May 1963

FEDERAL RESERVE BANK OF ST. LOUIS
Review

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FEDERAL RESERVE BANK OF ST. LOUIS

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Signs of Renewed Economic Advance

ECONOMIC STATISTICS most recently available suggest that business activity has moved upward from the plateau of most of 1962. Automobile and steel production have been strong, manufacturers' orders for durable goods have been rising, and recently there appears to have been some increase in employment. The question naturally arises as to whether those gains have been serving to reduce significantly the economy's level of unused resources.

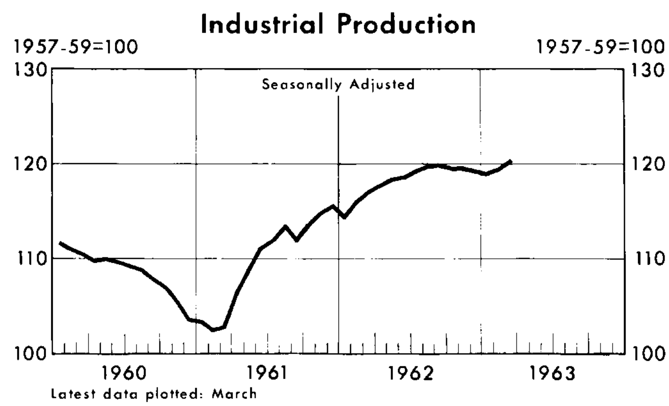
It is helpful to examine a larger sample of economic statistics and in a longer time perspective than the most recent months for further evidence that the recent improvements have been broadly based and not simply the random behavior of a few economic time series. A broader reading of current statistics suggests that recent economic gains have been real but does not unambiguously suggest that the economy has moved to significantly higher rates of resource utilization than during most of 1962. In particular, events of recent months have in some respects resembled those of the early part of 1962, when there was a moderate rise in most measures of business activity.

Business Income and Spending

Corporate profits after taxes rose from an annual rate of $26.1 billion in the third quarter of 1962 to $27.3 billion in the fourth quarter. This latter total was $1 billion, or about 4 per cent, above fourth-quarter 1961 profits. Indications are that there may have been some leveling in the first quarter of this year. In view of the changes in tax depreciation methods put into effect by the Treasury last year, a more meaningful measure of corporate performance may be total cash flow—profits plus capital consumption allowances. Cash flow to corporations increased from an annual rate of $55.5 billion in the third quarter of 1962 to $57.0 billion in the fourth quarter. The latter total was $2.2 billion, or about 4 per cent, above fourth-quarter 1961 corporate cash flow.

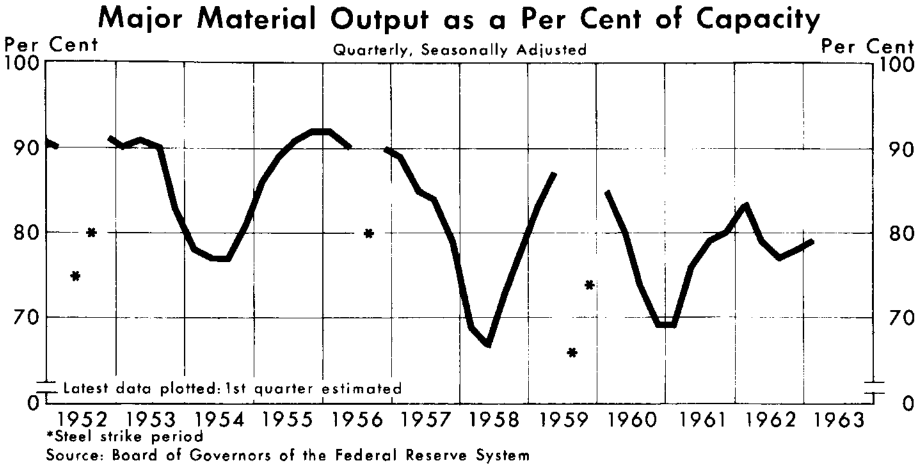
Profits and cash flow are widely considered to be important determinants of business spending on new plant and equipment. Perhaps reflecting the improved position of American business at the end of last year, the SEC-Commerce Department survey of investment plans in February indicated that business expenditures on new plant and equipment in 1963 will total $39.1 billion. If realized, such a level of business investment would be 5 per cent above the $37.3 billion total of 1962. On the other hand, this would be a smaller rate of increase than occurred last year; from 1961 to 1962 investment spending increased 8.6 per cent.

Accompanying increased corporate profits and the possibility of rising investment expenditures—but also reflecting in part inventory hedging against the possibility of work stoppage in the steel industry—industrial production rose from 119.4 per cent of the 1957-59 average in February to 120.4 in March and increased further in April. Since January, output of



the nation's mines, factories, and utilities has risen about 2 per cent. Steel increases have been a substantial part of this rise, but gains have also been registered in the production of consumer goods. Automobile production, in particular, has been strong thus far in 1963 and increased further in April.

Developments this year have in some ways paralleled those of the first several months of 1962. Total



industrial production rose 3 per cent from January to April 1962, then increased less than 1 per cent from April to January of this year. Last year was also a good automobile year; steel production also increased rapidly (until March) as users hedged against the possibility of a strike.

Rising steel output has been responsible for some improvement this year in overall capacity utilization in major materials-producing industries. Output in these industries rose from 78 per cent of capacity in the fourth quarter of 1962 to about 79 per cent in the first quarter of 1963. The corresponding rate during the first quarter of 1962 was 83 per cent.

Manufacturers' new orders for durable goods, which like corporate profits tend to lead broad cyclical movements, were about $17.2 billion in March after increasing for the third successive month. During the last three months of 1962 such orders declined. Again because of uncertainty with respect to steel, however, the cyclical significance of recent increases in durable goods orders is unclear.

