

Monthly Review

NOVEMBER, 1958

VOLUME XXXX • NUMBER 11

The Expanding Economy

p. 130

Business has continued to improve as consumers and government have increased spending and businesses have reduced their rate of inventory liquidation.

The Financial Situation Stabilizes

p. 132

In recent weeks interest rates leveled off, bank reserve positions remained the same, and the money supply changed only slightly. Financing the Government's large cash deficit without either inflationary pressures or hampering of recovery looms as a major problem for the near future.

Interest Rates in the Recovery

p. 134

The Situation of Cotton

p. 135

At home and abroad, this important staple and leading Eighth District product has lost markets which can apparently only be regained by more competitive pricing.

*This issue released
on November 18th*

Federal Reserve Bank

of St. Louis P. O. BOX 442 • ST. LOUIS 66, MISSOURI

THE EXPANDING ECONOMY

ECONOMIC CONDITIONS continued to improve through October and probably into November. Rising productive activity has brought improvement in employment and incomes in its wake. Prices of certain sensitive materials have risen lately but these increases have been offset by declines in other prices. Thus, prices on the whole have continued to display a welcome stability during the past several months.

Construction activity rose in September and October

Expenditures for new construction, after seasonal adjustment, were nearly 7 per cent larger in September than at the low point reached in May, and registered another gain from September to October. The total value of new construction in the first 10 months of this year was \$41.1 billion, 2 per cent more than in the same period of 1957. For the January-October period public construction was 6 per cent greater than in 1957, while private construction was about even. A drop in industrial building offset a rise in private residential construction between the two periods.

Indicators of future construction activity have grown substantially in the last several months, suggesting that the construction industry entered November with a large backlog of work underway. Construction contract awards were 26 per cent larger in September of this year than in September 1957, and private housing starts rose to a 1.2 million annual rate in the same month.

Construction activity has been strong in St. Louis, Louisville, Memphis, Evansville, and Little Rock as well. The dollar volume of contracts for residential building reported by F. W. Dodge Corporation during the first nine months of this year for these metropolitan areas combined was 16 per cent larger than in the same months of last year. The volume of non-residential building contracts was up 13 per cent. Despite the increase in dollar value of contracts, however, employment in contract construction in September was slightly smaller than a year earlier in these district metropolitan areas as a group.

Output of mines and factories was up in September and October

Industrial production of the nation reached 137 per cent of the 1947-49 average in September, up one point from the August rate, despite widespread work

stoppages in the automobile industry. An additional rise of output in October and November is indicated by growing production in steel, non-ferrous metals, and other industries for which weekly measures are available. The automobile industry is operating at a high rate in November in order to build up dealer's stocks of the new models.

St. Louis area production of automobiles and electrical machinery was reduced through much of October by labor disputes. Steel production in the St. Louis area, however, was more than 20 per cent greater in October than in August or September, and was scheduled at more than 93 per cent of capacity in early November. Elsewhere in the Eighth District, southern pine production was greater in September than in August. Hardwood output eased a little in September from the August rate but was about 5 per cent larger than in September 1957. District output of petroleum and coal rose in September and was about the same as a year earlier.

The rise in activity has reduced unemployment

Employment conditions improved in September and October. Manufacturing employment in the nation increased more than seasonally. Employment picked up at retail stores with the fall expansion in trade, and the reopening of schools increased State and local government employment. Unemployment in the nation declined by 600,000 between August and September, and by an additional 300,000 to 3.8 million between September and October, largely as the result of the increase of hiring in manufacturing plants.

Eighth District metropolitan areas shared in the employment gains, as manufacturing plants called back workers. However, work stoppages in several of them held down the gains (See Table). St. Louis area unemployment, according to a preliminary estimate, was 54,100 in October, down 20,300, or 28 per cent, from the high reached in March.

Nonagricultural Employment in Major Eighth District Areas
(in thousands)

	September 1957	April 1958	September 1958
Evansville	67.2	64.8	64.7
Little Rock	75.6	73.4	76.4
Louisville	250.2	235.5	239.5
Memphis	192.6	184.9	187.3
St. Louis	730.0	692.9	700.6
Total	1,315.6	1,251.5	1,268.5

Source: State Employment Security Divisions.

Personal income has reflected the gains in employment

Personal income rose by \$1.4 billion in September to a seasonally adjusted annual rate of \$357.5 billion. About half of the increase was in the form of a gain in wages and salaries stemming from the recent gains in employment and lengthening of the workweek. Transfer payments and the incomes of farm and business proprietors also rose. Between February, the recession low in personal income, and September income grew \$11 billion, or 3 per cent. The October employment gains added to wages and salaries for that month, and total personal income has probably continued to increase.

Prices have been stable on the average

Wholesale prices have remained stable for several months, despite the quickening of demands for many commodities. Ample supplies of most commodities and the existence of idle productive capacity in some lines have apparently moderated the price influence of increasing demand. In the week ended November 4 the wholesale price index stood at 118.7 per cent of the 1947-49 average, as compared to a high of 119.7 in March of this year, and a level of 118.1 in November 1957.

Prices of farm products and processed foods have declined since March and June, respectively, while prices of industrial commodities have held almost unchanged for more than a year. Among the industrial commodities, prices of petroleum products, steel scrap,

and lumber have eased in recent weeks, while prices of zinc and some other industrial materials have increased. Prices of some manufactured products, including small appliances and automobiles, have increased.

There was a small decline in the consumer price index in August, and the index remained unchanged from August to September at 123.7 per cent of the 1947-49 average. Declining food prices offset increases in prices of other goods and services in both months. In September 1957 the index stood at 121.1.

