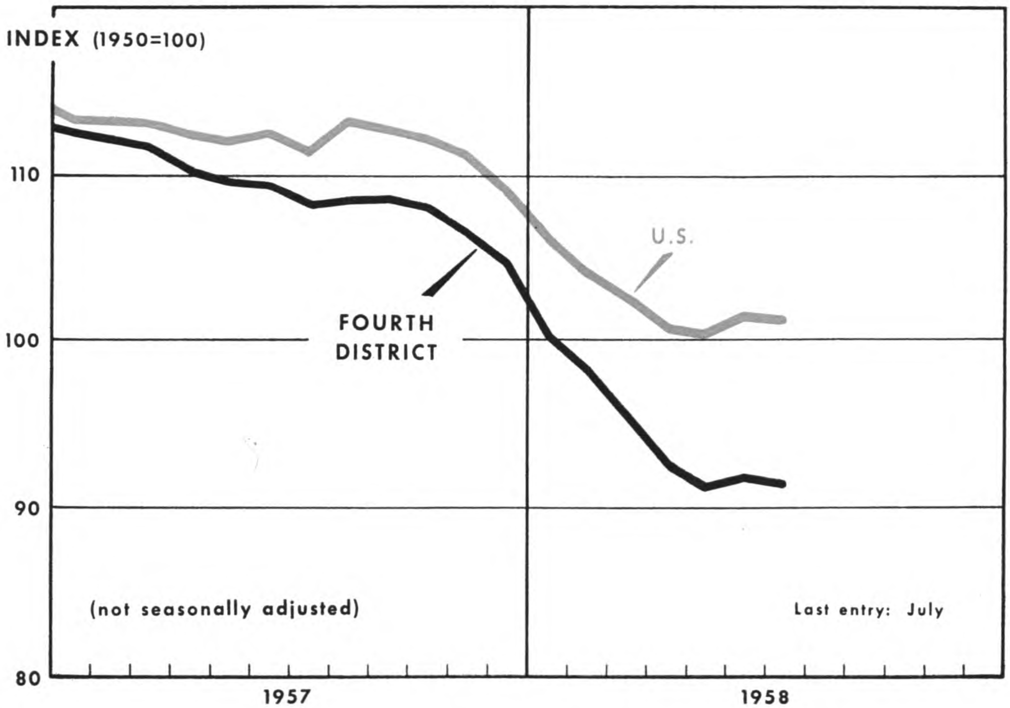
MONTHLY
Business Review

FEDERAL RESERVE BANK of CLEVELAND

September, 1958

IN THIS ISSUE

MANUFACTURING EMPLOYMENT



Source of data: Same as machinery industry chart on inside page

Heavy Industry Turns the Corner

PRELIMINARY ESTIMATES, midway through the third quarter, indicate that manufacturing and mining activity have continued the mild improvement that has been in evidence since production reached the low point of the recession last April.

The generally improved tone of production this quarter has occurred despite a near one-third cutback in auto production schedules, from a very poor second quarter, to about 700,000 units. If this schedule is realized, auto output in the third quarter will be the lowest for the period since 1946 when the industry was struggling with postwar conversion and material shortage problems.

The recovery in production activity in May and June was broadly based. Steel ingot production rose nearly a third from the low April rate and auto production also improved, after allowance for seasonal change. Output of both electrical and nonelectrical machinery, with the possible exception of heavy industrial machinery, moved up. Production of the important building materials—lumber, stone, clay, and glass products — rose more than seasonally expected as construction activity improved steadily. Most categories of nondurable goods also registered modest gains.

Although the steel operating rate fell sharply in early July, as hedge buying against an expected July 1 price increase evaporated, output was maintained at higher levels than were generally expected and advanced steadily as the month progressed to nearly 60 percent of capacity. Steel scrap prices also rose sharply in July and at month-end, the long-expected increase in steel prices was initiated on flat rolled steel by a major producer. Within less than a week, steel price increases averaging about $4.50 a ton had been put into effect by major producers on about two-thirds of the tonnage produced. Through mid-August, the steel operating rate continued to advance slowly.

Output of petroleum and petroleum products advanced in July in response to increased oil-production allowables, reduced inventory and firmer consumer demand. Early reports indicate that crude oil production and runs to refineries advanced further in August. Electric power consumption turned up in July and, after seasonal adjustment, was close to the high levels of last winter. Output of paperboard mills rebounded sharply from the July holiday shutdown and a leading copper producer early in August increased the workweek at several mines from four days to five.