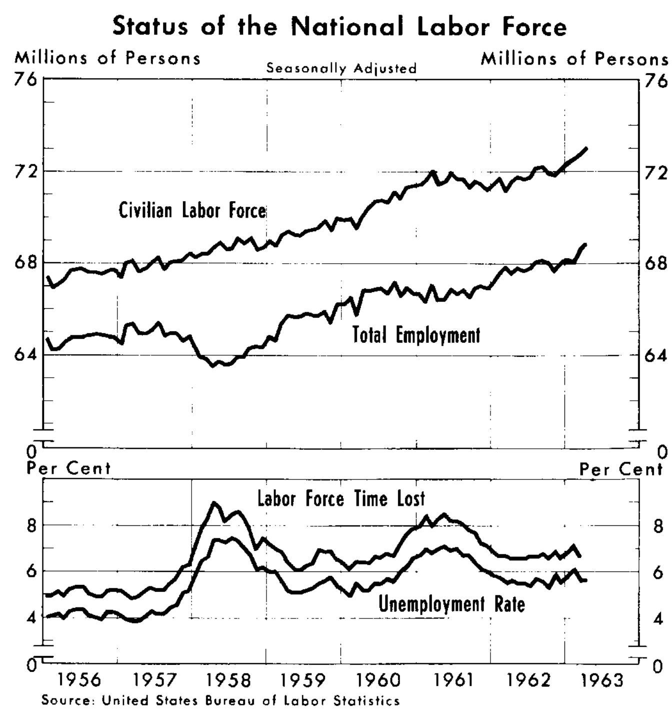
Construction expenditures, at a seasonally adjusted annual rate of $61 billion in April, still have not regained the peak levels of late 1962. The largest declines at the turn of the year were in the private component, including residential construction. Since January, however, private housing starts have risen sharply, from an annual rate of around 1.2 million units to around 1.5 million in March. Housing starts also averaged about 1.5 million units in the fourth quarter of 1962.

Employment-Unemployment

Total civilian employment, seasonally adjusted, increased from about 68 million, the level around which it fluctuated from mid-1962 until February, to 68.6 million in March and 68.9 million in April. As with industrial production, movements in employment thus far in 1963 have resembled the early months of last year. Employment also increased until May 1962, then changed little through the rest of the year.

With increasing employment have come recent moderate declines in unemployment. The number of unemployed, seasonally adjusted, declined from 4.4 million in February to 4.1 million in March and April. The proportion of the civilian labor force unemployed was 5.6 per cent in March and 5.7 per cent in April, compared with an average of 5.8 per cent from November to February. Recent declines in unemployment have been primarily among those unemployed for short periods. Long duration unemployment (15 weeks or more) continues to average 1.1 million, as it has since mid-1962.

The average workweek in manufacturing, a sensitive cyclical indicator of business conditions, in March was 40.3 hours, the same as in February. Only offsetting movements have been recorded in the average workweek in the past year. The last period in which significant increases were realized was the first quarter of 1962.



Consumer Income and Spending

Personal income in March was at a seasonally adjusted annual rate of $453 billion, $1.6 billion above February. The rise was concentrated in wages and salaries.

Total sales of retail stores were $20.4 billion in March, after allowance for seasonal variation. March was the third consecutive month in which moderate gains were recorded in retail sales, but preliminary data suggest that there was a slight decline in April. Retail sales increased rapidly during the first several months of 1962, then slowly through the end of the year.

Prices

Industrial commodity prices on the basis of weekly data were estimated to be 100.5 per cent of the 1957-59 average in April, compared with 100.6 in March. Such prices have been substantially unchanged, not only in the last year, but since 1959. Widespread increases in industrial commodity and other wholesale prices might be construed as evidence of rising business demand for goods pressing on supplies and thus stimulating production. The steel industry did raise prices on some of its products in early April, but through the last week in the month there was little discernible impact on the weekly index of industrial commodity prices.

The consumer price index rose from 106.1 per cent of the 1957-59 average in February to 106.2 in March, and at this figure was slightly above the level of last September. The overall stability of consumer prices since last autumn has resulted from a small decline in commodity prices and some moderating of the upward trend in prices of services.

Common stock prices have risen sharply in recent weeks and in April were close to the record levels of late 1961. Standard and Poor's index of 500 common stocks (1941-43 = 10) averaged 68.76 in April, compared to 65.67 in March. Paralleling the increase in prices has been a decline in earnings yields and dividends yields. The dividend-price ratio in late April averaged an estimated 3.10 per cent, a rate of return to the investor below that on most bonds and other savings media. Upward movements in stock prices have tended historically to precede similar patterns in general business activity. Among the possible economic reasons for such a lead, rising stock prices increase consumer wealth and may influence spending decisions. At the same time, the reduction in earnings yields and dividends yields reduces the cost of capital to businesses, and hence may encourage investment spending.

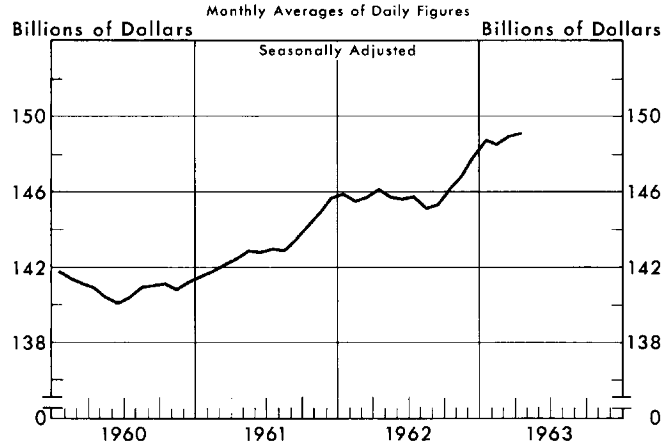
Bank Reserves, Money, and Interest Rates

Total member bank reserves, seasonally adjusted, were about unchanged from March to April. Because member banks are required to hold a specific percentage of deposits as reserves (deposits at Reserve Banks and cash in vault), these reserves are a limiting factor in the expansion of bank credit, bank deposits, and the money supply.[1] Since January, total reserves have risen at an annual rate of about 1.0 per cent. Nevertheless, because of a rise in time deposits, reserves available for private demand deposits have declined at an annual rate of about 1.5 per cent since January. Over the past twelve months these reserves have risen 0.5 per cent.

The money supply (demand deposits plus currency), seasonally adjusted, increased $400 million

Money Supply

Monthly Averages of Daily Figures



Latest figure plotted is month ending April 15, preliminary.

from the month ending March 15 to the month ending April 15. Since January, the money supply has increased at an annual rate of 1.3 per cent, and over the past year the nation's stock of money has risen 2.3 per cent. Time deposits at commercial banks have increased 16.0 per cent over the past year.

Interest rate movements have been mixed thus far this year. Three-month Treasury bill rates have fluctuated about the 2.90 per cent level. Yields on long-term Government bonds increased from 3.85 per cent at the beginning of the year to about 3.95 per cent in early May. Interest rates on municipal obligations also rose, from 2.94 per cent to 3.00 per cent. On the other hand, yields on medium-grade corporate bonds and on mortgages have drifted slightly lower since the beginning of the year.

[1] See *Purposes and Functions of the Federal Reserve System,* Board of Governors of the Federal Reserve System, Washington 25, D. C.

Hog and Beef Cattle Prices

THE RECENT PRICE DECLINES of hogs and beef cattle are of major interest in the Eighth Federal Reserve District. Farm income is a substantial per cent of total district income, and hogs and beef cattle account for 32 per cent of farm income. Lower prices for these products are generally reflected in a reduced dollar volume of sales as the price declines more than offset the increased quantities marketed.