Consumers, businesses, and government have supported the recovery

From the table, it can be seen that the rise of \$14.2 billion in total gross national expenditures which took place between the first quarter of this year and the third quarter was provided primarily by an increase in consumer spending and a reduction in the rate at which businesses were liquidating inventories. Rising expenditures at all levels of government also contributed substantially to the increase in total expenditures.

If expenditures in the third quarter are compared with those of third quarter 1957 it is evident that consumer spending and government purchases have grown almost enough over the year to make up for the declines which took place in private investment and net foreign investment. The decline in net foreign investment reflects the fact that during the recession our sales of goods and services to other countries fell more than our purchases from them.

Change in Gross National Expenditures
Between Third Quarter 1957 and Third Quarter 1958
(Seasonally adjusted annual rates in billions of dollars)

	Third quarter 1957	First quarter 1958	Third ¹ quarter 1958	Changes in Expenditure		
				(Recession) III '57 to I '58	(Recovery) I '58 to III '58	(One year) III '57 to III '58
Personal Consumption Expenditures	288.3	286.2	292.0	— 2.1	+ 5.8	+ 3.7
Durable goods	40.4	36.3	36.5	— 4.1	+ .2	— 3.9
Nondurable goods	140.5	139.8	143.0	— .7	+ 3.2	+ 2.5
Services	107.4	110.1	112.5	+ 2.7	+ 2.4	+ 5.1
Gross Private Domestic Investment	66.7	49.6	54.5	—17.1	+ 4.9	—12.2
New residential nonfarm construction	16.9	17.1	17.9	+ .2	+ .8	+ 1.0
Other construction	19.7	19.2	18.4	— .5	— .8	— 1.3
Producers' durable equipment	28.0	22.9	22.3	— 5.1	— .6	— 5.7
Change in business inventories	2.2	— 9.5	— 4.0	—11.7	+ 5.5	— 6.2
Government purchases of goods and services	87.0	89.5	93.0	+ 2.5	+ 3.5	+ 6.0
National Security	46.9	45.6	46.5	— 1.3	+ .9	— .4
Other Federal Government (net)	4.0	5.3	6.5	+ 1.3	+ 1.2	+ 2.5
State and local	36.1	38.6	40.0	+ 2.5	+ 1.4	+ 3.9
Net foreign investment	3.6	.5	.5	— 3.1	—0—	— 3.1
Total Gross National Expenditure	445.6	425.8	440.0	—19.8	+14.2	— 5.6

Source: United States Department of Commerce, National Income Division.
President's Council of Economic Advisers.

¹Preliminary estimates for third quarter 1958 by President's Council of Economic Advisers.

Comparable data are, of course, not yet available for the current (fourth) quarter. However, the data on production and expenditures of various kinds available for October and early November suggest that total gross national product, or expenditures, will exceed the 1957 peak in this October-December quarter. A further reduction in the rate of business inventory liquidation, or a shift to inventory accumulation, should increase gross private investment expenditures. Consumer spending for nondurable goods and serv-

ices can be expected to continue to grow as personal income grows. The main uncertainty in regard to the rate of consumer spending is how the 1959 automobiles will be received. Consumer expenditures for automobiles and parts measured at seasonally adjusted annual rates were about \$3.5 billion smaller in the first half of 1958 than in the first half 1957. A return to the 1957 rate of auto buying, would make a significant difference in the total output of the economy in the remainder of this year.

THE FINANCIAL SITUATION STABILIZES

DESPITE a current Federal cash budget deficit rate of about \$10 billion per year and Treasury borrowing of over \$4 billion during October and early November, money and capital markets have shown remarkable stability. After rising rapidly during the summer and early fall, interest rates have been virtually unchanged since late September.

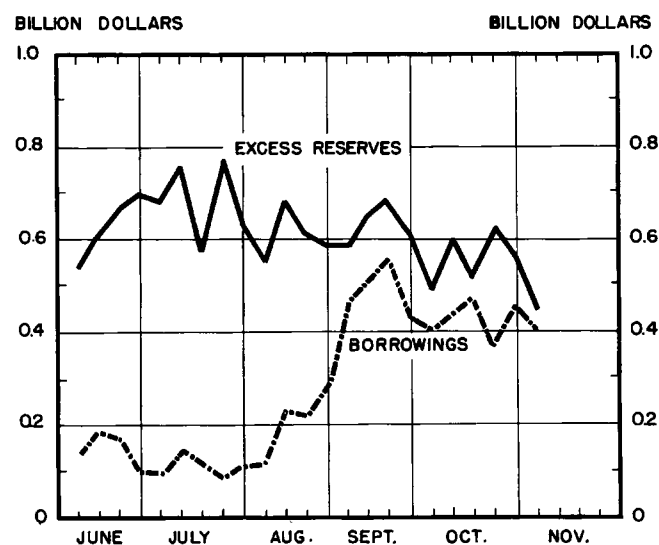
Yields on Treasury bills, which jumped from an average rate of less than 1.00 per cent in June to an average of 2.68 per cent in the final week of September, declined to 2.50 per cent in the week ended November 7. Interest rates on long-term Government bonds rose from an average of 3.19 per cent in June to nearly 3.80 per cent in the last week of September and fluctuated around this level during October and early November. Rates on corporate bonds have followed roughly the same pattern. Highest grade corporate issues, yielding 3.57 per cent in June, climbed to 4.12 per cent in the last week of September and were 4.11 per cent in the week ending November 7.