The recent business recession was centered largely upon manufacturers of durable goods. Business buyers were sharply cutting back their expenditures for new plant, equipment, and machinery, while consumers were reducing substantially their purchases of big-ticket appliances, television, and new cars. Reduced demand from both of these sectors of the economy, in turn, triggered an inventory liquidation that was of record proportions during the first quarter of 1958. Inventories during this period were reduced at about a $9.5 billion annual rate, with most of the liquidation taking place among manufacturers of durable goods. The rate of liquidation, however, was beginning to slow down toward the end of the second quarter.

The industries that bore the brunt of the downturn in demand during the recession included producers of primary metals (both ferrous and nonferrous), fabricated metals, machinery, transportation equipment, and consumer appliances, as well as mining enterprises. Industrial construction activity also slumped sharply and railroads were particularly hard hit by the reduction in coal, iron ore, and metal product carloadings. Producers of heavy electrical generating equipment used by utilities were about the only branch of the broad machinery industry to escape the general downturn in activity, as electric utilities maintained their record rates of new plant investment. Shipments of generating equipment in the first half of 1958, however, exceeded new order intake.

The selective impact of the recession was clearly measured by the behavior of the Federal Reserve index of production. From the high level of last fall to April, total industrial production declined 13 percent. The output of durable manufacturers, however, dropped 20 percent while nondurable manufacturing was down only 6 percent. The differences are even more marked when the performance of specific industry groups is examined. From August 1957 to April of this year, output of primary metals was down 37 percent; autos, trucks, and parts were off 34 percent; machinery dropped 20 percent; at the same time, the output of food, beverages and tobacco showed no change.

The heavily industrialized Fourth Federal Reserve District was more adversely affected by the recession than many other sections of the country. In the state of Ohio alone, for example, about 45 percent of nonfarm employees are engaged in manufacturing as compared with 33 percent in the nation as a whole. In Ohio, 70 percent of manufacturing employment is concentrated in durable goods as compared with a national proportion of less than 60 percent.

These differences between the Fourth District and the rest of the nation are clearly indicated by the cover chart which depicts the recent changes in total manufacturing employment. Manufacturing employment in the District, as elsewhere in the nation, declined steadily during 1957, but the drop began to accelerate in November and reached a low in May 1958. In these seventeen months, District manufacturing employment plunged 19 percent to about 91 percent of the 1950 average as compared with little more than an 11 percent drop for the United States to a level about equal to the 1950 average. Since May, factory employment in both the District and the United States has staged a moderate recovery with promise of further improvement in the third and fourth quarters. (The slight decline from June to July is mainly attributable to vacation shutdowns.)

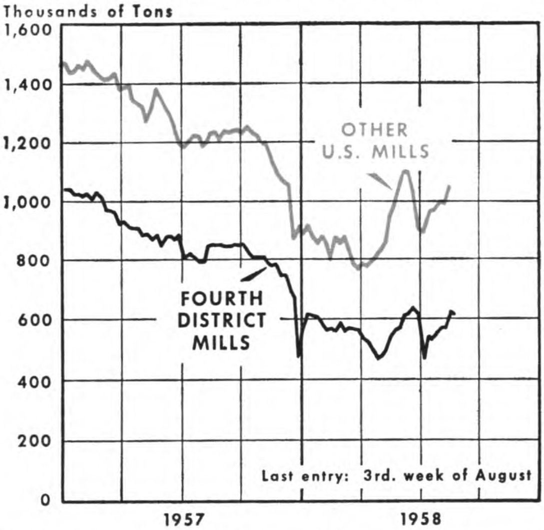
Steel

Steel mills of the District, which account for about 40 percent of total United States ingot capacity, followed a production pattern during the recent recession that closely paralleled the performance of the steel industry in other sections of the United States. The trends of major producing centers in the District are compared with other U. S. mills in an accompanying chart and table.

From August 1957 to the low point reached in April, District output plunged 43 percent, or to a rate of only 46 percent of capacity. The operating rate of steel mills in the rest of the United States dropped nearly 40 percent in the same period of time to 49 percent of capacity.

WEEKLY STEEL PRODUCTION

Ingots and steel for castings



Source of data: Derived from weekly operating rates compiled by STEEL magazine.

Differences in steel mill activity at the five major producing areas of the District in April are explained in large part by the product-mix of each center as well as by special circumstances.