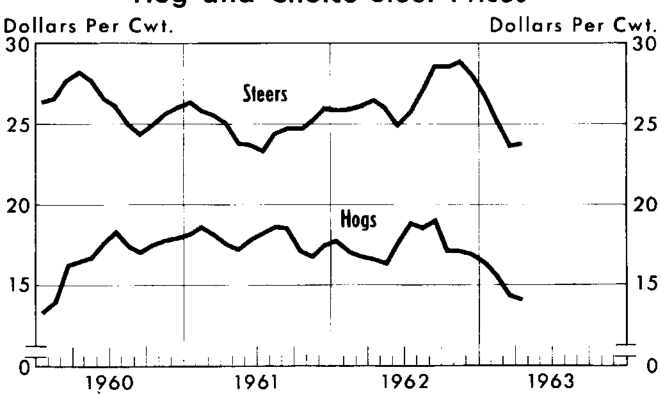
Prices of hogs and beef cattle declined markedly from September 1962 to April 1963. This was the sharpest seven-month decrease in recent years. Prices of hogs in East St. Louis dropped about 26 per cent during the period while choice steer prices were down 17 per cent. Similar declines occurred in other major markets of the nation. These declines reflected primarily increases in production which contributed to greater than normal meat supplies. Despite these declines, neither hog nor cattle prices were unprecedentedly low for recent years. Cattle prices in March and April were no lower than July 1961, and hog prices were no lower than in early 1960.

Recent Developments

After reaching peaks in the last half of 1962 (September in the case of hogs and November for cattle), hog and beef cattle prices turned down and continued down through the first quarter of 1963 (Chart 1).

Chart 1

Hog and Choice Steer Prices*



*Average of Wednesday prices for each month at East St. Louis, Illinois. (Mid-point of price ranges of 700-900 pound choice steers and U.S. number 1 and 2, 180-200 pound hogs.)
Source: USDA

Hog prices at East St. Louis reached an average monthly peak of $18.94 per cwt. in September 1962 when the recent downtrend began and by April 1963 had declined to $14.11, a drop of 26 per cent. This was the lowest monthly average price for hogs at the East St. Louis market since February 1960. From March 1960 to January 1963, prices ranged from $19.00 to $16.00 and averaged about $17.50 per cwt.

Prices of choice steers at East St. Louis averaged $28.50 to $29.00 per cwt. during each of the months of September, October, and November 1962. In December, however, prices began to decline, and the downtrend continued through the first quarter of 1963. The April average price for choice steers was $23.75 per cwt., about 18 per cent below the 1962 peak. Prices fell from $28.16 per cwt. in April 1960 to a low of $23.32 per cwt. in July 1961, rose to a new peak of nearly $29.00 in the fall of 1962, and then declined to below $24.00 in March and April 1963.

Cyclical Price Movements

Most of the short-term price changes of beef and pork in recent months have resulted from changes in quantities available to consumers rather than from changes in demand. A large part of meat output is consumed as fresh meat within a short time after slaughter. Accordingly, a substantial increase in slaughter has a depressing effect on prices received by farmers; conversely, when the volume of slaughter declines, prices rise.

Increases of pork and beef supplies have probably been the major factor in the decline of prices. When an increase in the supply of only one of the major meat types occurs and the total quantity of all meat is not unusually large, the impact on price may be relatively moderate. Consumers may substitute considerable quantities of one type of meat for another with only slight price adjustments.

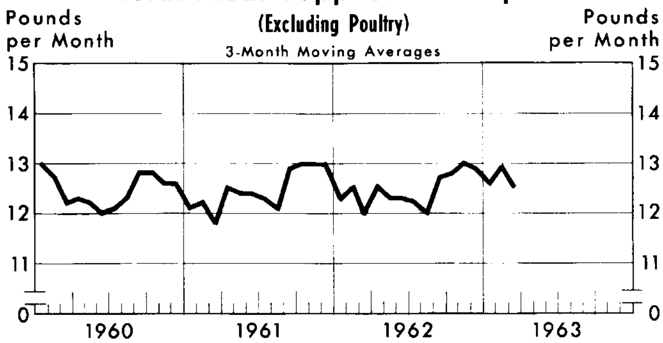
The rise in meat animal prices in the third quarter of 1962 reflected in part the unusually small slaughter of hogs in July, August, and September and the smaller quantity of total meat supplies excluding poultry (Chart 2). Total per capita supplies in August and September were about 4 per cent below the corresponding months a year earlier despite the general uptrend in meat slaughter for the year. By late 1962 monthly slaughter of hogs and beef returned nearer to levels of the previous year and prices were dropping. The uptrend in meat slaughter continued into 1963 compared with the levels of the same months last year with increasing downward pressure on beef

Chart 2

Total Meat Supplies Per Capita

(Excluding Poultry)

3-Month Moving Averages



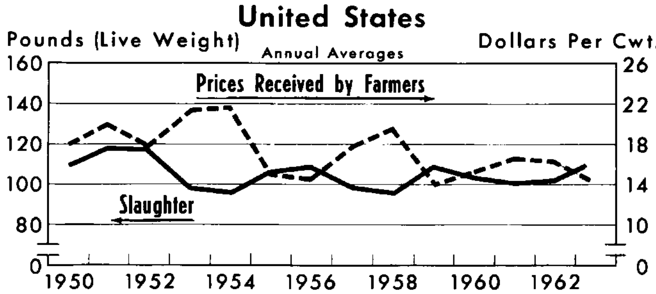
Source: USDA
Latest data plotted: March preliminary

and pork prices. During the first three months of 1963 total meat supplies per capita were about 4 per cent greater than in the same months of the previous year and about 1 per cent greater than in the last quarter of 1962. Hog slaughter per capita in the first quarter of 1963 was 5 per cent greater than in the same period a year earlier (Chart 3). Cattle slaughter was up about 3 per cent (Chart 4). Such fluctuations in meat supplies generally reflect livestock production cycles.

Chart 3

Hog Slaughter Per Capita and Prices
United States

Annual Averages

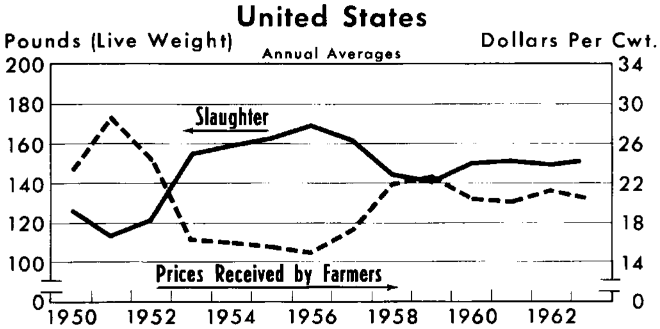


Source: USDA
Latest data plotted: Slaughter-1st quarter 1963, preliminary, at annual rate. Prices-1st four months 1963.