Banking

Reserve positions of banks changed relatively little during October. Borrowings of member banks from the Federal Reserve averaged about \$430 million in the month. This was somewhat less than during September, but up significantly from the \$250 million during August and less than \$150 million in each month from March through July of this year. Excess reserves of member banks averaged about \$575 million in October compared with a \$635 million average in the third quarter.

During October member bank reserves tended to be reduced by a seasonal movement of currency into circulation and by a net flow of gold out of the country. The Federal Reserve System added funds to bank reserves through purchases of securities in the open market. In the six weeks ended November 5, net pur-

Member Bank Excess Reserves and Borrowings



Weekly averages of daily figures.

Source for this and other banking charts:
Board of Governors of the Federal Reserve System

chases amounted to \$666 million, with funds being added as follows:

Week Ended		Net Amount Bought (+) or Sold (—)
October	1.....	\$+188 million
October	8.....	+178 million
October	15.....	+285 million
October	22.....	—282 million
October	29.....	+149 million
November	5.....	+148 million
Total 5 weeks.....		\$+666 million

During October loans and investments at weekly reporting banks increased about \$525 million. These banks increased their security portfolios over \$170 million, net purchases of the new Treasury notes and bills more than offsetting net sales of other issues. Loans to business concerns, although up, did not rise as much as is common at this period of the year.

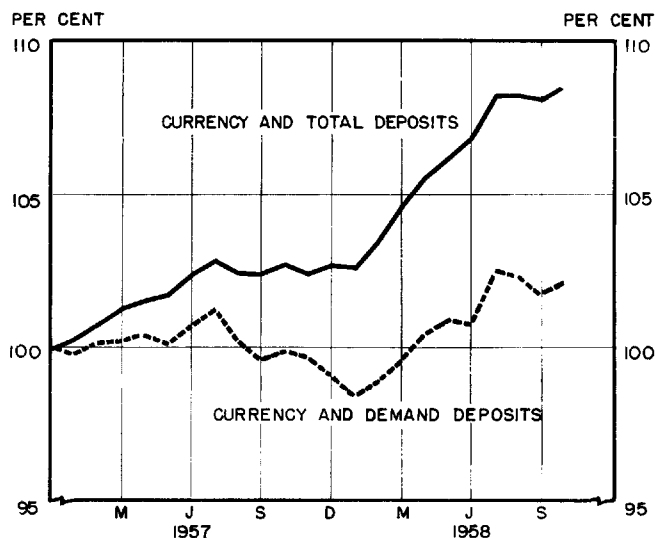
Money Supply

It is possible to draw the line between money and other liquid assets at different points. For some purposes it is useful to consider only currency, coin and demand deposits. A broader concept of money includes time deposits in commercial and mutual savings banks and in the postal savings system.

Preliminary estimates indicate that demand deposits (adjusted¹) and currency holdings of businesses and individuals were about 2 per cent higher at the end of October than a year earlier. Over the twelve months, currency and total deposits (time and demand) rose about 5 per cent. The growth in the money supply under either concept and adjusted for seasonal influences was rather sharp in the spring and early summer of this year, but during August and September demand deposits and currency contracted somewhat and the rate of growth in time deposits slackened. Early indications are that the private money supply rose more than seasonally in October, a less than normal expansion in bank credit and an outflow of gold being more than offset by a shift of balances from the United States Treasury to individuals and businesses. Last spring when total demands for goods and services were falling a rise in the money supply was welcome as a stimulus to recovery.

A major factor in the growth of the money supply in the twelve months through October was a roughly \$10 billion increase in bank holdings of Government securities. Bank credit was also expanded through net purchases of other securities and an increase in loans.

Money Supply Index
December 1956=100
(Seasonally Adjusted)



Source: Index based on deposit and currency data through September from the Board of Governors of the Federal Reserve System, computed by the Federal Reserve Bank of St. Louis. October data estimated by the Federal Reserve Bank of St. Louis.

¹ Demand deposits other than interbank and United States Government, less cash items in the process of collection.

Rate of use of the money supply has been increasing in recent months. The seasonally adjusted annual rate of turnover of demand deposits at banks outside the seven leading financial centers reached 23.3 times in September compared with a 22.6 average in the February-May period this year and the 23.7 times attained in the third quarter of 1957. Indications are that the October rate was also high.

Treasury Financing

Preliminary figures for the first quarter of the fiscal year (July through September 1958) show Federal cash receipts of \$18.4 billion and cash expenditures of \$23.5 billion. The deficit of \$5.1 billion in the quarter was substantially higher than is usual for this period; in the corresponding three months of last year the deficit amounted to \$2.3 billion. The greater deficit reflected both a moderate (\$0.5 billion) decline in receipts and an expansion (\$2.3 billion) in outlays. A large portion of the increased spending was for anti-recession programs, such as the special outlays for purchasing VA and FHA mortgages, regular and supplemental unemployment benefit payments, and some minor public works increases. Also, CCC disbursements for wheat, and to a lesser extent for corn, were higher this year than last.

The \$5.1 billion deficit in the July to September quarter was financed primarily (\$4.7 billion) out of the Treasury's cash balances which had been built up in June. The Treasury engaged in net cash borrowings of \$0.4 billion in the period. The budget deficit may have contributed to the speed of recovery.

Estimates for October indicate that the Federal cash deficit may have been about \$4.5 billion for the month. In October Treasury outlays typically outpace receipts, but a monthly deficit of this magnitude is unusual. Cash income was roughly \$200 million lower than in the corresponding month last year, with receipts from individual taxes, corporate taxes, and other sources each down. Expenditures were about \$800 million higher, with greater defense outlays, trust fund disbursements, and costs resulting from the recession.