In the Cleveland area, for example, one of the three major mills was completely closed down early in the year for a program of major repairs, modernization and expansion that was to take about three months to complete. The effect on the Cleveland rate was to reduce it to one of the lowest in the nation.

On the other hand, mills in the Wheeling district specialize in light, flat rolled products with emphasis on galvanized sheet and tin plate. Demand for the latter products remained relatively large during the recession so that steel mills in the area were able to maintain a rate far above the District average. Other differences can be explained by the practice of major producing companies, with mills in several locations, of closing down the least efficient plants and concentrating orders and output in newer facilities in an effort to hold total costs to a minimum.

STEEL OPERATING RATES

Ingot production as a percent of capacity

	Aug. '57	Apr. '58	Aug. '58
CINCINNATI area.....	78%	41%	67%
CLEVELAND area.....	86	30	54
PITTSBURGH area.....	81	49	53
WHEELING area.......	86	64	77
YOUNGSTOWN area...	79	44	51
FOURTH DISTRICT...	81	46	56
OTHER U.S..........	81	49	65
TOTAL U.S..........	81	48	61

Source: Derived from weekly figures compiled by *Steel* magazine.

As shown in the chart[1] and table, steel production in August had rebounded sharply from the low April level as orders from a wide variety of consuming industries expanded. The rebound in the Cincinnati district was due to special circumstances. There, a major producer had temporarily suspended operations for a rebuilding and expansion of its hotrolling facilities. Output of cold rolled products was maintained from a bank of coils accumulated in anticipation of the shutdown.

In large part, the sharp reduction in output of steel ingots was due to the liquidation of inventories in the hands of steel consumers. It is estimated that steel consumers liquidated the equivalent of about 8.5 million tons of ingots during the first half of 1958, following a liquidation of about the same magnitude during the second half of 1957.

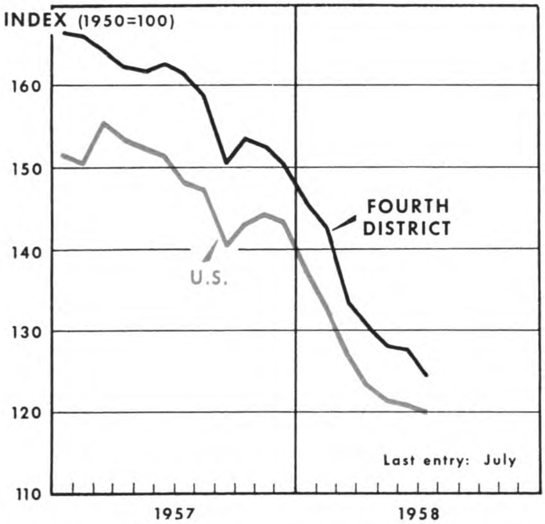
From the recent trend of orders, it seems apparent that the general wave of steel inventory reduction is about over, with the exception of the usual seasonal reductions in such products as tin plate and structural steel. If this should prove to be the case, steel ingot production in the fourth quarter should continue to rise as consumers place orders more nearly in line with recent rates of consumption. In addition, the seasonal rise in auto and appliance demand should stimulate production. The recent sharp rise in construction contract awards should enlarge further the demand for structural steel, piling, reinforcing bars, galvanized nails, and other types of steel used by the construction industry.

Transportation Equipment

Although the assembly of finished autos in the Fourth Federal Reserve District amounts to less than 3 percent of the national total (to be augmented this fall by production in a new assembly plant near Lorain, Ohio), the production of auto parts and major subassemblies has expanded rapidly in the postwar period. Altogether, motor vehicle and parts makers are the fourth-ranking manufacturing industry in the District in terms of employment. In addition, of course, the motor car manufacturers are major customers of the District's steel, foundry, rubber, glass, paint, machine tool, and chemical industries.

(1) None of the charts in this article is adjusted for seasonal variation.

EMPLOYMENT BY TRANSPORTATION EQUIPMENT MANUFACTURERS



Source of data: U. S. index derived from figures compiled by U. S. Bureau of Labor Statistics. Fourth District index based upon reports of the Division of Research and Statistics of the Ohio Bureau of Unemployment Compensation and the Pennsylvania Bureau of Employment Security.

The 34 percent plunge in new car production in the first half of 1958, as measured from the same period last year, had a sharp impact upon District manufacturers of transportation equipment, as shown by an accompanying chart. Somewhat more than half the workers in this industry are employed by motor vehicle and parts producers, while most of the remainder are employed by the aircraft and parts industry.

