1,086
Crowns, production*.....thousand gross.....	24,266	20,422	22,900	25,439	25,159	28,901	25,196	24,307	27,603	24,136	26,265	27,219
Porcelain enameled products, shipments:•												
thous. of dol.....	7,182	* 5,233	* 5,095	* 6,277	* 5,874	* 7,062	* 6,668	* 5,823	* 7,752	* 6,968	* 7,516	8,092
Spring washers, shipments.....do.....	5,239	399	455	506	543	580	580	580	580	580	580	580
Steel products, net shipments:⊙												
Total.....thous. of short tons.....	3,688	4,259	4,965	4,590	5,261	5,020	4,533	5,063	4,626	5,304	5,446	5,442
Merchant bars.....do.....	372	455	501	452	549	507	460	525	474	558	549	561
Pipe and tubes.....do.....	324	427	501	446	498	482	418	467	428	502	518	535
Plates.....do.....	284	399	421	397	467	466	386	468	445	527	555	579
Rails.....do.....	133	180	217	199	226	210	191	227	191	181	206	204
Sheets.....do.....	877	960	1,116	1,076	1,233	1,220	1,081	1,202	1,093	1,275	1,274	1,274
Strip—Cold rolled.....do.....	108	92	124	115	133	132	123	126	116	132	141	142
Hot rolled.....do.....	88	105	137	137	158	144	135	146	136	144	151	150
Structural shapes, heavy.....do.....	274	313	351	347	387	356	310	362	334	390	* 392	382
Tin plate and terneplate.....do.....	247	262	295	244	253	248	265	248	229	293	318	305
Wire and wire products.....do.....	318	297	387	365	410	391	392	420	364	396	425	425
NONFERROUS METALS AND PRODUCTS												
Aluminum:												
Imports, bauxite†.....long tons.....	65,356	77,110	88,606	95,038	29,811	93,752	113,445	108,795	166,616	167,437	129,133	189,615
Price, wholesale, scrap castings (N. Y.).....dol. per lb.....	.0444	.0523	.0525	.0550	.0575	.0682	.0775	.0775	.0755	.0725	.0719	.0667
Aluminum fabricated products, shipments, total*												
Castings*.....mil. of lb.....	* 121.0	* 136.1	* 151.2	* 148.7	* 181.8	* 163.1	* 156.9	* 174.4	* 157.7	* 155.3	* 152.6	143.2
Wrought products, total*.....do.....	91.8	90.1	105.0	114.8	114.2	138.8	124.9	119.4	133.7	120.0	110.9	* 106.7
Plate, sheet, and strip*.....do.....	70.5	65.6	80.3	88.8	91.9	110.1	99.5	92.7	103.9	92.9	83.8	* 81.7
Brass sheets, wholesale price, mill.....dol. per lb.....	.300	.237	.237	.237	.237	.237	.259	.275	.275	.289	.289	.293
Copper:												
Exports, refined and manufactures‡.....short tons.....	7,341	7,489	9,173	5,386	2,131	10,564	14,168	14,921	11,018	13,462	11,721	14,020
Imports, total‡.....do.....	20,510	35,755	21,272	25,182	32,503	33,182	45,431	25,138	26,114	26,291	23,204	41,659
For smelting, refining, and export†.....do.....	5,058	5,486	2,950	2,656	1,225	6,809	9,298	8,784	6,944	6,944	7,989	8,333
For domestic consumption, total‡.....do.....	15,452	30,269	18,322	22,526	31,278	26,373	36,133	12,798	17,330	19,347	15,215	38,426
Unrefined, including scrap‡.....do.....	819	12,319	18,272	19,315	23,029	12,933	23,925	8,592	7,805	12,158	9,755	25,099
Refined‡.....do.....	14,633	17,950	50	3,211	7,349	13,440	12,508	4,206	9,525	7,189	5,460	13,327
Price, wholesale, electrolytic (N. Y.).....dol. per lb.....	.2135	.1406	.1415	.1415	.1415	.1415	.1704	.1928	.1927	.1935	.2091	.2123

* Revised. ⊙ Beginning 1943, data have covered the entire industry.
† Based on information recently available it is believed that data beginning 1945 represent substantially the entire industry; in prewar years the coverage was about 90 percent.
• Data for 1946 and 1947 have been revised to exclude the value of finished plumbing ware; January–May 1946: Shipments—4,821; 4,355; 4,750; 5,876; 5,242.
⊙ Total shipments less shipments to members of the industry for further conversion; data prior to 1944 were production for sale.
‡ Data continue series published in the 1942 Supplement but suspended during the war period; data for October 1941–February 1945 will be published later.
§ For 1947, percent of capacity is calculated on annual capacity as of January 1, 1947, of 91,241,000 tons of steel; 1946 data are based on capacity as of January 1, 1946, 91,891,000 tons.
• New series. For pig iron consumption and stocks for 1939–40 and a description of the series see note marked “**” on p. S-29 of the November 1942 Survey. The series on pig iron production is approximately comparable with data in the 1942 Supplement (data in that volume are in short tons instead of long tons as indicated); see p. S-30 of the May 1943 Survey for further information and data for 1941–42. The pig iron price series replaces the Pittsburgh price shown in the Survey prior to the April 1943 issue. See note marked “***” on p. S-33 of the February 1947 Survey for a brief description of the data on aluminum fabricated products and reference to 1945 figures for the total; separate data prior to 1946 for the detail will be published later. The series for closures, including plastic closures, crowns, and metal cans, are compiled by the Bureau of the Census and cover all producers; data prior to 1946 will be shown later. For a brief description of the series for steel forgings, which are also compiled by the Bureau of the Census, and available data for 1945, see note on p. S-32 of the March 1947 Survey.
† Revised series. Data for steel castings are estimated industry totals; see note on p. S-32 of the July 1946 Survey for comparable figures beginning January 1945.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1946								1947				
	June	July	August	September	October	November	December	January	February	March	April	May	

METALS AND MANUFACTURES—Continued

NONFERROUS METALS AND PRODUCTS—Con.

Copper—Continued													
Production: ♂													
Mine or smelter (incl. custom intake)..... short tons.	1 81,854	32,785	56,906	64,462	69,748	72,807	73,024	78,674	78,256	74,474	84,356	1 88,927	1 91,203
Refinery..... do.	43,723	23,870	43,606	59,591	67,803	77,947	75,066	77,578	80,144	77,591	87,141	1 104,430	1 108,464
Deliveries, refined, domestic ♂..... do.	116,652	95,207	97,527	118,881	113,158	136,481	129,206	141,218	143,692	117,734	120,820	1 115,379	1 118,048
Stocks, refined, end of month ♂..... do.	1 76,629	79,145	101,183	94,669	98,619	91,161	90,896	80,832	76,680	74,645	71,507	1 85,293	1 83,980
Lead:													
Imports, total, except mfrs. (lead content) †..... do.		5,217	5,046	12,909	9,477	19,295	8,345	24,427	21,105	12,405	18,898	1 8,585	1 18,113
Ore (lead content):													
Mine production*..... do.		23,660	25,044	28,610	27,229	25,875	27,872	28,065	31,476	29,857	31,116	1 31,658	1 30,852
Receipts by smelters, domestic ore: ♂..... do.		21,801	32,977	31,373	28,054	27,324	26,180	31,307	30,907	32,157	36,328	1 37,581	1 34,269
Refined:													
Price, wholesale, pig, desilverized (N. Y.)..... dol. per lb.	.1500	.0818	.0925	.0825	.0825	.0825	.1044	.1219	.1293	.1318	.1496	.1500	.1500
Production, total ♂..... short tons.	45,235	18,584	34,029	35,690	40,720	43,062	40,041	40,448	45,620	44,053	51,239	53,424	53,822
From domestic ore ♂..... do.	41,505	17,450	32,622	33,994	39,012	41,217	38,287	38,043	42,506	41,210	46,699	48,995	49,084
Shipments ♂..... do.	54,627	25,173	35,591	32,891	34,947	41,008	34,764	40,613	44,888	49,638	52,465	50,568	50,482
Stocks, end of month ♂..... do.	37,836	32,968	31,396	34,275	40,944	42,992	48,262	48,088	48,826	43,233	41,900	44,834	47,233
Tin:													
Imports: †													
Ore (tin content)..... long tons.		3,242	5,665	3,593	153	783	4,904	415	3,011	1,774	0	3,987	1 4,009
Bars, blocks, pigs, etc..... do.		2,073	2,172	2,542	581	2,462	1,195	1,991	1,285	419	700	33	54
Price, wholesale, Straits (N. Y.)..... dol. per lb.	.8000	.5200	.5200	.5200	.5200	.5200	.6452	.7000	.7000	.7000	.7000	.8000	.8000
Zinc:													
Imports, total (zinc content) †..... short tons.		15,729	31,057	21,241	25,424	14,425	27,331	32,041	48,627	57,396	25,753	43,935	33,582
For smelting, refining, and export †..... do.		878	5,287	3,476	3,637	742	5,441	3,624	5,441	22,482	5,842	10,082	6,367
For domestic consumption: †													
Ore (zinc content)..... do.		7,616	19,982	14,007	17,242	8,899	15,278	18,608	29,896	29,275	12,823	28,930	20,306
Blocks, pigs, etc..... do.		7,235	5,788	3,758	4,545	4,784	6,612	9,809	13,289	5,639	7,088	4,923	6,909
Mine production of recoverable zinc*..... do.		42,524	33,218	45,893	48,433	51,517	48,993	49,891	54,925	51,085	55,134	56,827	57,181
Slab zinc:													
Price, wholesale, prime Western (St. Louis)..... dol. per lb.	.1050	.0825	.0923	.0825	.0825	.0887	.1012	.1050	.1050	.1050	.1050	.1050	.1050
Production ♂..... short tons.	70,990	58,812	59,014	59,752	58,475	64,138	66,873	70,176	72,332	65,198	75,376	73,891	73,070
Shipments ♂..... do.	63,527	60,492	69,220	51,886	65,927	73,915	91,429	90,204	74,795	76,074	75,788	72,243	70,863
Domestic ♂..... do.	52,390	51,101	58,321	43,522	60,136	71,667	75,781	77,904	67,211	65,356	67,325	61,715	58,827
Stocks, end of month ♂..... do.	174,327	239,953	229,747	237,613	230,161	220,384	196,828	175,800	173,337	162,401	162,401	163,697	166,864