The Treasury increased its outstanding debt substantially during October in order to finance the deficit. Early in the month it sold \$1.2 billion of 3½ per cent 13-month Treasury notes and \$2.7 billion of 7-month special Treasury bills, yielding about 3¼ per cent. Also, the Treasury continued to increase each of its regular weekly bill allotments by roughly \$100 million.

Normally, in the last two months of the calendar year the Federal Government experiences a further

cash deficit. In November and December of 1957, expenditures were \$0.8 billion higher than receipts for the two months combined. Most analysts expect the cash deficit will be considerably greater in the final two months this year, perhaps \$2 or \$3 billion. To obtain funds to meet this deficit, and one expected early next year until income tax receipts begin flowing in large volume, the Treasury on November 7 offered about \$3 billion of 214-day tax anticipation bills to be dated November 20. Probably the Treasury will come into the market again later this year or early next year. Also, the Treasury must refund \$9.8 billion of certificates which mature December 1 and \$2.4 billion of bonds which mature December 15.

The Treasury must raise the new funds and conduct

the refundings in a market where aggregate demands for funds are large relative to the current flow of saving. With demands for the resources of the economy rapidly increasing, care must be used to finance the Federal debt in a way which minimizes inflationary pressures.

To some degree the deficit of the first half of the fiscal year is being matched by funds being accumulated to make tax payments later in the fiscal year. Also, banks or other financial institutions have funds to invest out of the repayment of advances which were made to make tax payments last fiscal year. But such sources of funds can take care of only a portion of this extraordinarily large cash deficit of the first half of this fiscal year.

Interest Rates in the Recovery

JUDGED by the criterion of increasing production with reasonably stable prices, the economy has performed in an exemplary fashion in recent months, steering a fair course between stagnant or declining production and general and inordinate inflationary price increases.

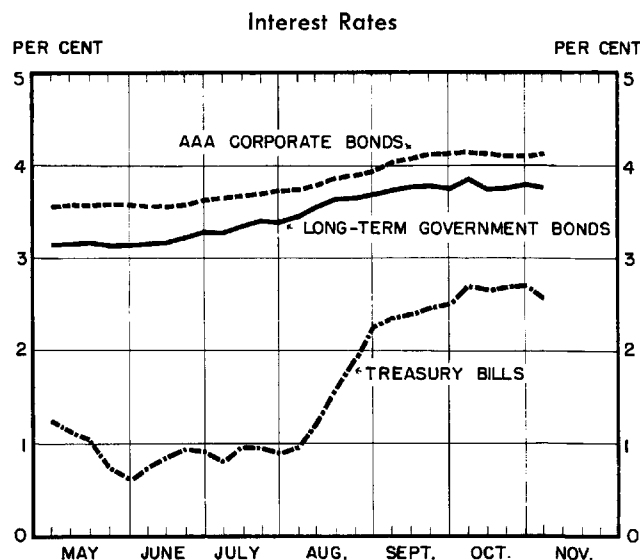
As ever, there is great interest in peering toward the future to see whether an even course will be maintained or whether the economy seems likely to proceed into one of those dangers which are ever a possibility. Much attention was given during the summer to the possibility that excessive total demand might develop in the economy, leading in the direction of inflation. Fears were expressed that a Federal Government deficit, plus state and local construction, plus inventory accumulation, plus other business investment, plus consumer demand, would soon exceed the current effective capacity of the economy. At the same time there has been concern expressed, and sometimes by the same people, over any developments or policies which might limit total demand, particularly investment demand.

It may be helpful to an understanding of this anomaly to recognize that an appropriate degree of restraint is the necessary and desirable antidote to inflation. Limitation of deficit spending plus outlays for capital formation to the amount which the public is willing to save under conditions of prosperity and stable prices is the key to avoidance of inflation. That some construction or other investment may be restricted by limited availability of funds is not something to be feared or condemned, but to be welcomed as the necessary means of avoiding chronic inflation in a world in which the factors of production are not unlimited.

If total investment or capital creation is to be restricted in time of boom, and restricted it is by one means or other, there are two basic means for determining how much of each kind of capital goods shall be created. Government can decide what shall be constructed or the free market can do it. But we do not have a capital allocation committee in this country. The allocation of funds is left to the decisions of private borrowers and lenders in the money markets and the capital markets and to private financial institutions such as insurance companies and banks.

Under this system, when total demand is high the prices paid for available funds, interest rates, are high. When total demand is low, the prices paid for saving or capital funds are low. It is difficult to see what

(Continued on page 139)



THE SITUATION OF COTTON

IN the cotton harvesting season now drawing to a close, about 12 million bales will have been picked, the second smallest crop since 1951 and about 10 per cent under the 1948-1957 average. Acreage harvested is the smallest since 1876 and less than one-half the area used for cotton production in 1949.

In the past decade cotton production has declined relative to other segments of the nation's economy in all major producing areas except the West.¹ Estimated 1958 production in the Southeast is less than half the 1948-1957 average for the area. Production in the Delta states is 75 per cent of the 1948-1957 average, the Southwest about average, and the West about 15 per cent above the 1948-1957 average.