It will be noted from the chart that employment last fall turned up sharply with the introduction of the new 1958 models and then began to fall rapidly with the poor reception given the new cars. In this District, the parts producers began to cut back in September as orders from the assembly plants were reduced, whereas nationally, the cut at motor car factories did not begin until December.

The chart also reflects the increased share of District manufacturers in the national transportation equipment market as a result of the many new parts plants located in the area since 1950. This is shown by the fact that the chart line for the Fourth District runs consistently at a higher level than the U. S. line, with both sets of figures representing relative change since 1950.

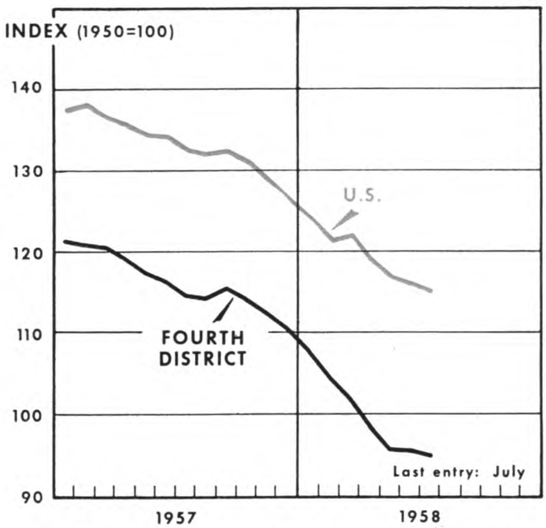
Since March of this year, new car production has consistently fallen below retail deliveries to consumers so that dealer inventories have been steadily reduced from the unwieldy February total of nearly 900,000 units. By October 1, stocks of 1958 models may be well below 300,000, or less than one-month's supply. Such a successful clearance would smooth the way for the introduction of the 1959 models.

The successful clearance of the current models, however, is being achieved by drastic production curtailments in the third quarter. Output in this period will be only about one-half of the year-ago total.

Machinery

The downturn in new plant and equipment expenditures by private business in the first half of the year, coupled with a reduced rate of sales of consumer appliances, had a particularly adverse effect upon manufacturers of

EMPLOYMENT BY MACHINERY MANUFACTURERS



Source of data: U. S. index derived from figures compiled by U. S. Bureau of Labor Statistics. Fourth District index based upon reports of the Division of Research and Statistics of the Ohio Bureau of Unemployment Compensation and the Pennsylvania Bureau of Employment Security.

both electrical and nonelectrical machinery. Production of machinery, as measured by the Federal Reserve index, dropped about one-fifth from early last fall to this spring.

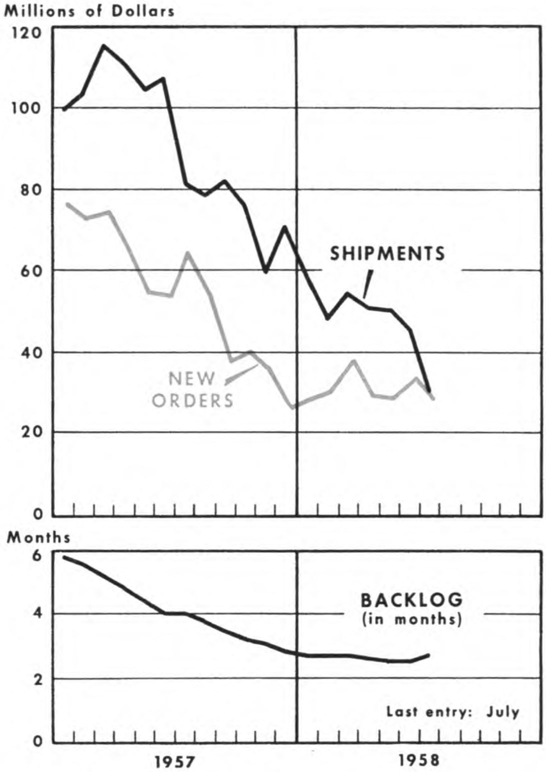
The effect upon employment is shown in an accompanying chart. Nationally, the number of employees dropped about 10 percent, but in the Fourth District employment in machinery manufacturing was off 17 percent. Employment in many shops was maintained by reducing the length of the workweek or by staggered work periods. Appliance manufacturers were also hard hit by extensive inventory liquidation that took place at the wholesale and retail levels as well as at the factory. In June and July, there was some evidence that employment was stabilizing and a mild pickup in new orders was taking place.(2)

The District's important machine tool industry was especially hard hit by the drop in capital expenditures. An accompanying chart depicts the precipitous slide that took place in the industry's new order, shipment, and backlog positions.