Chart 4

Cattle* Slaughter Per Capita and Prices
United States

Annual Averages



*Includes calves.
Source: USDA
Latest data plotted: Slaughter-1st quarter 1963, preliminary, at annual rate. Prices-1st four months 1963.

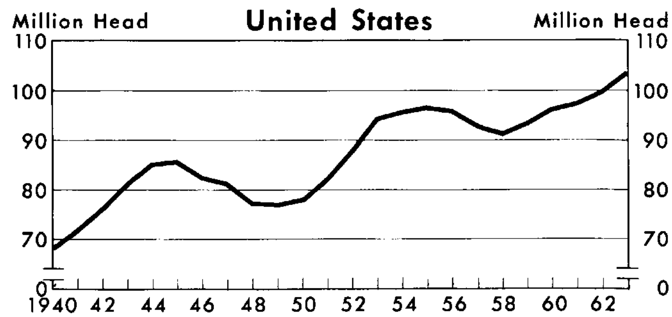
Recent Livestock Cycles

In recent years there has been a series of three- to four-year hog cycles (Chart 3). Reasons for this pattern are probably explained by factors inherent in the industry rather than in responses to outside influence such as size of feed crops or fluctuations in demand. One reason advanced for the cycle is as follows.[1] In the first period assume slaughter is low causing high hog prices and the pig crop is about the normal size. Slaughter will tend to rise and prices will tend to be depressed toward their normal levels in the second period, but the pig crop will tend to rise to above normal because of the attractiveness of high hog prices in period one. In the third period the larger pig crop will be fed, producing a larger than normal slaughter and below normal prices. The pig crop, however, declines toward normal levels because of normal prices in period two. Consequently, in period four slaughter and prices will return to normal but the pig crop will be below normal because of the low prices for hogs in period three. Forces are thus set in motion to start the cycle over again.

It is possible that cattle cycles also follow this same general pattern. According to recent research at Iowa State University an increase in feeder calf prices is associated with an increase in beef cow numbers three to four years later.[2] Furthermore, an increase in beef cow numbers is associated with a decline in cattle slaughter, as calves, heifers, and cows are withheld for breeding purposes rather than sold for slaughter. Most recent beef cattle cycles have had a duration of nine to eleven years, or more than twice the duration of hog cycles (Chart 5).

Chart 5

All Cattle and Calves on Farms
United States



Data as of January 1.
Source: USDA

[1] "The Hog Cycle and the Cobweb Theorem," Arthur A. Harlow, *Journal of Farm Economics*, November, 1960.

[2] "Decomposition of Beef and Pork Cycles," Wilber R. Maki, *Journal of Farm Economics*, August, 1962.

Former Corn-Hog Cycles

Hog production cycles were once thought to be, and possibly were, dependent on feed production. It was generally assumed that changes in the production and price of corn gave rise to changes in supplies and prices of hogs. This theory had some merit prior to Government price support and storage programs. Most of the corn harvested each fall was fed during the following feeding year. Little was carried forward from one feeding year to the next. Variations in production were therefore followed by similar variations in feeding and slaughter. Such a close relationship between corn and hog production did not necessarily hold on each farm, although the effect was brought about in the market place. A large corn crop was generally reflected in a substantial decline in corn prices. With corn prices below their normal relationship to the price of hogs, production of pork became attractive and usually expanded. Conversely, when the size of the corn crop was relatively small, corn prices rose relative to the price of hogs, and pork production contracted.

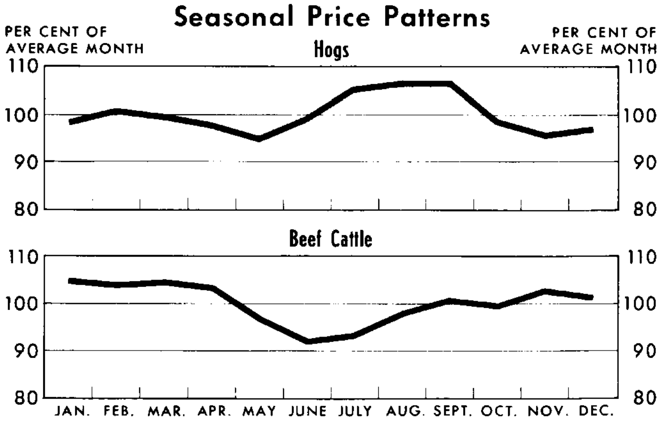
Current Government feed price and storage programs have altered to a marked extent this former tie between corn and hog production. Hog production no longer adjusts quickly to corn supplies. With price supports, there are only minor year-to-year fluctuations in the price of corn although production still varies. While the price support and storage program provides considerable stabilization in feed grain prices, it has not achieved the same degree of stability in output and prices of hogs and cattle.

Seasonal Price Movements

Hog and beef cattle prices generally vary somewhat from one part of the year to another (Chart 6). During recent years, however, seasonal influences have been substantially less than prior to World War II. Seasonal fluctuations in choice beef cattle prices in 1957-62 were only about 50 per cent as great as in the years 1921-35. Greater declines have apparently occurred in seasonal fluctuations in hog prices. This smoothing out of seasonal price movements may be the result of more year-round uniformity in the feeding and marketing of animals in recent years. Beef slaughter has become fairly uniform throughout the year. Hog slaughter still declines substantially in July with some upward movement in price. Improved meat storage facilities, however, have apparently been a factor in smoothing out the former price peaks for pork during this month.

Chart 6

Seasonal Price Patterns



Seasonal factors based on 1957-62 data estimated for 1963. Prices are for choice grade slaughter steers at Chicago and average price for barrows and gilts at eight midwest markets combined.

Long-Run Price Movements

Numerous factors influencing beef and pork prices have an impact over an extended period of time. Some of these long-run, pricemaking forces have a common influence on all consumer prices. Others, however, may influence only a specific commodity or a readily substitutable commodity.

Population growth influences all consumer prices, including prices of hog and cattle products. As the population increases there are more mouths to feed and aggregate demand for food rises. Population growth alone has probably been the most important factor increasing demand for meat in recent years. This factor has increased meat demand at an estimated rate of almost 2 per cent per year or about 20 per cent during the period 1950-62.