Some of the reasons why cotton production in major producing areas and the nation has not kept pace with postwar growth in the rest of the economy are discussed in this article. Traditional producing areas of the Southeast, Delta, and Southwest have lost part of the market to the West. Synthetic fibers have replaced a substantial quantity of cotton on the domestic market. Expanded cotton and synthetic

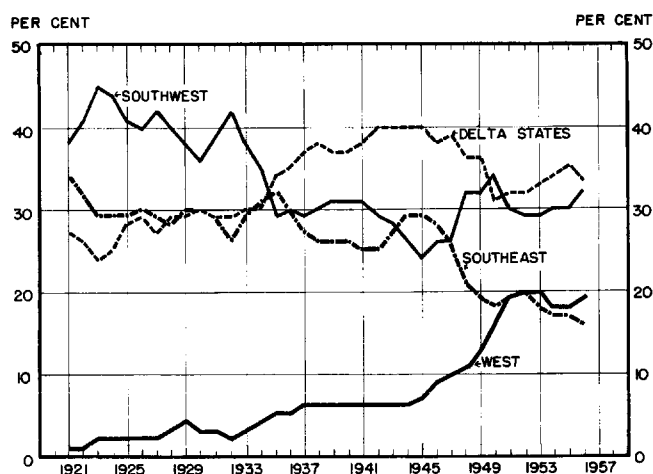
fiber production in other countries have been factors in the export market for American cotton.

Throughout the 19th century and well into the 20th the "South," consisting of the Southeast, the Delta States and the Southwest, was the cotton producing area in the nation. An increasing raw material demand from the world's textile industry provided the basis for a long period of expanding production. Exports and domestic mill consumption continued a generally upward trend until the early depression years of the 1930 decade when demand declined. In the mid-thirties exports began to decline substantially. Domestic consumption picked up again during the early war years, but in the postwar period failed to share in the rapid growth of other segments of the economy.

Concurrent with the declining export market and a leveling off in domestic mill consumption was the development of cotton production in the West. In 1922 approximately 99 per cent of domestic production was in the traditional producing regions of the South. As late as 1944, 95 per cent of the crop was produced in this region with the remaining 5 per cent produced in the West, primarily Arizona and California. Production in the West expanded rapidly in the period between the end of World War II and the reinstatement of acreage restrictions in 1950. After controls were reestablished production continued to increase in the West, but at a slower rate. In 1957 the West produced 23 per cent of the nation's cotton crop, and California alone produced 14 per cent, or more than any other state except Texas.

While cotton production was expanding in the West it was declining in the Southeastern States. In 1920 the Southeast produced 35 per cent of the national total, with South Carolina and Georgia ranking second and third, respectively, behind the perennial number-one producer, Texas. But by 1957 the Southeast produced only 14 per cent of the crop, and Southeastern production in 1958 is expected to be only 11 per cent of the national total. South Carolina and Georgia which were in second and third places in 1920 were in twelfth and ninth places, respectively, in 1957. Total production in the two states dropped from an average of 1.9 million bales in the three years 1920-1922 inclusive to an average of 1.0 million bales

Percentage Distribution of Cotton Production by Regions
1920 - 1957
3-year Moving Average



Source for this and other cotton charts:
United States Department of Agriculture, *Statistics on Cotton and Related Data*, Statistical Bulletin No. 99, June 1951, and supplements.

¹ States included are: Southeast: Virginia, North Carolina, South Carolina, Georgia, Florida and Alabama; Delta States: Missouri, Arkansas, Tennessee, Mississippi, Louisiana, Illinois and Kentucky; Southwest: Texas, Oklahoma and Kansas, West: California, Arizona, New Mexico and Nevada.

in the years 1955-1957, a decline of about 45 per cent, whereas the nation's crop increased 25 per cent, or from 10.4 million to 13 million bales.

Much smaller changes occurred in the proportion of the nation's cotton produced in the Delta and the Southwest. Production in the Delta gained relative to that of the nation from the early twenties until World War II but has declined somewhat since that time. The area's share of national production increased from 26 per cent in the 1920-22 period to 37 per cent in 1939-41 and declined to 33.3 per cent in 1955-57 (See Table).

**Average Annual Cotton Production in
Major Delta Producing States for Selected Periods**

	Thousands of Bales			Per Cent of United States Total		
	1920-22	1939-41	1955-57	1920-22	1939-41	1955-57
Arkansas...	1,008	1,448	1,357	9.6	12.4	10.3
Mississippi...	899	1,419	1,571	8.7	12.2	12.1
Missouri...	99	434	346	1.0	3.7	2.7
Tennessee...	339	519	530	3.3	4.4	4.1
Louisiana...	337	505	528	3.2	4.3	4.1
Total.....	2,682	4,325	4,332	25.8	37.0	33.3

Source for this and other tables:
United States Department of Agriculture, *Statistics on Cotton and Related Data*, Statistical Bulletin No. 99, June 1951, and supplements.

All major Delta states followed the area trend. However, the relative increases were greatest in Mississippi and Missouri from the early twenties until the 1939-41 period, and Mississippi has had the smallest relative decline since 1939-41.

Soil conditions, technology and sociological conditions have all been factors in the national redistribution of cotton production. The large irrigated farms of the West were well adapted to mechanization. Higher yields per acre can be obtained with irrigation in the West than without irrigation in the more humid Southeast. Furthermore, many farms in the Southeast have been too small either to irrigate or to mechanize economically. In addition the cumulative effects of soil erosion in the Southeast began to have a telling effect on crop production in the thirties.

The Delta states unlike the Southeast had large level farm units well suited to mechanization. Also, the rich Delta soils were generally maintained in a high state of fertility. Cotton could be produced in the Delta with large amounts of labor as long as great quantities of labor were available, and as mechanization became technically and economically practicable the land was well adapted to the change.

The Southwest was generally similar to the Delta, but with slightly larger farms on the average and somewhat lower yields per acre. A large percentage of the farm units in the area were able to mechanize and stay in cotton production.