New orders for machine tools appear to have leveled off in the second quarter of this year at a rate nearly 50 percent below the average for the same period of 1957. Shipments, however, fell sharply in July, largely for seasonal reasons, and in that month were about 75 percent below the year-ago figure. The increase in the order backlog, from 2.6 months in June to 2.7 months in July, was entirely the result of the drop in shipments.

The general outlook for machine tool builders is far from bright, although it varies considerably between different companies. A few producers still have sufficient orders on their books to maintain a relatively high rate of activity for the balance of the year; others are working on a hand-to-mouth basis. A general upturn in machine tool activity depends upon an ultimate reversal of the downtrend of new plant and equipment expenditures by private business.

MACHINE TOOLS
Metal Cutting and Metal Forming Types



Source of data: National Machine Tool Builders Association.

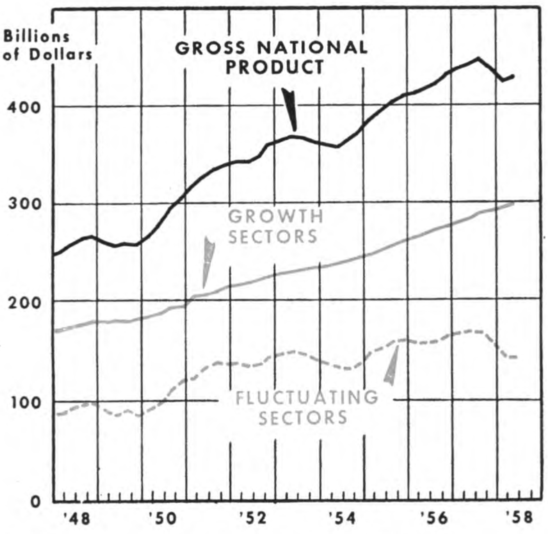
(2) For employment by machinery manufacturers in the U. S., the line shown in the chart appears to indicate a temporary gain for March 1958. This is due to a statistical technicality; it is not considered significant of industrial trends.

The Second-Quarter Gain in National Product

THE NEWS that the Gross National Product for the second quarter of this year was larger than in the first quarter became available early in the summer season. It was an important piece of news, fortifying as it did the somewhat more fragmentary indications of business improvement which had become visible in the spring months.

How strong was the second-quarter pick-up in the Gross National Product; how deeply embedded in the total economic framework were the recovery forces at work? This question remains timely, at least until the third-quarter scores are known, which cannot be until about mid-October at the earliest. As of press time in late August, there were numerous indications that a widely based and rapidly paced recovery in general business was under way. The evidence took the form of measures somewhat less comprehensive than the Gross National Product.

GROSS NATIONAL PRODUCT



Quarterly data, seasonally adjusted at annual rates.

Much can be learned from an examination of the performance of the various segments of GNP during the second quarter, following upon the trends of previous quarters which had all too consistently been downward. The full meaning of the second-quarter performance, however, will be gauged only when the direction of movement can be seen against the perspective of later developments.

The second-quarter gain in the national product was a small one; the increase from the first quarter amounted to about $3 billion, expressed in seasonally adjusted annual rates. This amounts to about three-fourths of one percent, which is not a large change by standards of past experience. The various parts of Gross National Product, however, moved during the second quarter in magnitudes of more decisive impact; as is often the case, the movements of the parts were divergent and largely offsetting.

The key to the second-quarter performance of Gross National Product may be found in the fact that there was *nearly* a cessation in the combined downward movement of the segments which had previously been the center of the business recession,(1) coupled with the fact that the rises in the already strong segments were sufficient to outweigh the weaker elements. This central feature will become apparent as the various segments are reviewed in turn.

It will be noted at once, however, that a pattern of "lesser losses", offset by stout gains in the strong segments, is not at all characteristic of "recovery" quarters in the record of postwar business cycles. Thus, if the second quarter of '58 should be finally marked (by hindsight) as the recovery quarter following the termination of the 1957-58

(1) This statement applies to quarterly averages. It is consistent with the fact that, on a monthly basis, industrial production (including its durable goods component) rose appreciably both in May and in June, as pointed out in the lead article of this issue.

business recession, it will differ in respect to the Gross National Product pattern from both the '50 recovery and the '54 recovery. During the first quarter of '50 as well as during the third quarter of '54 (which are generally conceded to be the recovery quarters of their particular cycles) *both* the "fluctuating sectors" and the "growth sectors", as defined below, showed gains from the previous quarter. In this case, i.e., the second quarter of '58, the "fluctuating sectors" were still slightly down, but were overpowered by the "growth sectors". (See accompanying chart.) This fact would not necessarily preclude an eventual labeling of the second quarter as the recovery quarter, but it might be one factor taken into account in making the decision, when the returns are all in.