HEATING APPARATUS, EXCEPT ELECTRIC

Boilers, radiators and convectors, cast iron: †													
Boilers (round and square):													
Production..... thous. of lb.	25,838	20,966	21,188	25,380	25,713	30,066	28,451	19,856	27,982	26,003	29,452	28,849	29,528
Shipments..... do.	26,342	21,348	20,222	26,881	27,021	32,243	30,954	23,694	24,294	23,782	26,073	25,326	23,185
Stocks, end of month..... do.	50,824	41,611	42,577	41,076	39,769	37,591	35,088	32,173	35,861	38,082	41,461	44,984	51,327
Radiation:													
Production..... thous. of sq. ft.	4,472	3,386	3,196	3,878	3,494	4,523	4,321	3,250	4,619	4,168	4,862	4,890	4,984
Shipments..... do.	4,698	3,355	3,559	4,469	3,764	4,858	4,369	4,236	4,065	4,200	4,441	4,597	4,746
Stocks..... do.	2,909	4,375	4,012	3,421	3,151	2,816	2,768	1,732	2,256	2,254	2,675	2,899	3,137
Boilers, range, shipments*..... number.	85,704	90,636	113,524	104,169	103,837	94,274	84,457	78,400	60,821	67,140	66,597	66,745	
Oil burners: †													
Orders, new, net..... do.	106,579	102,438	101,818	51,888	99,009	105,689	86,196	87,872	118,208	11,795	2 10,338	5,083	
Orders, unfilled, end of month..... do.	806,181	862,912	907,304	931,853	956,966	990,350	1,002,380	1,008,813	1,045,876	1,077,832	968,114	874,787	
Shipments..... do.	36,745	45,707	57,426	57,339	73,896	72,305	74,166	81,439	81,245	96,694	99,350	98,410	
Stocks, end of month..... do.	5,852	6,626	5,543	5,198	6,407	7,588	7,039	10,487	11,903	14,745	13,337	15,432	
Stoves and ranges, domestic cooking, exc. electric: †													
Production, total..... do.	219,970	202,517	263,215	249,542	296,874	254,261	226,291	302,890	281,510	305,406	313,694	288,699	
Coal and wood..... do.	31,415	28,459	34,520	34,142	42,232	33,175	31,701	39,817	40,411	46,175	49,288	44,837	
Gas (incl. bungalow and combination)..... do.	144,205	133,679	181,190	169,929	204,190	172,054	153,972	206,130	188,587	203,631	210,406	194,182	
Kerosene, gasoline, and fuel oil..... do.	44,350	40,379	47,505	45,471	50,452	49,032	40,618	57,362	52,712	55,600	54,000	49,680	
Stoves, domestic heating, production, total*..... do.	282,358	304,007	376,557	377,803	528,984	466,854	457,360	467,577	360,150	388,957	416,216	412,648	
Coal and wood*..... do.	106,608	115,421	135,191	146,901	206,873	163,115	151,979	131,055	89,049	97,264	95,063	92,349	
Gas*..... do.	93,091	86,334	104,037	116,405	155,945	151,271	162,518	160,936	139,879	159,496	175,282	157,720	
Kerosene, gasoline, and fuel oil*..... do.	82,659	102,252	137,329	114,497	166,166	152,468	142,863	175,888	131,222	132,197	145,871	160,579	
Warm air furnaces (forced air and gravity air flow), shipments, total*..... number.													
Gas*..... do.	15,914	16,206	20,192	23,163	27,545	29,089	26,262	28,954	23,944	14,562	14,209	9,923	
Oil*..... do.	4,339	5,345	6,345	9,112	9,537	12,296	14,355	14,980	17,552	22,653	22,650	24,664	
Solid fuel*..... do.	29,283	27,571	35,709	40,028	46,420	47,620	37,490	32,603	24,812	22,951	19,038	20,324	
Water heaters, nonelectric, shipments*..... do.	181,424	187,569	213,789	209,415	264,989	260,569	253,621	203,315	270,843	282,408	244,711	209,800	

MACHINERY AND APPARATUS

Blowers, fans and unit heaters:													
Blowers and fans, new orders..... thous. of dol.	16,604				17,382				15,292		14,907		
Unit heater group, new orders..... do.	7,628				10,193				10,113		7,216		
Electric overhead cranes: †													
Orders, new..... do.	1,456	2,360	1,565	1,082	2,346								
Orders, unfilled, end of month..... do.	15,132	16,242	16,549	15,811	16,775								
Shipments..... do.	494	802	1,252	1,192	1,348								
Foundry equipment: †													
New orders, net, total..... 1937-39=100.....	649.9	491.7	453.4	538.7	424.4	469.2	477.4	430.9	513.4	521.9	573.8	512.1	548.6
New equipment..... do.	658.9	492.8	444.8	555.5	415.4	407.1	421.0	379.0	466.9	472.5	532.3	445.9	525.9
Repairs..... do.	620.7	488.2	481.1	484.1	453.5	672.0	661.5	600.3	665.0	682.9	709.5	727.9	623.0
Machine tools, shipments*..... thous. of dol.	24,720	28,580	22,360	26,911	25,468	29,140	26,176	27,587	26,542	26,765	29,012	26,857	25,791

* Revised. † Data continue series published in the 1942 Supplement but suspended during the war period; data for October 1941-February 1945 will be published later. Beginning April 1947, data include copper from all sources; earlier data relate to domestic and duty-free foreign copper except that deliveries included deliveries of duty-paid foreign copper for domestic consumption. Stock figure for April 1, 1947, comparable with later data, is 80,522 short tons.

‡ Cancellations exceeded new orders. † Data cover 9 companies since September 1944; earlier data back to March 1943 covered 8 companies.

♣ For data for January 1942-April 1944 for the indicated copper, lead, and zinc series, see p. 24 of the June 1944 Survey. Total shipments of zinc include through September 1946 shipments for Government account in addition to shipments to domestic consumer and export and drawback shipments.

§ See p. 24 of the January 1947 Survey for available data for 1942-45 for cast-iron boilers and radiation; these series continue data in the 1942 Supplement.

¶ Data are based on reports of 150 companies for 1946 and around 160 for 1947, covering almost the entire industry; it is believed that concerns added after 1945 had little or no production in that year and data for 1945 were practically complete; in prewar years reports covered about 90 percent of the industry.