Competition From Synthetic Fibers

In addition to competition from other producing areas in the United States the course of cotton production in the Delta depends upon other national and international factors. Following World War I cotton producers began to experience increasing competition from substitutes for cotton as well as from cotton grown in other countries. There was a tendency for substitutes to replace cotton in many of its important uses. First came the increased use of paper and jute in the bag, twine, and upholstery industries. Later, when synthetic fibers came into general use, serious competition developed for the cotton market in a wide variety of products. Clothing, tire cord, bags, upholstery, carpet and numerous other products were successfully made from synthetic fibers.

After World War II the production of synthetic fibers developed more rapidly in other countries than in the United States. Germany, Italy, France, Japan, and the United Kingdom, all of which have been major importers of cotton, have become producers of rayon and acetate fibers. Wood pulp, the principal basic material from which synthetic fibers are made, is generally available in these countries at a cost favorable to the substitution of wood fibers for cotton. Also, most of these countries in recent years have had a shortage of foreign exchange with which to purchase cotton but have had the materials and the technical skills in their well developed chemical industries to produce substitutes.

Output of rayon abroad rose from the equivalent to 51 thousand bales of cotton in 1920 to the equivalent of 4.4 million bales of cotton in 1940. Following World War II, production of synthetic fibers in cotton importing countries began to rise again, and reached the equivalent of more than 10 million bales of cotton.

Although the growth of man-made fiber production has been less in the United States than in the rest of the world, large enough inroads have been made in the traditional domestic cotton market to have a major impact on cotton consumption. The demand for cotton for industrial purposes has proved to be quite sensitive to price changes, in relation to prices of substitutes for cotton. Cotton use has not only failed to expand in the postwar years with the rest of the economy, but has actually lost ground in many of its major uses such as tire cord.

In clothing items, where the cost of raw materials is only a small part of retail price, substitution of synthetic fibers for cotton has been slower. However, in the last few years the blending of synthetic fibers with cotton has become a common practice in making many types of clothing.

Consumption of man-made fibers in the United States has increased steadily since World War I. Synthetic fiber use climbed from less than nine million pounds or the equivalent of 20,000 bales of cotton in 1920 to 1.7 billion pounds in 1957, the equivalent of 5.7 million bales of cotton.

Domestic consumption of American cotton reached a peak of 11.2 million bales in 1941 and was maintained at a generally high rate into the early 1950's. But, in 1956 consumption at United States mills declined to 8.5 million bales, the lowest in recent years, and a further decline to 7.9 million bales occurred in 1957.

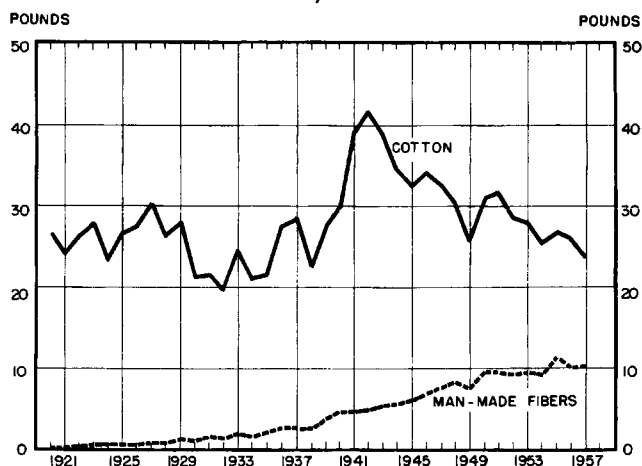
The proportion of cotton in the total amount of fibers used in the nation declined from 88.3 per cent in 1920 to 65.7 per cent in 1957 (See Table). During this period the percentage of synthetic fibers increased from 0.3 in 1920 to 28.1 in 1957. Other fibers, chiefly wool and flax, constitute the remainder.

Cotton and Man-Made Fiber Consumption in the United States

	Cotton		Man-Made Fibers	
	Total (mil. lb.)	Per cent of all fibers	Total (mil. lb.)	Per cent of all fibers
1920.....	2,823	88.3	9	0.3
1930.....	2,617	84.5	119	3.9
1940.....	3,959	80.6	487	9.9
1950.....	4,683	68.5	1,492	21.9
1957.....	4,064	65.7	1,739	28.1

Per capita consumption of cotton increased in the 1920 and 1930 decades despite increasing competition from synthetic fibers. But the increased use of synthetic fibers in the 1940 and 1950 decades began to have a measurable effect on cotton consumption. Cotton consumption per capita rose from 27 pounds in 1920 to 30 pounds in 1927, declined in the early depression years and reached a peak of 42 pounds in 1942. The decline since 1942 has been fairly steady,

Per Capita Consumption of Cotton and Man-made Fibers United States, 1920 - 1957



reaching a low of 24 pounds in 1957. In contrast, per capita use of synthetic fibers gained steadily throughout the period.

Exports

Declining exports have been a major factor inhibiting the expansion of cotton production in America. It became evident in the late twenties that a change was occurring in the relative position of American cotton in the world market as cotton and synthetic fiber production abroad became increasingly important. Nevertheless, the big break in exports did not come until after legislation to raise the price of American Cotton was initiated in the mid-thirties.

Cotton exports in 1927 reached a peak of 10.9 million bales, or approximately two-thirds of total domestic production in the previous year.² By 1939 exports had declined to 3.3 million bales and continued at a very low level throughout World War II. After 1945, exports picked up, in part because of various foreign aid programs. Nevertheless, cotton shipments did not approach predepression levels until 1957 when 7.6 million bales were shipped under the greatly expanded export aid program. Even with this program, under which prices of cotton sold abroad ranged six to seven cents per pound below domestic prices, total exports declined to 5.7 million bales in 1958, and the Department of Agriculture's estimate of exports for 1959 total is only 4.5 million bales.