The components of the Gross National Product that are referred to here as "fluctuating sectors" have been selected on the basis of their past record of volatility, especially in the postwar period. They are broadly related to, although not synonymous with, the durable goods segments of the national product which are known to be characteristically of the fluctuating type because of the postponability of demand which is associated with them. Included in the "fluctuating sectors" are:

"Consumer Investment"

Personal Consumption Expenditures for Durable Goods(2)

Investment in New Private Residential Construction

"Business Investment"

Investment in "Other" Private Construction (e.g., industrial and commercial)

Producers' Durable Equipment

Change in Business Inventories

Federal Government Purchases of Goods and Services

Net Foreign Investment

(2) The listed captions which are not in quotation marks are the standard components of Gross National Product as published in the U. S. Department of Commerce. The rearrangement of components, including that of the "growth sectors" which are identified at a later point, is our own.

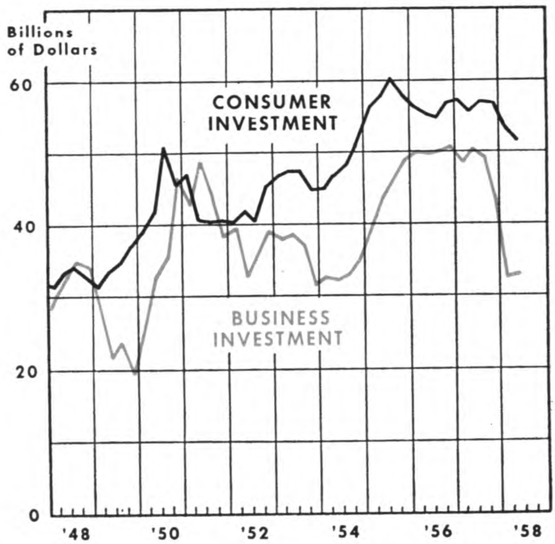
The Investment Accounts

Both "consumer investment" and "business investment", as identified above, posted relatively more favorable showings in the second quarter than in the first. In the case of consumer investment, the previous rate of decline was appreciably slowed, while in the case of business investment, there appeared a leveling tendency (in fact, even a very slight increase, on balance) following the sharp drop which occurred in the first quarter.

Thus, consumer investment slipped by $1.6 billion (annual rate) during the second quarter, as contrasted with the decline of $3.8 billion in the first quarter. The moderate decline in the second quarter was about equally divided between consumer durables and residential construction.

Business investment turned the corner during the second quarter. It registered a rise of about a half-billion dollars, annual rate, as contrasted with the precipitous drop of $11.3

INVESTMENT OUTLAYS
(as parts of Gross National Product)



"Consumer investment" = personal consumption expenditures for durable goods + new residential construction.

"Business investment" = private nonresidential construction + producers' durable equipment + change in business inventories.

billion which had occurred in the first quarter; the latter had broken all postwar records for severity of drop in a single calendar quarter, and probably all records in respect to dollar magnitude of decline. (See chart.) It is important to see what form of changes contributed to this crucial shift in business investment.

Outlays for producers' durable equipment, which constitute one important part of the segment which is identified here as "business investment", slipped by about a half-billion-dollar annual rate in the second quarter, whereas they had plunged by nearly $4 billion in the first quarter. That is the kind of relative gain which was so characteristic of the fluctuating elements of the economy in the second quarter. "The let-up in the slowdown", which had occasioned some lighter semantic touches in the discussions of the time, became a reality of the first importance.