* New series. Data for mine production of lead and zinc are from the Department of the Interior, Bureau of Mines, and are practically complete; monthly figures beginning July 1941 and earlier annual totals will be shown later. Data for range boilers, stoves and ranges, warm-air furnaces and water heaters are compiled by the Bureau of the Census and are practically complete; data for 1943-45 for domestic heating stoves are shown on p. 20 of the April 1947 Survey; data prior to 1946 for the other series will be shown later (data beginning 1944 for total shipments of warm-air furnaces are available in the May 1945 and later issues of the Survey). The data shown for gas cooking stoves and ranges were revised in the April 1947 Survey to include combination ranges, or ranges designed to use two different fuels; gas is one of the fuels used in most of these ranges. For source of data on machine tool shipments and reference for 1940-42 data, see note on p. S-34 of February 1947 Survey.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947								1946				
	June	July	August	September	October	November	December	January	February	March	April	May	

METALS AND MANUFACTURES—Continued

MACHINERY AND APPARATUS—Continued													
Mechanical stokers, sales:†													
Classes 1, 2, and 3.....number.....	5,851	13,893	17,503	20,354	19,437	17,269	14,946	7,594	4,282	2,306	3,598	4,061	5,281
Classes 4 and 5:													
Number.....	270	309	330	427	450	454	357	339	215	177	280	174	170
Horsepower.....	63,168	75,074	83,958	70,827	63,055	78,454	58,495	49,903	54,852	52,705	56,661	57,563	52,981
Pumps and water systems, domestic, shipments:‡													
Domestic hand and windmill pumps.....number.....	36,046	27,741	22,663	25,003	24,082	30,552	28,917	23,434	26,737	28,310	36,261	36,578	38,745
Water systems, including pumps, total.....do.....	54,290	46,155	54,531	60,251	55,485	68,289	57,986	62,319	59,545	64,455	62,586	70,792	61,045
Jet*.....do.....	21,551	23,042	27,421	28,889	26,737	34,728	30,103	34,141	31,125	33,930	32,773	35,671	20,173
Nonjet*.....do.....	32,739	23,113	27,110	31,362	28,748	33,561	27,883	28,178	28,420	30,525	29,813	35,121	31,872
Pumps, steam, power, centrifugal and rotary, new orders.....thous. of dol.....	2,999	2,648	4,014	3,789	3,223	3,581	3,260	3,035	3,428	3,506	3,464	3,638	2,973
Scales and balances (except laboratory), shipments, quarterly:*.....thous. of dol.....		7,150			7,751			9,864			10,100		
Sewing machines, heads, production:*.....number.....													
Domestic.....do.....	33,838	34,596	27,296	35,249	50,042	43,220	43,843	47,063	46,068	51,384			
Industrial.....do.....	8,909	10,788	7,364	9,695	12,760	10,832	10,764	12,506	11,368	11,687	14,002	11,835	
ELECTRICAL EQUIPMENT													
Battery shipments (automotive replacement only), number*.....thousands.....	1,377	1,161	1,471	1,318	1,355	1,150	1,213	1,500	1,601	1,798	1,868	1,873	
Domestic electrical appliances, shipments:													
Vacuum cleaners, total •.....number.....	184,182	199,722	234,148	223,039	266,062	268,432	272,949	265,790	279,219	327,528			
Floor.....do.....	178,841	192,655	226,060	216,219	259,153	260,572	265,364	258,892	272,927	321,515			
Hand.....do.....	5,341	7,067	8,088	6,820	6,909	7,860	7,585	6,898	6,292	6,013			
Washers •.....do.....	314,705	172,195	168,500	189,778	184,215	247,816	216,634	190,770	259,233	255,611	290,397	320,969	313,724
Electrical products:†													
Insulating materials, sales billed.....1936=100.....	227	252	284	294	351	331	337	388	373	405	405		
Motors and generators, new orders ‡.....do.....	465	432	501	471	508	438	533						
Furnaces, electric, industrial, sales:													
Unit.....kilowatts.....	9,099	9,379	9,889	8,240	4,869	4,227	3,615	7,528	5,060	6,514	8,854	3,586	
Value.....thous. of dol.....	606	771	2,104	714	647	600	322	789	476	551	1,079	389	
Laminated fiber products, shipments.....do.....	4,150	2,878	3,507	3,761	4,328	4,074	4,168	4,550	4,471	4,859	4,687	4,092	
Motors (1-200 hp):													
Polyphase induction, billings.....do.....	5,873	6,154	7,519	7,871	8,621	8,437	9,861			120,589			
Polyphase induction, new orders.....do.....	13,095	13,377	15,445	13,808	14,756	11,962	13,875			138,332			
Direct current, billings.....do.....	973	987	1,234	1,011	1,344	1,222	1,825			14,359			
Direct current, new orders.....do.....	1,735	1,589	2,067	1,741	2,204	1,215	3,620			15,318			
Rigid steel conduit and fittings, shipments†.....short tons.....	22,218	16,129	15,705	21,471	18,683	20,742	20,533	24,252	18,297	18,757	20,088	21,110	22,141
Vulcanized fiber:													
Consumption of fiber paper.....thous. of lb.....	4,771	3,247	3,183	3,790	4,125	5,059	4,741	4,241	5,004	4,488	4,598	4,824	5,086
Shipments.....thous. of dol.....	1,625	824	1,056	1,288	1,330	1,765	1,640	1,701	1,942	1,744	1,757	1,791	1,758

PAPER AND PRINTING

PULPWOOD AND WASTE PAPER													
Pulpwood:*													
Consumption.....thous. of cords (128 cu. ft.).....	1,632	1,514	1,423	1,558	1,503	1,628	1,585	1,473	1,666	1,523	1,702	1,647	1,714
Receipts, total.....do.....	1,696	1,604	1,723	1,920	1,821	1,705	1,382	1,438	1,709	1,861	1,819	1,430	1,465
Stocks, end of month.....do.....	3,815	2,942	3,241	3,639	3,956	4,034	3,818	3,780	3,814	4,153	4,255	4,035	3,767
Waste paper:*													
Consumption.....short tons.....	642,650	578,075	558,257	635,827	607,231	680,047	651,974	596,247	678,241	620,667	684,637	668,727	693,879
Receipts.....do.....	649,812	606,548	596,609	635,567	604,136	707,738	636,387	634,491	637,165	587,481	667,975	711,509	697,152
Stocks.....do.....	477,944	426,750	464,831	460,946	453,896	481,398	464,676	515,361	492,702	458,826	435,411	475,915	473,917
WOOD PULP													
Exports, all grades, total†.....short tons.....	6,057	4,780	3,591	4,334	2,302	1,947	2,737	6,475	9,534	15,150	13,140	14,161	
Imports, all grades, total†.....do.....	150,216	212,697	147,417	133,141	152,707	135,001	136,428	167,977	160,791	141,995	148,921	175,067	
Bleached sulphate†.....do.....	10,584	9,757	3,263	6,348	7,562	7,818	9,271	15,537	20,567	14,132	13,402	19,988	
Unbleached sulphate†.....do.....	26,482	64,109	33,864	32,893	29,292	28,051	20,735	38,921	26,615	17,872	21,673	28,669	
Bleached sulphite†.....do.....	37,757	37,439	33,988	28,104	31,113	26,938	35,297	39,661	38,318	39,610	43,417	40,330	
Unbleached sulphite†.....do.....	49,818	78,176	49,574	49,822	62,459	51,986	50,636	53,075	54,596	48,190	44,022	59,488	
Soda.....do.....	1,928	1,249	1,529	1,556	1,410	1,070	1,770	1,318	1,699	1,597	1,621	1,592	
Groundwood†.....do.....	23,647	21,967	25,199	14,418	20,871	19,138	18,719	19,465	18,996	20,594	24,786	25,000	
Production:†													
Total, all grades.....do.....	900,629	829,378	915,099	880,198	980,653	947,335	886,567	997,645	913,079	1,012,858	984,622	1,038,341	
Bleached sulphate.....do.....	77,336	71,931	80,170	76,008	79,811	77,472	75,135	87,764	79,766	89,792	87,175	92,484	
Unbleached sulphate.....do.....	323,722	309,614	331,556	314,045	343,457	336,697	304,130	350,101	321,127	354,293	337,047	336,873	
Bleached sulphite.....do.....	138,986	132,575	143,184	135,185	152,654	144,605	141,338	159,571	146,907	162,270	160,223	164,791	
Unbleached sulphite.....do.....	65,455	56,075	69,272	64,407	75,732	71,711	67,047	75,000	68,901	73,967	74,131	79,133	
Soda.....do.....	38,386	37,583	42,655	38,947	42,010	40,717	39,154	42,343	37,696	42,092	41,655	43,324	
Groundwood.....do.....	149,540	133,614	140,027	132,787	159,873	158,714	149,588	164,703	150,587	167,995	157,727	171,905	
Defibrated, exploded, etc.*.....do.....	58,955	41,706	56,589	71,548	75,279	69,915	66,796	73,111	65,485	76,061	74,712	76,000	
Stocks, end of month:†													
Total, all grades.....do.....	85,313	83,178	77,606	71,916	72,432	76,590	70,609	74,887	74,465	79,694	83,786	95,760	
Bleached sulphate.....do.....	6,291	6,684	6,021	7,193	7,589	6,218	6,836	7,542	6,990	7,447	8,926	7,079	
Unbleached sulphate.....do.....	8,013	6,773	6,430	8,350	7,865	8,765	7,222	8,545	7,809	7,043	8,331	7,545	
Bleached sulphite.....do.....	14,363	17,933	17,185	16,713	17,620	18,615	20,326	19,500	17,747	21,004	20,564	26,284	
Unbleached sulphite.....do.....	11,809	11,043	13,605	12,154	15,399	15,294	9,518	8,610	9,938	11,128	10,645	13,527	
Soda.....do.....	2,329	2,448	2,726	2,690	2,481	2,611	2,088	2,431	2,808	2,422	2,052	2,709	
Groundwood.....do.....	39,252	34,940	28,230	21,381	17,943	21,423	22,897	25,971	27,188	28,630	32,046	35,452	