Consumer income increases may also have an impact on demand for beef and pork. It is generally assumed that most appetites for the better cuts of these products are not satiated. Thus, when incomes rise, especially among the lower income groups, demand for these products will increase somewhat, resulting in upward pressure on prices. It may be, however, that the United States has attained such a high standard of living in recent years that the impact of increased incomes on demand for meat is moderate for most families. It is also doubtful if the relatively moderate business cycles of recent years have had much influence on demand for meat. Since 1950, consumer incomes have grown at a relatively stable rate and demand for beef and pork has apparently changed little during the various phases of the business cycles.

Another long-term factor affecting demand for beef and pork is the changing taste or preference for the commodity. Although the impact of changing tastes is difficult to measure, some indications can be drawn

Economic Improvement in Major Metropolitan Areas of the District

ECONOMIC ACTIVITY during the first quarter of 1963 in the four major metropolitan areas of the central Mississippi valley showed some improvement over the last quarter of 1962. Preliminary indications are that there were some further gains during April. Employment has been increasing since December and was slightly higher in first-quarter 1963 than in fourth-quarter 1962. Industrial use of electric power, which has been increasing since November, registered a quarter-to-quarter gain. Department store sales and bank debits have changed little since the last quarter of 1962. Business loans outstanding have decreased slightly since late last year. The situation in each of the four areas is described briefly in the charts and text which follow. ⟶

Hog and Beef Cattle Prices–*Continued from page 7*

from beef and pork price and consumption data (Table I). One would expect beef and pork to be substitutable to some extent in family diets. Thus, consumption of either commodity is expected to vary inversely with its price and directly with the price of the other assuming no change in consumer preference. However, unless consumer taste changed one would expect the relationship between prices and consumption for each to remain about the same over a period of years. The data, however, reveal that beef consumption per capita rose about 30 per cent from the 1949-51 average to the 1960-62 average, while price was rising about 14 per cent. On the other hand, pork consumption per capita declined 8 per cent during the period while prices rose only 3 per cent. This indicates that consumer preference or taste may have been changing from pork to beef.

TABLE I

Average Consumption of Beef and Pork per Person and Retail Price per Pound for Selected Periods

	Beef		Pork	
Annual Average	Consumption Pounds	Price Cents	Consumption Pounds	Price Cents
1949-51	68.0	71.0	68.5	56.7
1960-62	88.3	80.9	62.9	58.5
Per Cent Change	+ 29.9	13.9	— 8.2	+ 3.2

Source: USDA

Chart 7

Feed Prices Paid by Farmers

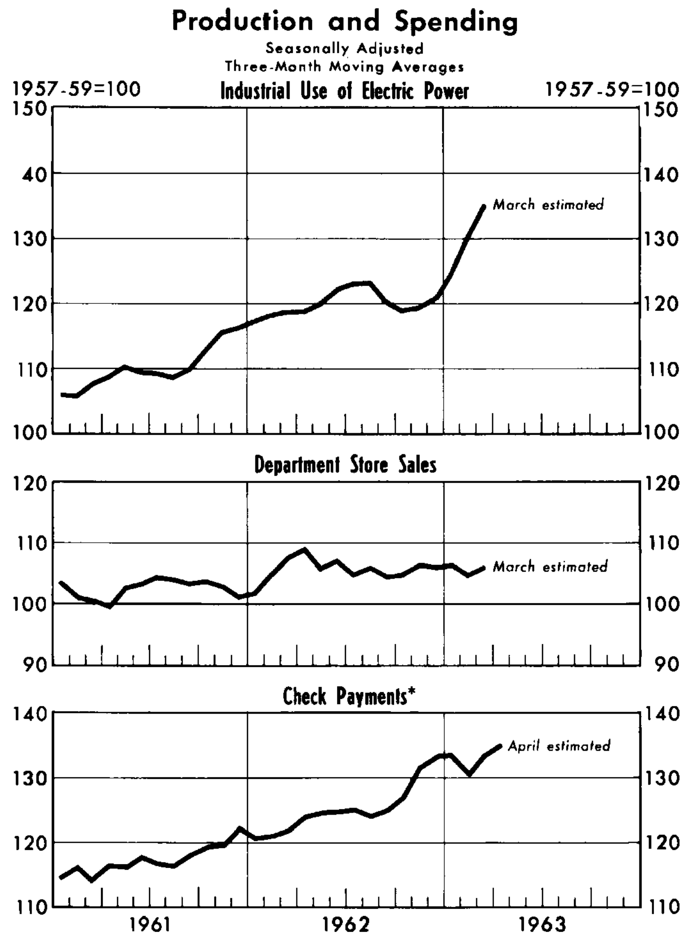
Source: USDA

The supply of beef and pork has been affected by noncyclical factors. Technological developments have contributed to the production efficiency of these commodities during the past decade. Efficiency gains in larger sized units are apparent from the rapid growth in the average size of farms. Some gains have also been achieved through improved feeding and disease control. The greatest gains in reducing costs, however, have probably been through lower feed costs (Chart 7). Feed costs are a large proportion of total beef cattle and hog production costs. From the 1948-52 average, feed costs had declined about 14 per cent by 1962. It will be noted that feed costs increased somewhat in the past two years, and if this upward trend continues, it could change the trend in pork and beef prices.

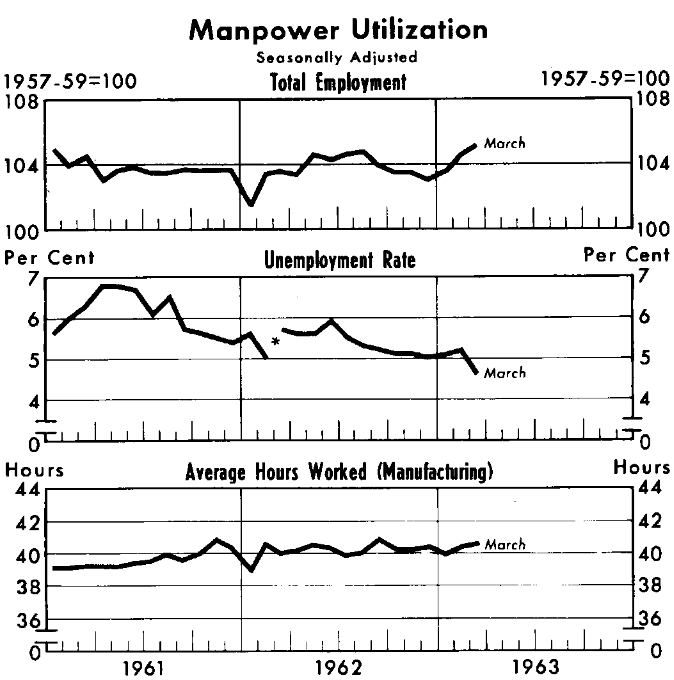
St. Louis Metropolitan Area

ECONOMIC ACTIVITY in the St. Louis Area has risen since the end of 1962. Manpower utilization has increased since December, with both employment and average hours worked showing gains. Employment in March was 2 per cent higher than in last December. In addition, the industrial use of electric power by large manufacturing firms has risen sharply.