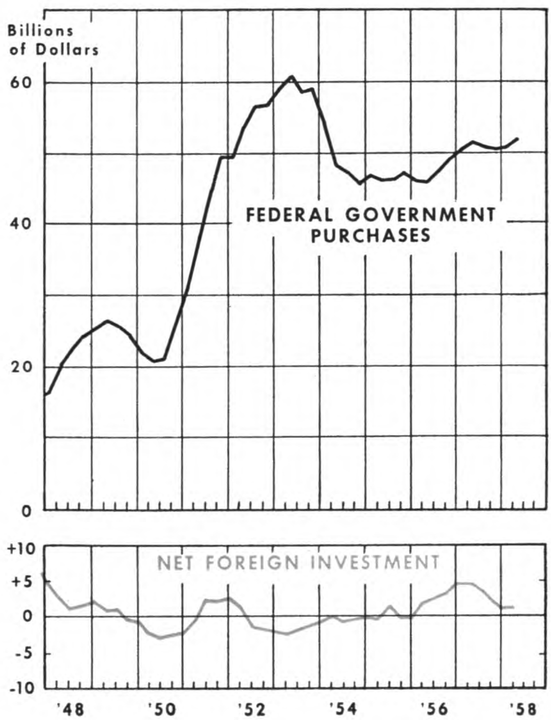
The "change in business inventories", which constitutes a second and very important part of the business investment sector, amounted during the second quarter to an $8 billion annual rate of reduction. The fact that the rate of liquidation was reduced was at least of coordinate importance with the fact that the rate of liquidation was still very large. In terms of Gross National Product arithmetic, it meant that during the second quarter a shift from a $9.5 billion rate of liquidation to an $8 billion rate resulted in a net gain of $1.5 billion for the Gross National Product total, in sharp contrast to the first quarter performance, when the change from the previous $2.3 billion rate of liquidation to a $9.5 billion rate had resulted in a drag on the Gross National Product total amounting to $7.2 billion.

To round out the business investment picture, it may be noted that the investment in new private construction (other than residential) slipped by about a half-billion-dollar annual rate in the second quarter, which was the same as the decline which had occurred in the first quarter.

Federal Government and Foreign Accounts

An element which was definitely on the plus side during the second quarter was spending by the Federal government for goods and services. (In Gross National Product accounting, this is exclusive of social insurance benefits or other transfer payments.) As expected, this factor was beginning to reflect the accentuated defense spending which had been largely in the planning phases since the "sputnik" days of last autumn. The amount of lift provided to business activity was not large, however; the second-quarter rate of total Federal government purchases of goods and services was $1 billion larger, in annual rate, than that of the first quarter. That, in turn, had been about one-half-billion dollars larger than the reduced rate of the final quarter of '57. In fact, this year's second-quarter rate of Federal spending was not much larger

FEDERAL GOVERNMENT PURCHASES AND NET FOREIGN INVESTMENT

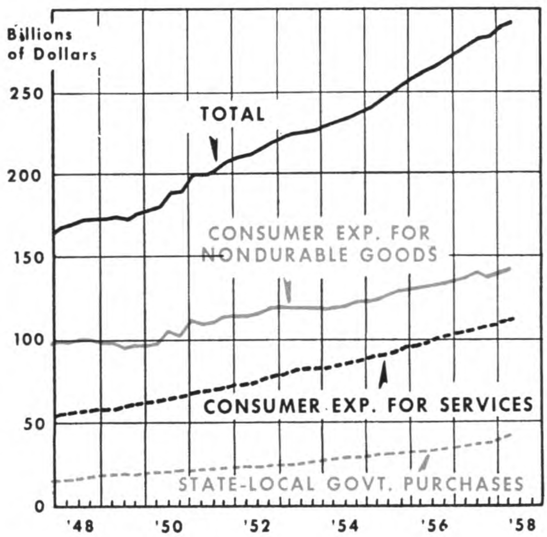


than that of the second quarter of '57, prior to the mid-year cutbacks. (See chart on the preceding page.)

Shown on the same chart as Federal government purchases is the component of Gross National Product known as "Net Foreign Investment", which completes the roster of "fluctuating sectors". Net foreign investment measures the changes in assets and liabilities held by American interests in relation to the remainder of the world; its fluctuations reflect especially the changes in the commodity export (or import) balance.

During the second quarter, net foreign investment amounted to a half billion dollars on the plus side of the balance, which was the same as the annual rate for the first quarter; thus, there was neither a stimulus nor a drag accruing to the GNP total from the score of this component. Previous to the second quarter, the trend in net foreign investment had been downward, as part of the backwash from the termination of the Suez Canal episode; in fact, for the three calendar quarters prior to the second quarter of this year, changes in the foreign account had had the result of pulling down the Gross National Product total.

GROWTH SECTORS
OF GROSS NATIONAL PRODUCT



On balance then, the "fluctuating sectors" were only slightly further down in the second quarter of the year, as contrasted with the sharp drop of the first quarter.