† Revised. (1) Data are for January-March. (2) It is believed that data shown currently and also earlier data for recent years are substantially complete. ‡ Data cover almost the entire industry; in prior years the reporting concerns represented over 95 percent of the total. § Data continue series published in the 1942 Supplement but suspended during the war period; data for October 1941-February 1945 will be published later. ¶ The monthly index of orders received of motors and generators will be released quarterly beginning with the second quarter of 1947. • Data for washers are from the American Ironer and Washer Manufacturers' Association and cover electric and gasoline washers, excluding small or midsize types; the 1946 data are as reported by companies representing around 97 percent of the industry according to comparison of the January-September total with data for that period collected by the Bureau of the Census; 1947 data are revised estimated industry totals. Data for vacuum cleaners are from the Vacuum Cleaner Manufacturers Association and cover total sales, excluding rebuilt cleaners, by the industry; data for hand type are comparable with figures in the 1942 Supplement; data for floor type shown in that volume include rebuilt cleaners and are therefore not entirely comparable with figures shown above (comparable monthly average for 1941, 139,177). * New series. See note in the February 1947 Survey for source of data for automotive replacement battery shipments, pulpwood and waste paper; all series are industry totals. Data for 1939-45 for jet and nonjet water systems will be shown later. Data for scales and balances and sewing machines are from the Bureau of the Census and are practically complete, data prior to 1946 will be shown later (collection of data on the production of domestic sewing machines has been discontinued). Data beginning 1941 for production of defibrated, exploded, etc., wood pulp also will be shown later. † Revised series. See note in February 1947 Survey regarding unpublished revisions in the indexes of new orders for motors and generators and sales of insulating materials. Data for rigid steel conduit and fittings were revised in the July 1946 Survey (see note in that issue for explanation). Revised wood pulp production for 1940-43 and sulphite stocks for 1943 are shown on p. 20 of the December 1944 Survey and revised 1942 stock figures for all series are on pp. 30 and 31 of the June 1943 issue; revisions in the 1943 data for groundwood and total production shown in the December 1944 Survey and unpublished revisions in the 1944 production data for these two series will be shown later; beginning in the May issue, data for total production of wood pulp include defibrated, exploded, etc., pulp, shown separately above, which was not included previously; stocks of such pulp are comparatively small and are not included in the stock figures; stock data are stocks of own pulp at mills.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946						1947				
	June	July	August	September	October	November	December	January	February	March	April	May	
PAPER AND PRINTING—Continued													
PAPER AND PAPER PRODUCTS													
All paper and paperboard mills:*													
Paper and paperboard production, total, short tons	1,729,087	1,596,773	1,474,261	1,684,906	1,596,187	1,751,147	1,674,107	1,577,751	1,764,493	1,629,117	1,800,239	1,754,410	1,835,620
Paper	883,163	820,090	766,906	864,982	799,698	888,293	845,207	803,350	892,871	820,583	901,973	885,366	931,506
Paperboard	726,304	677,681	635,304	729,445	687,473	737,648	708,949	659,340	752,393	701,075	773,441	751,198	776,381
Building board	119,620	99,002	72,051	90,479	109,016	125,206	119,951	115,061	119,229	107,459	124,825	117,846	127,733
Paper, excl. building paper, newsprint, and paperboard (American Paper and Pulp Association):†													
Orders, new	691,780	669,564	659,247	646,889	681,582	745,909	640,569	644,338	809,564	671,294	738,255	692,057	715,757
Production	704,830	671,335	613,822	704,694	648,551	721,954	690,813	654,939	728,303	666,630	732,863	711,517	750,396
Shipments	692,237	677,096	613,441	701,343	632,877	736,737	695,803	649,478	726,511	667,801	721,800	709,453	744,357
Fine paper:													
Orders, new	106,080	108,191	100,854	85,449	101,055	109,332	81,565	84,304	114,900	93,388	119,009	102,900	90,518
Orders, unfilled, end of month	158,250	175,437	187,924	161,480	176,288	174,098	159,403	161,502	166,112	161,085	166,788	165,340	148,310
Production	100,200	97,790	89,320	103,161	92,573	102,908	100,943	94,870	105,100	97,608	106,484	102,434	107,591
Shipments	97,205	99,684	85,824	99,592	88,037	112,537	104,245	93,037	107,504	98,095	105,153	100,644	108,356
Stocks, end of month	50,500	59,500	56,150	53,504	59,081	54,635	52,578	52,970	47,939	47,596	47,880	48,985	49,285
Printing paper:													
Orders, new	235,125	214,214	225,529	202,087	234,622	254,603	212,033	223,580	314,706	235,764	252,988	238,918	260,627
Orders, unfilled, end of month	270,793	252,603	258,456	229,328	241,498	248,257	221,908	226,988	290,502	296,114	292,367	281,212	273,275
Price, wholesale, book paper, "B" grade, English finish, white, f. o. b. mill, dol. per 100 lb.	9.80	8.00	8.00	8.28	8.55	8.55	8.55	9.30	9.30	9.68	9.80	9.80	9.80
Production	248,180	226,110	206,408	236,530	219,460	246,718	230,394	223,860	252,360	230,039	256,045	252,348	263,677
Shipments	242,032	228,049	206,958	237,857	213,137	249,933	235,028	215,967	250,429	226,676	249,862	252,770	257,570
Stocks, end of month	75,802	53,512	53,225	55,331	59,320	62,013	50,504	55,100	57,113	60,440	67,234	63,943	68,516
Wrapping paper:													
Orders, new	255,575	254,258	247,518	261,804	253,345	278,773	252,261	245,954	279,440	249,396	270,461	252,330	263,424
Orders, unfilled, end of month	170,575	194,966	197,977	193,693	213,506	214,298	197,134	191,210	186,735	184,065	182,985	178,430	161,563
Production	260,500	254,348	237,498	266,987	248,021	274,416	264,614	248,937	272,357	249,479	271,949	256,878	276,941
Shipments	256,500	256,630	237,170	267,254	243,728	276,005	264,765	252,874	272,500	252,127	269,947	256,026	275,131
Stocks, end of month	65,875	65,970	65,867	64,162	72,263	71,230	66,026	67,131	64,128	61,972	59,211	59,788	60,225
Newsprint:													
Canada:													
Production	355,606	334,207	357,027	370,676	330,063	376,436	364,304	341,951	370,000	341,268	372,482	369,490	384,520
Shipments from mills	375,498	322,805	364,591	356,572	335,874	387,294	391,388	340,125	344,543	319,831	373,769	376,305	400,763
Stocks, at mills, end of month	90,431	123,161	115,597	129,701	123,890	113,232	85,948	87,774	113,231	134,668	133,381	126,566	110,323
United States:													
Consumption by publishers	292,664	259,284	243,072	257,303	265,583	292,205	291,517	294,835	266,422	258,424	302,672	297,461	302,994
Imports †		276,959	326,399	295,934	293,228	305,777	323,457	318,576	294,042	260,815	322,357	315,334	328,747
Price, rolls (N. Y.), dol. per short ton	90.00	67.00	71.08	73.80	74.00	80.00	84.00	84.00	84.00	84.00	84.00	90.00	90.00
Production	67,268	61,241	62,742	65,129	61,025	67,248	64,739	62,088	68,634	62,802	67,916	71,933	73,498
Shipments from mills	66,743	61,671	60,249	67,206	55,587	66,966	62,107	62,054	69,492	65,226	68,872	73,988	70,997
Stocks, end of month:													
At mills	11,951	6,416	8,909	6,832	12,270	12,552	15,184	15,218	14,360	11,936	10,980	8,925	11,426
At publishers	228,793	209,784	226,577	243,331	240,602	217,303	217,438	219,478	231,964	224,545	206,064	215,995	212,724
In transit to publishers	11,664	52,155	61,735	64,331	60,634	82,167	79,676	73,328	75,602	69,466	73,699	68,773	64,985
Paperboard (National Paperboard Association):‡													
Orders, new	715,054	682,472	729,294	742,918	712,650	806,828	703,825	697,357	802,016	713,834	747,358	770,304	760,236
Orders, unfilled, end of month	461,226	568,733	632,141	575,021	580,228	613,221	555,398	542,896	586,121	577,777	549,774	582,603	511,918
Production	737,551	687,700	675,600	768,200	692,200	781,700	750,900	688,646	774,667	718,072	747,115	765,026	805,744
Percent of activity	101	97	89	99	96	99	99	92	98	103	103	100	101
Waste paper, consumption and stocks: §													
Consumption	424,391	374,295	369,803	439,686	399,684	420,867	474,317	397,478	450,740	416,935	456,127	445,180	464,323
Stocks at mills, end of month	299,507	283,996	315,236	313,975	299,218	309,990	304,100	321,434	313,398	274,850	266,879	289,297	293,347
Paper products:													
Shipping containers, corrugated and solid fiber, shipments* mil. sq. ft. surface area	4,662	4,730	4,763	5,233	4,919	5,512	5,242	4,828	5,475	5,289	5,566	5,438	5,245
Folding paper boxes, value:*													
New orders	343.8	362.7	361.0	381.0	414.6	440.2	363.8	421.4	490.3	445.6	414.5	414.4	399.7
Shipments	447.6	331.3	300.5	368.3	351.5	409.4	397.0	405.9	474.5	439.7	470.9	483.0	465.9
PRINTING													
Book publication, total, no. of editions	531	679	536	510	656	848	863	846	470	557	1,027	852	811
New books	426	556	422	401	532	675	704	621	372	436	808	678	650
New editions	165	123	114	109	124	173	159	225	98	121	219	174	161