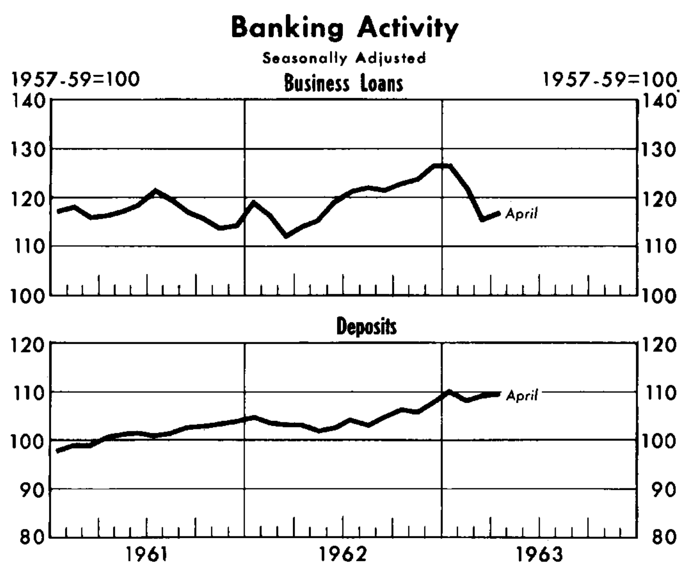
On the other hand, department store sales have remained about unchanged since early 1962, check payments have only increased slightly, and business loans have decreased since January of this year.



*Debits to demand deposit accounts, except interbank and U.S. Government accounts.



*Change in estimating procedure.

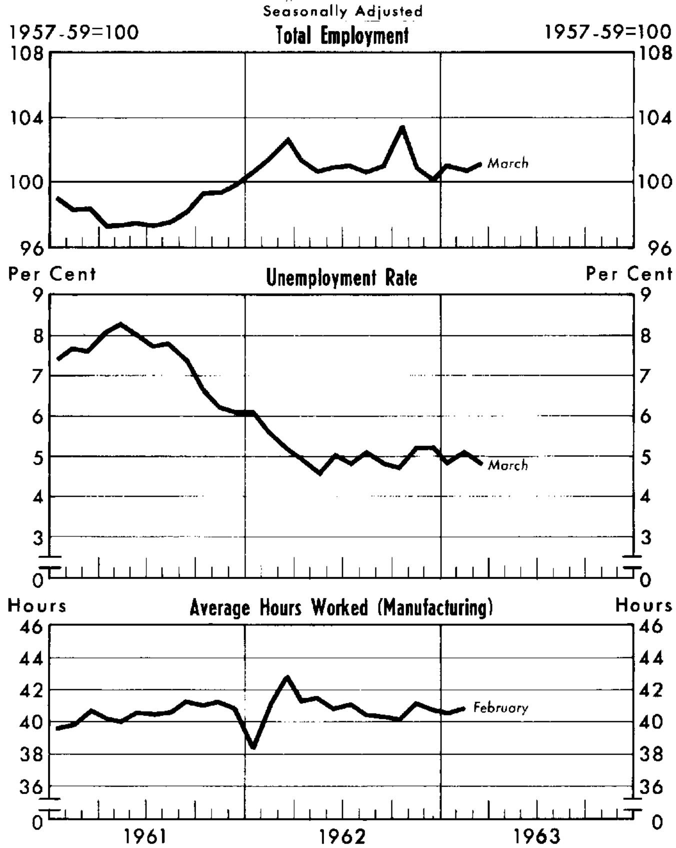


Louisville Metropolitan Area

LOUISVILLE ECONOMIC ACTIVITY during the first three months of 1963 has remained at a level near that of late 1962. Neither employment nor average hours worked have changed significantly. There have been virtually no changes since December in industrial use of electric power and department store sales; but the volume of check payments has fallen. Bank deposits and loans to businesses have shown little net change since the end of 1962.

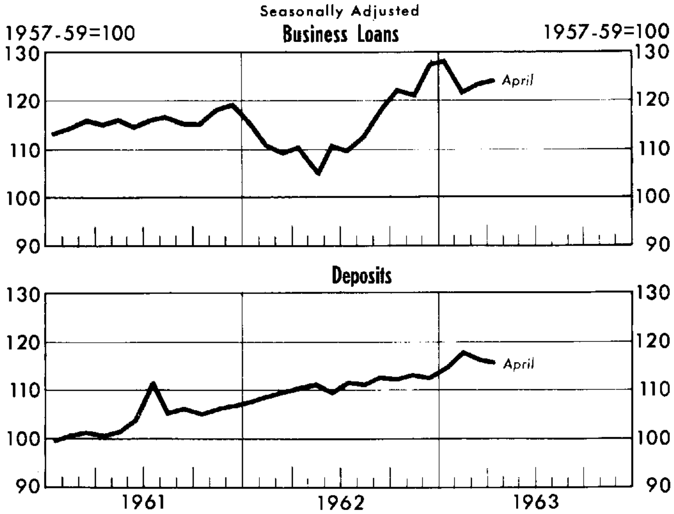
Manpower Utilization

Seasonally Adjusted



Banking Activity

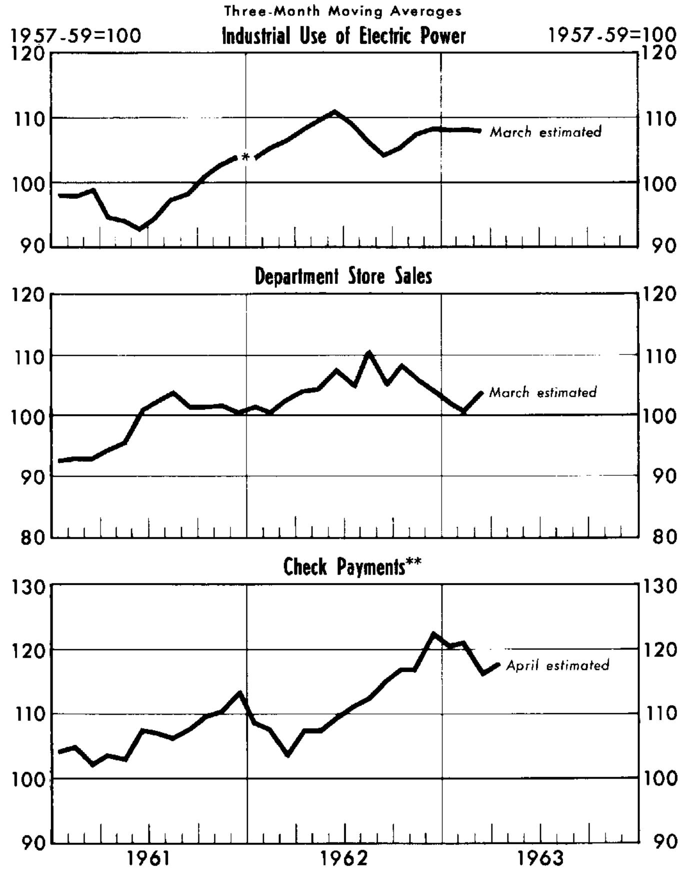
Seasonally Adjusted



Production and Spending

Seasonally Adjusted

Three-Month Moving Averages



*Revision in sample.