The United States was the chief supplier of cotton to the world throughout the 19th century. In the nine years 1891 to 1899, inclusive, average annual production in all other countries excluding China was only 4 million bales, or less than one-half of production in the United States. Production in the rest of the world increased rapidly following World War I, averaging 9.4 million bales in the five years 1920 to 1924 or about four-fifths the United States average. Production in other countries began to exceed United States production in the thirties as cotton acreage was restricted in this country by various control programs. During World War II United States production declined relatively less than that of other countries, but after the war cotton output outside the United States increased rapidly. In 1957 production in the rest of the world was estimated at 28.8 million bales, more than two-and-one-half times as much as was produced in the United States.

Although no other one nation has approached the United States in volume of cotton production, seven other countries produced more than a million bales in

² Export year ending July 31.

1957 (See Table). Three countries produced 500 thousand to 1 million bales, and numerous smaller countries produced in excess of 100,000 bales. Greatest production in recent years has occurred in Mexico, Brazil, Egypt, India, Pakistan, Russia, and China.

Cotton Production and Exports from Major Producing Countries of the World, 1920 and 1956¹
(Thousands of 478-lb. bales)

	Production		Exports	
	1920	1956	1920	1956
Mexico	—	1,800	75	1,310
Brazil	499	1,350	37	380
Egypt	1,251	1,350	678	924
India	3,013	4,050	1,773	252
Pakistan	"	1,400	"	506
Russia	58	6,200	—	—
China (including Manchuria)	2,406	6,000 ²	105	—
Other Nations	694	5,930	356	4,706
Total Foreign Countries	7,921	28,080	3,024	8,078
United States	13,429	13,310	6,348	7,917

¹ Year beginning August 1.

² Included in India total prior to 1945.

³ Estimated.

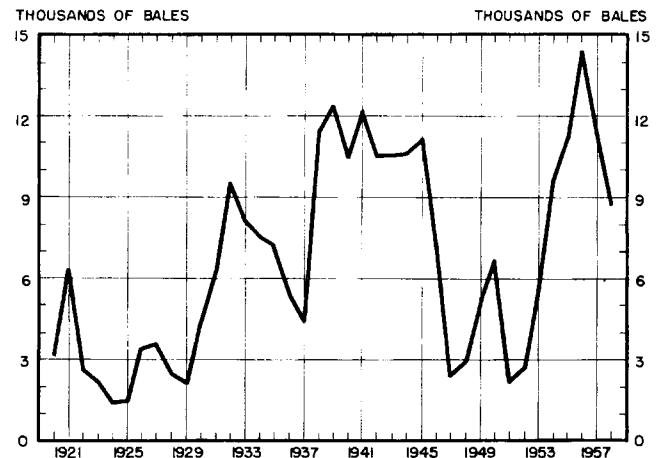
Exports from most other cotton-producing countries have moved up as production increased. In 1920, cotton exports of other countries were approximately three million bales, or about 50 per cent of United States exports. In 1956, such exports were 8.1 million bales, or more than United States shipments abroad, despite the greatly expanded United States export program which succeeded in tripling exports from 1955 levels. Increased production in some of the major producing nations has gone primarily into domestic consumption rather than into exports. India, for example, exported more than 1.7 million bales out of a total production of 3 million bales in 1920 but in 1956 exported only 252 thousand bales, despite a substantial increase in production. Increased production in China has also had little impact on cotton trade between nations.

Public Policy With Respect To Cotton

Cotton has been shielded from its changed economic environment much of the past quarter century. Acreage control and price support programs in the thirties protected producers from the impact of cotton's changed status. Most farmers were able, through better methods of cultivation, soil practices and increased fertilization, to increase yields per acre and maintain production at relatively high levels. That part of production which failed to clear the market at prices established under support programs was taken by the Commodity Credit Corporation through loans and the accumulation of stocks. The Government was, in effect, the residual purchaser at the supported price level.

Total carryover (primarily stocks held by the Commodity Credit Corporation) reached almost 13 million bales in 1939 despite acreage controls and continued in excess of 10 million bales throughout the war years after acreage controls were removed. Reduced production, high domestic consumption, and larger exports under foreign aid programs during the reconstruction period immediately following the war pulled supplies down in 1947. A short build-up in carryover began in 1949 which terminated with the increased domestic consumption and exports during the Korean hostilities. An uptrend in carryover started again in 1953 with the government as a heavy purchaser. Carryover stocks rose to 14.5 million bales in 1956, but subsequently have been somewhat reduced by an export subsidy program coupled with rigid acreage controls.

**Carryover of United States Cotton
1920 - 1958**



Programs designed to protect the incomes of cotton producers in the United States have also aided cotton producers in other countries and the manufacturers of synthetic fibers. While the program of government loans and purchases prior to 1956 maintained a favorable price for American producers, it was also effective in supporting the price received by producers of cotton in other countries. World export supplies of cotton were restricted and international prices supported as American cotton acreage was restricted and supplies stockpiled. United States price supports were thus an influence tending to increase cotton production in other countries. This situation continued until 1956 when the Commodity Credit Corporation was authorized to sell cotton for export at 6 to 7 cents per pound below domestic prices.

The problem of price competition with synthetic fibers continues. In the early 1930's the equivalent price per pound of rayon fiber was double that of cotton. Cotton prices went ahead of rayon in the late

1940's and have been approximately 25 per cent higher since 1950. While cotton prices have more than tripled since the late 1930's, the price of rayon fiber has risen only about 20 per cent. No solution has been found for meeting this internal competition under the price support system.