PETROLEUM AND COAL PRODUCTS

COAL													
Anthracite:													
Exports †, thous. of short tons		366	657	761	717	546	556	957	577	406	528	880	831
Prices, composite, chestnut:													
Retail, dol. per short ton	16.17	15.28	16.55	16.56	16.81	16.78	16.80	16.63	16.87	16.84	16.83	16.82	16.17
Wholesale, do.	13.520	12.726	13.622	13.584	13.593	13.597	13.620	13.768	13.753	13.767	13.767	13.652	13.400
Production, thous. of short tons	4,597	3,636	5,263	5,444	5,048	5,409	4,990	5,080	5,155	4,292	4,867	4,279	4,549
Stocks, producers' storage yards, end of mo. †, do.		63	83	94	132	200	236	251	284	290	321	367	459
Bituminous:													
Exports †, do.		3,245	5,418	5,874	5,070	4,185	3,644	1,712	3,253	3,233	4,168	4,555	7,516
Industrial consumption and retail deliveries, total †, thous. of short tons		34,012	39,235	41,565	42,424	46,698	44,516	45,940	55,788	52,399	52,487		
Industrial consumption, total, do.		29,548	32,744	33,958	34,041	36,714	35,401	37,281	42,843	39,855	41,498		
Beehive coke ovens, do.		571	716	788	729	867	562	599	877	798	595		
Byproduct coke ovens, do.		6,309	7,551	7,781	7,578	7,814	6,992	6,757	7,964	7,245	8,025		
Cement mills, do.		575	632	675	656	693	694	676	658	607	651		
Electric power utilities, do.		5,024	5,714	6,314	6,280	6,708	6,447	6,732	7,158	6,594	6,938		
Railways (class I), do.		8,257	9,092	8,790	8,790	9,571	8,879	9,515	10,104	9,431	10,137		
Steel and rolling mills, do.		582	671	760	725	850	799	871	943	904	947		
Other industrial, do.		8,250	8,740	8,548	9,283	10,211	11,028	12,131	15,139	14,276	13,905		
Retail deliveries, do.		4,464	6,491	7,607	8,383	9,984	9,115	8,659	12,945	12,544	10,989		

* Revised. † Data continue series in the 1942 Supplement; data for October 1941–February 1945 will be published later.

‡ Estimated; see note in April 1946 Survey for basis of estimates.

§ The comparability of the data is affected by a gradual reduction in the number of cities, or changes in the number of dealers or the number of quotations included in the averages from August 1946 to date; averages for August, September, November, and December 1946 and January 1947 comparable in each case with data shown above for the following month are \$16.54, \$16.80, \$16.62, \$16.60, and \$16.85, respectively; data for February–June 1947 are directly comparable; in other months comparability was affected only slightly.

¶ Publication of anthracite stocks has been discontinued and collection of data for consumption of bituminous coal has been indefinitely discontinued.

‡ For revisions for January 1942–March 1943, see note for paperboard at bottom of p. S-35 of July 1944 Survey; small revisions for January 1944–April 1946 are available on request.

† Revised series. The series from the American Paper and Pulp Association beginning in the August 1944 Survey are estimated industry totals and are not comparable with data in earlier issues; there have been further small revisions in the 1943–44 data as published prior to the June 1945 issue; these revisions and earlier data will be published later.