**Debits to demand deposit accounts, except interbank and U.S. Government accounts.

The Data

These reports are presented as an aid in following economic developments in these metropolitan centers. Because economic activity by its very nature is a composite of many different segments, a more meaningful picture of economic developments can be obtained by considering the entire set of indicators as a whole rather than by placing complete reliance on any single indicator. Moreover, there may be shortcomings in each series which may create a misleading impression.

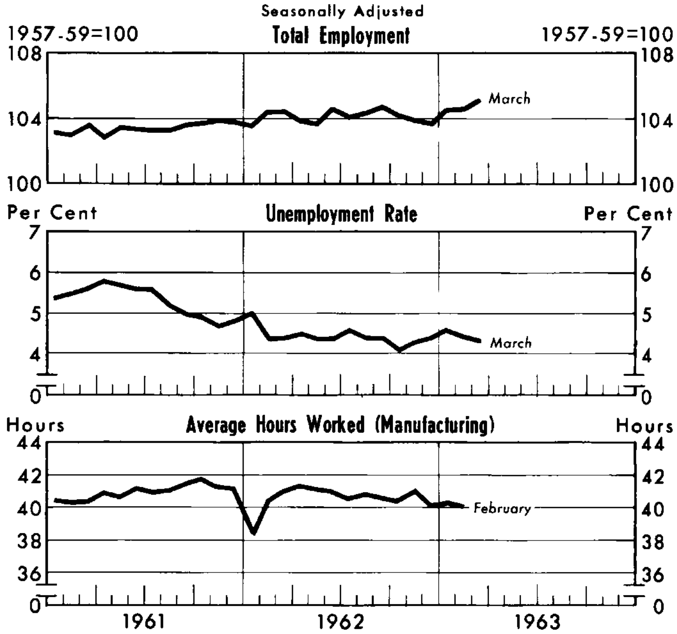
All the data have been adjusted for seasonal variations. In addition, in order to smooth erratic fluctuation in the data, the electric power, department store sales, and check payments series are presented as three-month moving averages. It should be noted that the most recent index presented for each of these three in-

Memphis Metropolitan Area

BUSINESS ACTIVITY in the Memphis Area has shown improvement since late 1962. Manpower utilization has increased, resulting from an increase in employment. Production and spending have risen since last December, with gains registered in industrial use of electric power, department store sales, and check payments. Business loans have increased since late 1962.

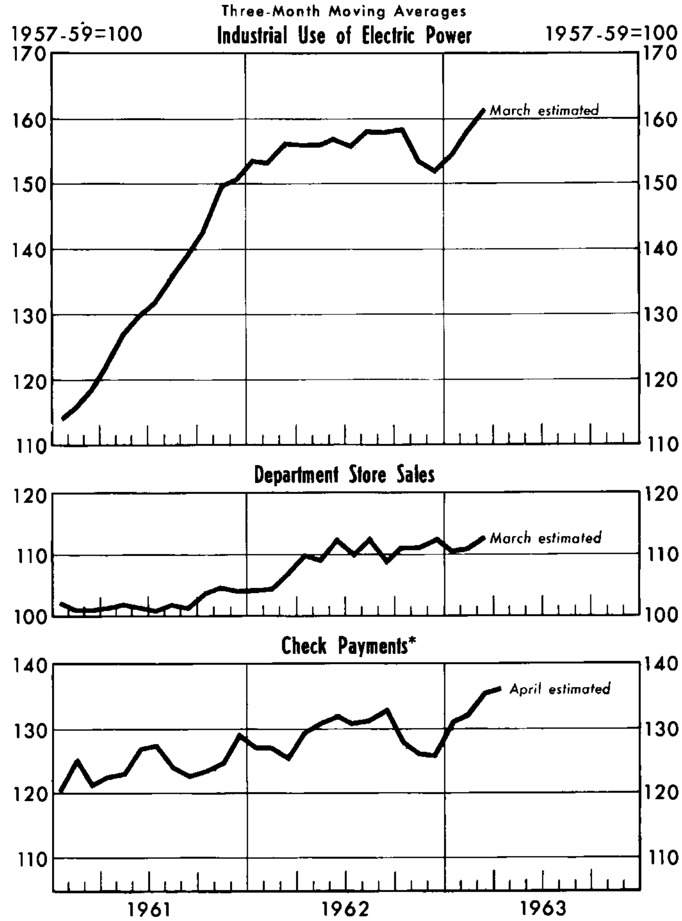
Manpower Utilization

Seasonally Adjusted



Production and Spending

Seasonally Adjusted
Three-Month Moving Averages



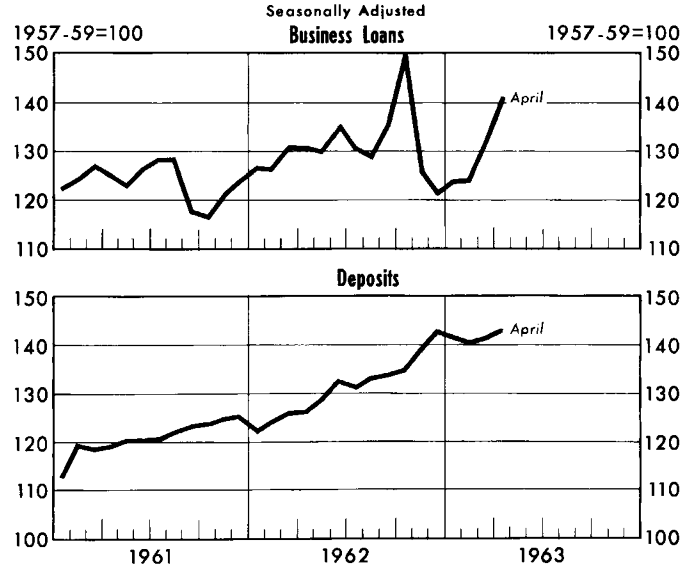
*Debits to demand deposit accounts, except interbank and U.S. Government accounts.

dicators is an average of the last two months and is subject to revision.