The "Growth Sectors"

We turn now to those parts of the Gross National Product which are classified here as "growth sectors", on the score of their consistently rising tendencies during the postwar period. Included in the "growth sectors" are:

Personal Consumption Expenditures for Nondurable Goods

Personal Consumption Expenditures for Services

State and Local Government Purchases of Goods and Services

All of the elements comprising the "growth sectors" were on the rise in the second quarter of '58. The combined effect of such increases, as noted at the outset, was to outweigh the moderate declines of the "fluctuating sectors", thus yielding a small net gain in the final score for Gross National Product.

It is unnecessary to describe each of these growth sectors in turn. (See the adjacent chart.) Suffice it to say that during the second quarter of the year, as well as during the first, all three posted gains which were approximately in line with recent experience. It is interesting to note that during the entire recession of 1957-58, the only instance of decline in any one of the three series was the decline in consumer expenditures for nondurable goods which occurred in the fourth quarter of '57, amounting to a slippage of $1.7 billion in annual rate, or 1.2 percent, from the previous quarter. (A temporary decline in retail food prices, affecting the aggregate dollar volume of food purchases, accounted for a considerable part of the fourth-quarter decline in expenditures for nondurables.)

Although the gains registered in the "growth sectors" were sufficient to outweigh the moderate declines in the "fluctuating sectors" during the second quarter, it is important to realize that such gains did not represent spurts; they were about of customary magnitude. Thus, a picture of "the consumer" rushing like some St. George to slay the dragon of recession would be quite unjustified. Equally unrealistic is the picture of the consumer during the depth of the recession, often portrayed in the role of a miser or a frightened rabbit, whose excessive timidity was alleged to be the root of the difficulty. As a matter of statistical fact, "the consumer" is a fairly steady-going creature, at least for a very large range of his purchases. Perhaps that is because there are so many of "him".

NOTES ON FEDERAL RESERVE PUBLICATIONS

Among the articles recently published in monthly business reviews of other Federal Reserve banks or in the Federal Reserve *Bulletin* are:

"Personal Financial Saving During Recessions", Federal Reserve Bank of Chicago, August 1958.

"Recession in Perspective", Federal Reserve Bank of Richmond, August 1958.

"The Runoff in Inventories", Federal Reserve Bank of Kansas City, August 1958.

"Federal Reserve Policy and the Financial Markets during the Past Year", Federal Reserve Bank of St. Louis, August 1958.

"Sterling: A Year of Recovery", Federal Reserve Bank of New York, August 1958.

"Feed Manufacturing: A Growth Industry in the Sixth District", Federal Reserve Bank of Atlanta, August 1958.

"Money and Credit in the Recession", Federal Reserve *Bulletin,* Board of Governors of the Federal Reserve System, Washington, D. C., July 1958. (Reprint available.)

(For copies, please write directly to the Federal Reserve Bank named in each case, or to the Board of Governors for the last named item.)

Around the Fourth District—

Department Store Sales, July and Year-to-Date

	July '58 % change from year ago	Jan.-July '58 % change from year ago
Columbus	+ 6	−0−
Lexington	+ 4	− 2
Pittsburgh	+ 3	−0−
Wheeling-Steubenville	+ 3	− 7
Cincinnati	−0−	− 3
Cleveland	− 4	− 4
Erie	− 4	− 9
Akron	− 7	− 8
Springfield	− 7	−10
Canton	− 8	−10
Youngstown	−10	−14
FOURTH DISTRICT TOTAL	− 1	− 4

* * * *

Sales of *radios and television sets* at Fourth District department stores during the first half of the year were 2% above a year ago, whereas sales of *major household appliances* were down 10%.

* * * *

Savings deposits of individuals at reporting banks in 12 Fourth District centers increased to a total of $2,746 million during July, a new record high for the fifth consecutive month. Five of the twelve centers set individual new highs, namely: Pittsburgh, Cincinnati, Canton, Erie, and Lexington.

* * * *

Bank debits in reporting Fourth District cities appeared not to have shared in recovery tendencies during July. The July figure was 9% below a year ago, while the total of May-June-July was 8% below a year ago.

* * * *

Week-to-week steadiness characterized most barometers of Cleveland business activity throughout the month of August.

* * * *

Frequent and abundant rainfall has reduced *hay production* in Ohio to the lowest point in two decades. In contrast, total production of hay for the United States has been estimated at 10% above normal.

(The above items are based on various series of District or local data, which are assembled by this bank and distributed upon request in the form of mimeographed releases.)