* New series. The new paper series are from the Bureau of the Census and cover production of all mills including producers of building paper and building boards; for 1942 monthly averages and data for the early months of 1943, see p. S-32 of the August 1944 issue. For data beginning 1934 for shipping containers, see p. 20 of the September 1944 Survey. For data beginning June 1943 for folding paper boxes, see p. S-32 of the August 1944 Survey; earlier data will be published later. Minor revisions in the January–May 1944 figures for folding paper boxes and January 1943–May 1944 data for shipping containers are available on request.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946						1947				
	June	July	August	September	October	November	December	January	February	March	April	May	
PETROLEUM AND COAL PRODUCTS—Continued													
COAL—Continued													
Bituminous coal—Continued													
Other consumption:													
Vessels (bunker) \$.....thous. of short tons.....	88	138	146	134	140	135	88	77	91	125	150	200	
Coal mine fuel [Ⓢ]do.....	222	223	240	224	237	158	179	249	214	233	.....	.....
Prices, composite:													
Retail (34 cities).....dol. per short ton.....	1 12.10	10.93	11.23	11.23	1 11.10	1 11.08	1 11.14	1 11.22	1 11.82	1 11.97	1 11.99	1 12.00	1 12.09
Wholesale:													
Mine run.....do.....	6.368	5.832	5.949	5.972	5.976	5.998	6.044	6.217	6.230	6.252	6.334	6.334	
Prepared sizes.....do.....	6.581	6.094	6.186	6.194	6.199	6.200	6.305	6.498	6.518	6.524	6.561	6.565	
Production [Ⓢ]thous. of short tons.....	50,579	51,350	54,686	51,922	57,485	37,501	43,746	58,970	51,400	54,995	41,120	.....
Stocks, industrial and retail dealers, end of month, total [Ⓢ]thous. of short tons.....	37,777	43,611	47,990	52,367	54,924	52,429	47,157	49,160	49,471	51,674	.....	.....
Industrial, total.....do.....	35,213	40,450	44,567	48,965	51,532	49,546	44,453	46,003	47,340	49,547	.....	.....
Byproduct coke ovens.....do.....	3,630	3,871	5,230	5,924	6,593	6,355	5,222	5,919	6,645	7,429	.....	.....
Cement mills.....do.....	482	591	768	891	1,046	1,054	887	861	881	935	.....	.....
Electric power utilities.....do.....	11,430	12,594	13,907	14,563	15,638	14,549	13,044	13,208	13,453	14,059	.....	.....
Railways (class I).....do.....	7,297	7,641	8,117	8,800	9,274	7,587	6,959	7,673	7,673	8,262	.....	.....
Steel and rolling mills.....do.....	624	642	843	855	888	877	785	909	985	1,141	.....	.....
Other industrial.....do.....	11,750	15,111	15,702	17,932	18,093	19,124	17,556	17,433	17,694	17,731	.....	.....
Retail dealers, total.....do.....	2,564	3,161	3,423	3,402	3,392	2,883	2,704	3,166	2,131	2,127	.....	.....
COKE													
Exports \$.....thous. of short tons.....	82	113	97	93	76	78	49	49	38	69	76	98	
Price, beehive, Connellsville (furnace).....dol. per short ton.....	9.562	7.500	8.750	8.000	8.750	8.750	8.750	8.812	8.875	8.875	9.062	9.125	
Production:													
Beehive.....thous. of short tons.....	450	367	468	524	485	557	361	381	562	514	580	593	
Byproduct.....do.....	4,418	5,323	5,462	5,345	5,512	4,925	4,769	5,619	5,129	5,658	5,383	5,531	
Petroleum coke.....do.....	159	168	186	190	212	191	197	203	178	209	195	218	
Stocks, end of month:													
Byproduct plants, total.....do.....	616	709	807	949	1,120	1,034	929	797	716	676	652	671	
At furnace plants.....do.....	360	361	398	503	653	602	571	523	527	504	460	445	
At merchant plants.....do.....	256	348	409	446	467	432	358	274	189	172	191	226	
Petroleum coke.....do.....	85	78	72	89	96	93	90	94	77	91	89	84	
PETROLEUM AND PRODUCTS													
Crude petroleum:													
Consumption (runs to stills)†.....thous. of bbl.....	145,069	150,541	150,550	145,181	146,816	140,514	148,171	146,897	134,953	150,120	141,210	153,348	
Exports \$.....do.....	3,401	4,291	4,602	3,687	4,622	3,794	3,542	2,529	2,610	3,257	3,999	4,789	
Imports \$.....do.....	6,298	7,813	7,631	8,154	7,149	6,176	8,422	8,956	8,172	8,916	7,846	8,361	
Price (Kansas-Okla.) at wells.....dol. per bbl.....	1.810	1.210	1.260	1.460	1.460	1.485	1.560	1.560	1.580	1.710	1.810	1.810	
Production†.....thous. of bbl.....	146,890	152,585	149,910	143,708	148,323	144,674	146,471	144,800	134,933	152,160	149,228	156,024	
Refinery operations.....pct. of capacity.....	96	98	96	96	94	93	95	94	95	94	94	95	
Stocks, end of month:													
Refinable in U. S.†.....thous. of bbl.....	223,140	224,351	224,157	222,417	222,177	226,453	224,473	223,848	225,121	228,981	235,710	237,768	
At refineries.....do.....	55,119	53,532	54,785	53,894	52,074	53,344	53,113	55,833	57,106	59,310	60,386	59,013	
At tank farms and in pipe lines.....do.....	152,786	155,656	154,501	153,490	155,434	158,207	156,238	152,988	153,160	154,637	160,484	163,740	
On leases†.....do.....	15,235	15,163	14,871	15,054	14,669	14,902	15,122	15,027	14,855	15,084	14,840	15,015	
Heavy in California.....do.....	4,921	4,908	5,066	5,401	5,483	5,355	5,703	5,584	5,790	5,999	5,953	5,825	
Wells completed†.....number.....	1,396	1,241	1,425	1,333	1,434	1,314	1,248	1,453	1,196	1,358	1,247	1,626	
Refined petroleum products:													
Gas and fuel oils:													
Domestic demand \$:													
Distillate fuel oil.....thous. of bbl.....	14,850	15,098	13,828	14,520	18,131	23,110	32,450	35,294	31,687	29,279	21,321	19,262	
Residual fuel oil.....do.....	39,283	36,734	37,925	33,509	37,014	41,497	47,405	48,299	43,308	45,852	42,140	40,057	
Consumption by type of consumer:													
Electric power plants†.....do.....	2,851	2,512	2,963	2,914	3,280	4,372	5,313	4,426	3,696	3,564	3,462	3,264	
Railways (class I).....do.....	6,850	6,903	6,950	6,729	7,249	7,307	7,607	7,460	6,537	7,138	6,675	6,653	
Vessels (bunker oil)\$.....do.....	5,967	5,547	5,374	3,695	2,367	5,002	5,579	5,818	5,710	6,164	6,132	6,470	
Exports \$:													
Distillate fuel oil.....do.....	3,684	2,540	2,715	1,992	891	758	1,273	876	1,751	2,093	2,766	2,189	
Residual fuel oil.....do.....	351	578	821	730	550	316	831	733	713	672	635	593	
Price, fuel oil (Pennsylvania).....dol. per gal.....	.075	.058	.058	.062	.062	.062	.066	.070	.070	.071	.073	.075	
Production:													
Distillate fuel oil.....thous. of bbl.....	23,320	24,589	23,703	23,877	24,432	23,741	24,970	24,131	21,746	25,577	22,925	24,954	
Residual fuel oil.....do.....	36,569	36,600	35,942	34,512	33,777	33,015	35,937	36,390	34,390	37,876	34,438	37,328	
Stocks, end of month:													
Distillate fuel oil.....do.....	38,824	46,439	54,068	62,019	67,870	68,145	59,620	48,197	36,901	31,423	30,268	34,279	
Residual fuel oil.....do.....	41,492	45,446	48,186	54,012	55,580	52,735	47,094	41,550	38,480	37,403	36,455	39,992	
Motor fuel:													
Domestic demand \$.....thous. of bbl.....	63,221	69,404	66,701	62,216	66,598	61,315	61,043	57,057	50,551	59,947	63,406	70,865	
Exports \$.....do.....	2,555	2,321	3,604	3,608	2,386	3,068	3,688	2,892	4,832	4,091	3,358	3,480	
Prices, gasoline:													
Wholesale, refinery (Okla.).....dol. per gal.....	.080	.058	.060	.068	.070	.070	.070	.070	.070	.076	.080	.080	
Wholesale, tank wagon (N. Y.).....do.....	.172	.149	.151	.158	.159	.159	.161	.161	.161	.167	.172	.172	
Retail, service stations, 50 cities.....do.....	.171	.142	.151	.155	.155	.156	.156	.158	.159	.171	.171	.171	
Production, total†.....thous. of bbl.....	64,345	67,445	69,707	66,284	67,305	66,072	69,028	65,904	60,485	66,701	63,374	68,535	
Gasoline and naphtha from crude oil •.....do.....	56,705	59,921	62,079	58,914	59,607	58,636	61,387	58,560	53,591	59,069	55,502	60,681	
Natural gasoline and allied products††.....do.....	9,501	9,558	9,321	9,574	10,275	10,155	10,651	10,651	9,944	11,033	10,803	10,392	
Sales of 1. p. g. for fuel and chemicals.....do.....	1,752	1,928	2,085	2,082	2,444	2,604	2,870	2,931	3,252	2,797	2,996	2,964	
Transfer of cycle products.....do.....	109	106	108	122	133	115	140	159	119	149	134	142	
Used at refineries†.....do.....	4,940	5,229	5,774	5,390	6,023	6,232	5,813	5,859	4,908	5,271	5,618	5,300	
Retail distribution [Ⓢ]mil. of gal.....	2,619	2,856	2,784	2,555	2,701	2,498	2,518	2,319	2,173	2,449	2,605	.....
Stocks, gasoline, end of month:													
Finished gasoline, total.....thous. of bbl.....	83,726	79,384	78,833	78,848	77,628	79,980	84,534	90,300	94,985	96,952	92,719	86,727	
At refineries.....do.....	50,911	48,077	47,347	47,021	46,244	47,581	51,927	57,066	61,332	63,089	58,852	54,752	
Unfinished gasoline.....do.....	8,245	8,394	7,912	8,173	8,324	8,607	8,208	9,323	8,687	8,727	9,005	8,482	
Natural gasoline.....do.....	7,343	7,334	6,943	7,060	6,312	5,487	4,981	4,794	5,010	5,265	5,604	5,566	

*Revised. †See note in April 1946 Survey. • Combined total of data formerly shown as straight run gasoline and cracked gasoline.

† The comparability of the data is affected in some months by a reduction in the number of cities or by a change in the sample; averages for August, September, November, and December 1946 and January 1947 comparable in each case with data shown above for the following month are \$10.93, \$11.07, \$11.12, \$11.40, and \$11.94, respectively; February-June 1947 are directly comparable and cover 30 cities.

Ⓢ Collection of data for the indicated coal series has been indefinitely discontinued.

Ⓢ Data continue series published in the 1942 Supplement but suspended during the war period; data for October 1941-February 1945 will be published later.

† Revised series. For source of 1939-41 revisions for bituminous coal production, see note marked "†" on p. S-32 of the April 1943 Survey; revisions for 1942-43 are shown on p. S-33 of the April 1945 issue; revisions for 1945 are shown on p. S-36 of the March 1947 Survey. For 1941 revisions for the indicated series on petroleum products see notes marked "†" on p. S-33 of the March and April 1943 issues (correction for crude petroleum production January 1941, 110.446); 1942-43 revisions are available upon request.

†† Includes natural gasoline, cycle products, liquefied petroleum gases at natural gasoline plants and benzol; sales of liquefied petroleum gas for fuels and for chemicals and transfers of cycle products are deducted before combining the data with gasoline and naphtha to obtain total motor fuel production.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947		1946					1947				
	June	June	July	August	September	October	November	December	January	February	March	April	May