The index of industrial use of electric power is based on data provided to this Bank by the public utilities in each area. *Employment data* are developed by the respective State Employment Security Offices. *Total sales figures* are provided by cooperating department stores in each center. It should be recognized that these data relate only to department store sales and do not necessarily reflect trends and fluctuations in other categories of retail sales or of total retail sales. *Check payments,* or debits, are reported monthly by all or a sample of commercial banks. *The data for deposits and business loans* are provided by the weekly reporting banks in each area, the monthly figures being averages of weekly data. Deposits include demand deposits adjusted (other than interbank and U. S. Government, less cash items in process of collection) and time deposits.

Banking Activity

Seasonally Adjusted

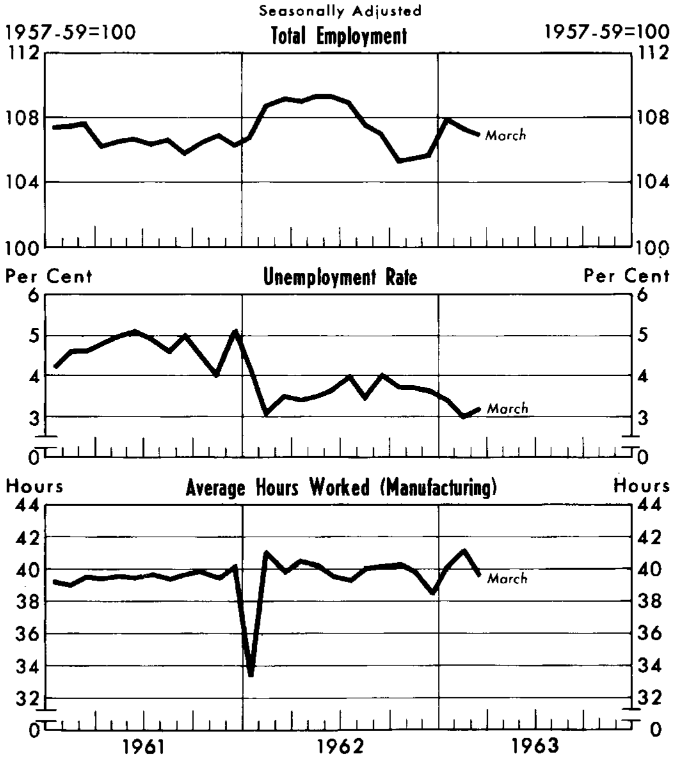


Little Rock Metropolitan Area

ECONOMIC ACTIVITY IN LITTLE ROCK has increased since late 1962. Manpower utilization has increased, reflecting increases in both employment and hours worked. In addition, both industrial use of electric power and department store sales rose sharply in the first three months of 1963; but check payments have increased only slightly in this period. Business loans have advanced markedly since the end of 1962.

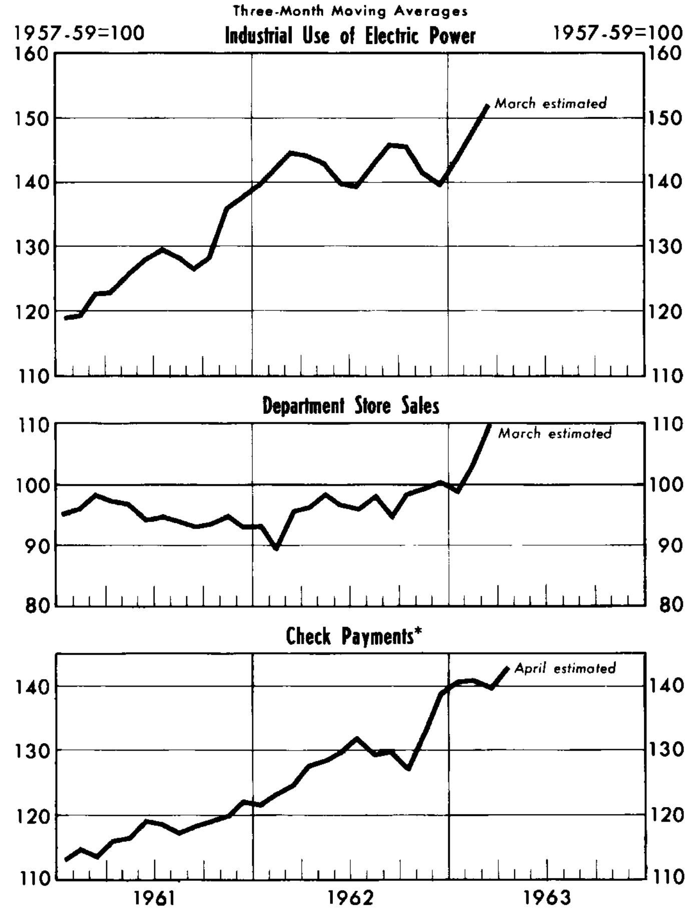
Manpower Utilization

Seasonally Adjusted



Production and Spending

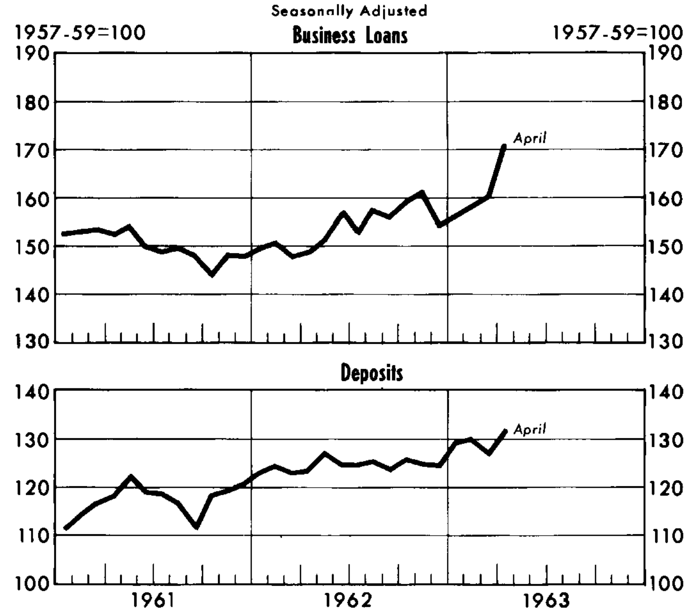
Seasonally Adjusted
Three-Month Moving Averages



*Debits to demand deposit accounts, except interbank and U.S. Government accounts.

Banking Activity

Seasonally Adjusted



A MONTHLY REPORT entitled *Selected Economic Indicators,* which covers the four cities presented here and Fort Smith, Arkansas, Evansville, Indiana, and Springfield, Missouri, is available upon request to the Research Department of this bank.