PETROLEUM AND COAL PRODUCTS—Continued

PETROLEUM AND PRODUCTS—Continued												
Refined petroleum products—Continued												
Kerosene:												
Domestic demand§.....thous. of bbl.....	5,185	5,339	4,321	5,284	7,502	8,899	11,513	12,325	10,532	10,078	8,082	6,068
Exports§.....do.....	1,566	976	767	701	312	414	664	394	930	1,017	889	202
Price, wholesale, water white, 47°, refinery (Pennsylvania).....dol. per gal.....	.082	.071	.074	.074	.074	.074	.075	.076	.076	.078	.081	.082
Production.....thous. of bbl.....	8,376	8,435	8,179	7,825	8,566	7,893	8,782	9,415	9,243	9,476	8,854	9,284
Stocks, refinery, end of month.....do.....	9,063	10,490	12,382	13,442	13,926	12,734	9,772	7,299	6,126	5,260	4,870	7,328
Lubricants:												
Domestic demand§.....do.....	2,715	3,049	3,236	3,095	3,536	2,900	2,900	2,951	2,680	2,929	3,066	3,104
Exports§.....do.....	1,054	910	1,135	694	706	906	1,063	1,104	1,258	1,273	1,259	1,361
Price, wholesale, cylinder, refinery (Pennsylvania).....dol. per gal.....	.330	.160	.200	.214	.248	.250	.274	.298	.300	.308	.310	.310
Production.....thous. of bbl.....	3,839	3,620	4,096	4,016	4,327	3,857	4,135	4,204	3,925	4,480	4,267	4,608
Stocks, refinery, end of month.....do.....	7,635	7,293	7,030	7,244	7,338	7,384	7,564	7,773	7,753	8,015	7,936	8,070
Asphalt:												
Imports§.....short tons.....	8,588	9,052	18,772	27,811	8,253	0	88	11,389	19,144	12,022	21,923	20,323
Production.....do.....	738,200	851,800	871,300	827,800	806,500	670,400	615,800	540,500	532,400	602,700	606,700	789,300
Stocks, refinery, end of month.....do.....	907,600	819,600	691,800	626,500	577,800	622,200	702,000	781,800	888,200	1,001,800	1,028,500	1,063,100
Wax:												
Production.....thous. of lb.....	65,520	60,480	69,160	68,600	74,840	79,240	79,800	83,720	81,760	93,520	80,800	89,600
Stocks, refinery, end of month.....do.....	81,760	73,920	73,360	83,160	84,840	89,880	86,240	82,040	85,120	91,560	85,680	89,320
Asphalt prepared roofing, shipments:†												
Total.....thous. of squares.....	5,045	5,213	5,516	5,264	5,646	5,328	5,231	5,827	5,300	5,809	6,097	5,968
Smooth-surfaced roll roofing and cap sheet.....do.....	1,575	1,653	1,837	1,633	1,760	1,725	1,691	1,942	1,886	1,969	1,997	1,798
Mineral-surfaced roll roofing and cap sheet.....do.....	1,099	1,105	1,128	1,146	1,237	1,168	1,134	1,287	1,162	1,273	1,326	1,399
Shingles, all types.....do.....	2,371	2,456	2,550	2,486	2,649	2,435	2,407	2,598	2,252	2,567	2,775	2,771

RUBBER AND RUBBER PRODUCTS

RUBBER												
Natural rubber:												
Consumption¶.....long tons.....	16,466	21,998	28,405	31,123	35,421	37,323	38,802	45,328	40,983	43,104	43,818	43,098
Imports, including latex and Guayule §.....do.....	9,545	21,627	35,731	41,737	46,887	59,266	46,658	92,779	60,678	36,088	46,011	93,026
Stocks, end of month¶.....do.....	176,768	169,490	185,580	199,591	200,799	218,672	237,467	294,191	283,479	280,812	292,970	331,781
Synthetic rubber:*												
Consumption.....do.....	62,899	54,562	61,486	58,798	60,729	57,794	53,453	58,764	53,321	55,514	54,333	48,663
Exports.....do.....	5,367	3,166	2,188	2,603	4,487	1,786	1,877	3,450	2,434	710	665	441
Production.....do.....	63,388	63,176	64,300	63,765	62,086	60,305	62,648	62,103	59,125	57,478	50,117	39,069
Stocks, end of month.....do.....	94,095	101,007	103,076	108,840	110,913	113,556	114,963	115,655	119,912	121,322	116,829	106,848
Reclaimed rubber:¶												
Consumption.....do.....	21,725	21,350	24,566	23,715	26,706	24,385	23,597	27,715	25,484	26,157	25,066	21,697
Production.....do.....	24,882	22,619	25,798	23,956	26,322	24,748	25,254	25,545	23,990	26,209	26,606	25,392
Stocks, end of month.....do.....	35,295	35,603	35,742	35,404	34,261	33,516	33,666	30,053	27,417	31,940	33,527	37,223
TIRES AND TUBES												
Pneumatic casings:§												
Exports.....thousands.....	235	248	264	155	198	358	413	411	353	363	419	502
Production.....do.....	6,323	5,985	7,054	7,233	8,197	7,595	7,511	8,508	7,915	8,577	8,333	8,104
Shipments.....do.....	6,503	6,304	6,825	6,947	8,425	7,478	8,137	7,499	7,360	7,892	7,273	7,283
Original equipment.....do.....	937	1,534	1,689	1,636	1,574	1,656	1,839	1,922	2,138	2,457	1,894	2,005
Stocks, end of month.....do.....	3,276	2,819	3,006	3,372	3,041	3,112	2,448	3,328	3,865	4,516	5,608	6,426
Inner tubes:§												
Exports.....do.....	205	192	193	109	125	258	313	334	282	297	337	475
Production.....do.....	5,917	5,826	7,034	7,148	8,187	7,680	7,402	8,719	7,841	7,921	7,093	5,752
Shipments.....do.....	5,942	6,170	6,918	6,702	8,408	7,260	7,923	7,188	6,289	6,466	5,731	5,571
Stocks, end of month.....do.....	4,404	3,907	3,929	4,433	4,106	4,453	3,820	5,075	6,621	8,050	9,480	9,772

STONE, CLAY, AND GLASS PRODUCTS

ABRASIVE PRODUCTS													
Coated abrasive paper and cloth, shipments.....reams.....	134,834	147,807	140,813	161,631	150,726	166,649	164,733	145,383	151,364	143,017	158,716	155,873	146,352
PORTLAND CEMENT													
Production.....thous. of bbl.....	15,971	14,489	15,420	16,213	16,450	16,410	15,335	14,557	13,406	12,618	14,205	14,566	13,389
Percent of capacity.....do.....	81	73	75	79	83	81	78	71	66	68	69	74	66
Shipments.....thous. of bbl.....	18,188	14,564	16,249	17,955	17,153	17,721	14,803	11,494	8,395	8,434	12,133	15,414	15,328
Stocks, finished, end of month.....do.....	17,092	11,894	11,064	9,308	8,612	7,298	7,830	10,921	15,931	20,112	22,178	21,331	19,308
Stocks, clinker, end of month.....do.....	5,744	4,923	4,788	4,580	3,898	3,598	3,512	3,886	4,593	5,354	5,996	6,338	6,326
CLAY PRODUCTS													
Brick, unglazed:													
Price, wholesale, common, composite, f. o. b. plant.....dol. per thous.....	19.550	17.932	18.074	18.218	18.519	18.551	19.010	19.095	19.270	19.292	19.400	19.412	19.416
Production*.....thous. of standard brick.....	376,587	481,547	501,287	470,998	509,839	455,676	381,146	376,848	334,624	339,963	377,586	410,744	
Shipments*.....do.....	354,086	447,614	481,377	443,647	480,121	424,705	354,782	324,868	268,460	326,776	382,610	400,530	
Stocks, end of month*.....do.....	235,490	263,564	286,534	310,814	339,129	368,953	383,824	448,752	509,022	522,627	515,806	526,649	
Structural tile, unglazed:*													
Production.....short tons.....	104,107	119,041	125,352	116,845	128,276	123,976	113,682	112,119	97,421	97,443	107,543	104,978	
Shipments.....do.....	99,706	117,723	124,293	115,474	122,157	107,833	102,778	97,764	82,505	96,050	107,101	104,863	
Stocks.....do.....	52,285	56,608	56,923	57,664	62,633	80,497	87,580	101,950	116,503	118,075	118,637	115,773	
Vitrified clay sewer pipe:*													
Production.....do.....	92,369	107,901	108,042	99,000	116,567	102,857	103,135	112,992	104,504	109,254	101,914	117,071	
Shipments.....do.....	98,634	104,072	108,446	106,518	110,751	98,495	103,313	103,896	93,241	107,758	107,851	114,545	
Stocks.....do.....	129,427	134,529	133,143	125,491	131,330	134,560	137,887	143,194	154,653	156,061	150,033	152,410	

* Revised. §Data continue series published in the 1942 Supplement but suspended during the war period. Data for 1941-45 for tires and tubes and imports of natural rubber are shown on pp. 22 and 23 of the December 1946 Survey. Data for October 1941-February 1945 for other series will be published later.

¶ For source of the indicated series and 1941-45 data, see p. 23 of December 1946 Survey; these data continue similar series published in the 1942 Supplement.

* New series. Data for 1943-45 for exports of synthetic rubber and for 1941-45 for other synthetic rubber series are shown on p. 23 of the December 1946 Survey. For September 1942-December 1943 data for brick see p. 24 of the February 1945 Survey and for 1939-45 data for clay sewer pipe, p. 23 of December 1946 issue; data for September 1942-February 1945 for unglazed structural tile are shown on p. 20 of the April 1947 Survey.

† Data for asphalt roofing have been published on a revised basis beginning in the April 1945 Survey; see note in that issue.

Unless otherwise stated, statistics through 1941 and descriptive notes may be found in the 1942 Supplement to the Survey	1947				1946				1947				
	June	June	July	August	September	October	November	December	January	February	March	April	May
STONE, CLAY, AND GLASS PRODUCTS—Continued													
GLASS PRODUCTS													
Glass containers: [†]													
Production.....thous. of gross.....	9,619	8,991	9,426	10,659	9,815	10,533	9,610	9,344	11,153	9,281	10,582	10,358	10,578
Shipments, domestic, total.....do.....	8,316	8,680	9,001	10,406	9,633	10,376	9,332	9,352	10,101	8,650	9,645	9,637	9,492
General use food:													
Narrow neck food.....do.....	928	865	962	1,287	1,309	971	744	723	743	679	918	1,050	1,007
Wide mouth food (incl. packers tumbler).....do.....	1,650	2,502	2,629	3,217	2,864	3,204	2,978	2,881	3,078	2,445	2,481	2,307	2,079
Beverage.....do.....	1,093	653	595	615	529	571	517	513	623	569	760	853	962
Beer bottles.....do.....	1,616	415	374	417	460	576	573	639	832	804	1,140	1,342	1,697
Liquor and wine.....do.....	663	1,059	1,146	1,252	1,216	1,408	1,372	1,342	1,420	1,262	1,293	993	761
Medicinal and toilet.....do.....	1,309	1,899	1,975	2,221	2,051	2,491	2,099	2,227	2,295	1,947	1,906	1,967	1,844
General purpose (chem., household, indus.).....do.....	433	663	676	717	582	687	658	651	725	620	658	610	573
Dairy products.....do.....	305	280	284	332	314	364	318	331	359	286	356	354	341
Fruit jars and jelly glasses.....do.....	320	346	1,360	1,347	309	1,105	73	144	125	138	133	161	227
Stocks, end of month.....do.....	6,854	3,729	3,911	3,917	3,940	3,906	3,905	3,591	4,167	4,554	5,141	5,475	6,085
Other glassware, machine-made:													
Tumblers: [†]													
Production.....thous. of doz.....	6,210	7,389	6,070	7,891	6,711	7,763	6,848	6,470	7,586	4,835	6,272	6,339	6,769
Shipments.....do.....	5,261	6,347	5,984	7,946	6,078	7,657	6,527	6,242	6,352	4,736	5,975	6,140	6,234
Stocks.....do.....	7,729	4,920	4,997	4,784	5,352	5,326	5,544	4,879	5,095	6,478	5,575	6,262	6,672
Table, kitchen, and householdware, shipments [†]													
Production.....thous. of doz.....	3,351	3,847	3,553	4,335	3,645	5,000	3,168	2,298	4,489	2,668	2,213	3,454	3,658
Stocks.....thous. of sq. ft.....	21,026	16,316	18,409	16,803	21,142	23,271	20,781	18,411	21,980	20,268	22,605	21,419	21,171
Plate glass, polished, production.....thous. of sq. ft.....													
GYPSUM AND PRODUCTS													
Crude gypsum:													
Imports.....short tons.....		300,815			571,871			541,733			186,199		
Production.....do.....		1,306,845			1,522,455			1,642,030			1,557,162		
Calcined, production.....do.....		946,851			1,172,746			1,249,901			1,163,981		
Gypsum products sold or used:													
Uncalcined.....do.....		408,263			389,021			472,603			519,788		
Calcined:													
For building uses:													
Base-coat plasters.....do.....		331,237			422,025			482,306			386,830		
Keene's cement.....do.....		8,295			8,392			9,871			11,833		
All other building plasters.....do.....		91,524			103,442			115,806			109,089		
Lath.....thous. of sq. ft.....		281,750			295,620			328,491			364,675		
Tile.....do.....		4,055			4,508			5,438			5,464		
Wallboard.....do.....		443,327			557,537			689,374			517,458		
Industrial plasters.....short tons.....		52,320			49,941			55,484			58,577		

TEXTILE PRODUCTS

CLOTHING													
Hostery:													
Production.....thous. of dozen pairs.....		13,002	11,984	13,545	13,204	14,554	13,289	12,122	14,592	13,171	12,921	13,029	11,672
Shipments.....do.....		13,140	11,008	12,135	13,519	15,138	13,583	11,953	13,394	12,599	12,711	12,535	11,269
Stocks, end of month.....do.....		15,971	16,854	18,129	17,720	17,087	16,722	16,802	18,464	18,642	18,853	19,346	19,749
COTTON													
Cotton (exclusive of linters):													
Consumption.....bales.....	728,251	792,317	729,603	855,511	818,449	931,229	877,461	774,177	947,036	840,463	875,124	882,880	827,234
Exports.....do.....		409,926	366,510	413,395	242,177	103,781	455,342	361,370	289,672	385,050	382,909	275,104	248,549
Imports.....do.....		16,355	27,694	17,896	40,984	36,201	51,218	14,630	10,543	10,381	12,083	9,598	10,730
Prices received by farmers [†]dol. per lb.....	.341	.260	.308	.336	.353	.377	.292	.300	.297	.306	.319	.323	.335
Prices, wholesale, middling, 1 ¹ / ₂ " [⊕] , average, 10 markets													
.....dol. per lb.....	.372	.292	.334	.355	.369	.361	.309	.324	.319	.333	.352	.351	.360
Production:													
Ginnings.....thous. of running bales.....			162	532	2,334	5,725	7,366	7,783	8,166		8,513		
Crop estimate, equivalent 500-lb. bales													
.....thous. of bales.....											8,637		
Stocks, domestic cotton in the United States, end of month: [‡]													
Warehouses.....thous. of bales.....	1,168	5,320	4,414	3,785	4,280	5,845	6,161	5,939	5,192	4,243	3,319	2,469	1,797
Mills.....do.....	1,599	2,179	2,179	1,983	1,865	1,928	2,019	2,125	2,159	2,161	2,135	2,040	1,862
Cotton linters:													
Consumption.....do.....	73	84	94	87	75	79	82	79	94	80	87	85	80
Production.....do.....	23	15	14	26	74	162	169	129	136	97	68	51	34
Stocks, end of month.....do.....	382	399	347	285	292	349	388	437	472	485	483	466	423
COTTON MANUFACTURES													
Cotton cloth:													
Cotton broad woven goods over 12 inches in width, production, quarterly*.....mil. of linear yards.....		2,299			2,190			2,359			2,470		
Cotton goods finished, quarterly*:													
Production, total.....do.....		1,788			1,604			1,810			1,792		
Bleached.....do.....		878			765			897			901		
Plain dyed.....do.....		467			449			492			489		
Printed.....do.....		443			390			421			402		
Exports.....thous. of sq. yds.....	68,310	57,382	59,444	41,109	41,201	68,907	99,872	86,338	86,808	123,375	138,196	146,686	
Imports.....do.....	3,607	5,443	3,581	2,311	2,459	1,792	2,190	1,687	1,123	888	907	1,135	
Prices, wholesale:													
Mill margins.....cents per lb.....	46.46	22.01	24.97	25.93	27.40	30.86	40.78	47.72	51.60	52.36	53.37	51.25	47.86
Denims, 28-inch.....dol. per yd.....	.338	.256	.280	.312	.323	.338	.338	.338	.338	.338	.338	.338	.338
Print cloth, 64 x 60.....do.....	.228	.114	.126	.134	.140	.146	.147	.185	.192	.248	.255	.227	.216
Sheeting, unbleached, 36-inch, 56 x 56.....do.....	.232	.138	.138	.165	.172	.180	.180	([⊕])	([⊕])	.240	.245	.232	.232

* Revised. [†] Jelly glasses included with wide mouth food containers. [‡] Total ginnings of 1946 crop. [⊕] Not available.

Ⓢ Based on cloth prices for July 24, 1946, from the "Textile Apparel Analysis" for first 3 weeks of the month and O. P. A. ceilings for last week.

Ⓣ Data continue the series shown in the Survey through the October 1943 issue; this construction was discontinued during the war period.

Ⓝ This series was substituted in the November 1943 Survey for the price of 56 x 60 sheeting, production of which was discontinued during the war period.

Ⓞ Total ginnings to end of month indicated. ⊕ Includes laminated board reported as component board; this is a new product not produced prior to 1942.

Ⓜ Data continue series published in the 1942 Supplement but suspended during the war period; data for October 1941-February 1945 will be published later.

Ⓨ See note in February 1947 Survey for source of August 1941-March 1942 revisions and total cotton stocks in the United States July 31, 1946.

*New series. For a brief description of the data for cotton broad woven goods and 1943 figures see p. S-35 of August 1944 Survey and for 1939-45 data for cotton goods finishing, p. 23 of August 1946 issue.

† Revised series. See note on p. S-34 of the July 1944 Survey regarding changes in the data for glass containers and comparable figures for 1940-42 and note in May 1946 Survey for changes in the reporting companies for other machine-made glassware; glass container data since October 1945 are from the Bureau of the Census. For revisions for August 1937-July 1942 for farm price of cotton, see p. S-35 of June 1944 Survey.

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