The future of cotton in the Delta area hinges to a great extent on the willingness and ability of producers to sell at competitive prices. The continued growth of man-made fiber production, both domestic and world-wide, plus cotton production in other countries, indicates that adjustments in the price of cotton will be necessary if it is to become a growth industry again. The disparate rate of price changes in the rayon and cotton industries has doubtless been a major factor in cotton's relative decline on the domestic market.

Evidence indicates that producers are making prog-

ress toward lower cost cotton. Costs are closely related to the degree of mechanization, and recent data show a larger per cent of Delta farms mechanized. Declining costs reflected in lower prices offer a possibility for the industry. Chemical and mechanical developments in cultivating and harvesting have increased labor efficiency. Improved fertilization, irrigation, improved varieties of seed, and better soil conserving and cultural practices have increased yields per acre and output per manhour. Production per manhour did not change substantially from 1910 to 1935 but more than doubled between 1935 and 1957.

The growth in population and the rising standard of living throughout the world are on the side of cotton's success, but greater strength in the fiber markets through a competitive price is necessary for cotton to retain its position in the nation's economy.

Interest Rates in the Recovery (Continued from page 134)

alternative there could be to this fluctuation of interest rates other than Government rationing of the limited investment funds of the economy.

During the summer and early fall interest rates rose markedly. In October of this year they were not on the whole so high as a year earlier but they were much higher than at the bottom of the recession last spring. These higher interest rates are a manifestation of the fact that available investment funds are not unlimited. When total demand is less than that which is compatible with the amount of available productive capacity, it is incumbent upon the Federal Reserve System to make reserves available to the banks so that they can expand their loans and investments more rapidly. When total demand tends to be excessive, it is the duty of the Federal Reserve so to limit bank reserves that their outstanding loans and investments will increase at a lesser rate. When bank loans and investments are limited, interest rates tend to rise. Such increases are necessary in order to balance investment demands with the resources available for investment without inflationary price rises.

As business conditions have improved and short-term market interest rates have risen rapidly during the summer and fall of 1958, the Federal Reserve System has faced the problem of determining the discount rates, the interest rates charged member banks on the funds which they borrow from the Federal Reserve Banks. Discount rates are almost always somewhat above the short-term rates on the highest grade paper. In early 1955 when the Treasury bill

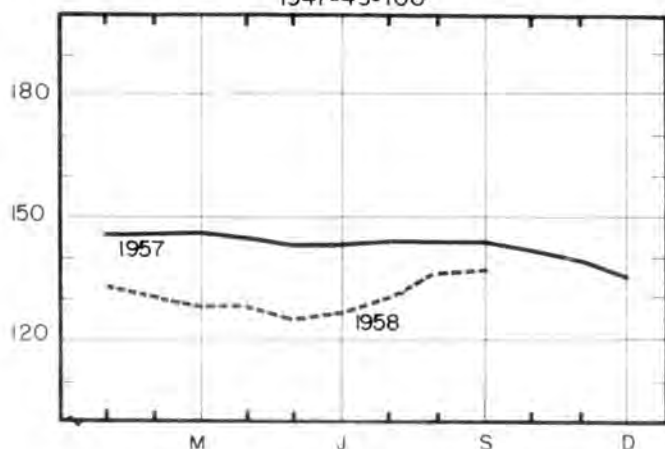
rate rose as high as the discount rate the latter was increased and throughout the period 1955-56 the discount rate never lagged behind the market rates. Over the past 45 years there has been no considerable period of time when the discount rate has been substantially below the market rate for the highest grade of short-term credit.

When the Federal Reserve Bank of San Francisco determined on August 14 to increase its rediscount rate from 1.75 per cent to 2.00 per cent, the bill rate had risen during the preceding two weeks from about 0.90 per cent to 1.61 per cent. On August 25 the bill rose substantially above 2.00 per cent and subsequently continued to rise. By the time the last of the twelve Federal Reserve Banks increased its rate from 1.75 per cent to 2.00 per cent on September 24 the market rate had risen to 2.50 per cent.

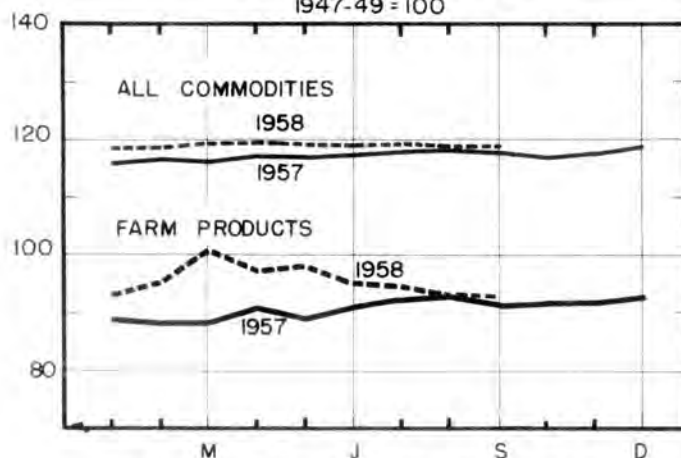
On October 23 the Federal Reserve Board approved increases in rediscount rates from 2.00 to 2.50 per cent at the St. Louis, Philadelphia, Richmond, Minneapolis, and Dallas Banks effective October 24. At that time the short-term rate was about 2.75 per cent or a quarter of a percentage point above the new rediscount rate. By November 6 all twelve of the Federal Reserve Banks had raised their discount rates to 2.50 per cent. The bill rate since October 24 has reacted downward and has fallen in line with the rediscount rates for the first time in many weeks. Following the very rapid rise in August and a somewhat more moderate increase in September, interest rates since the first of October have been quite stable.

Selected Current Business Indicators

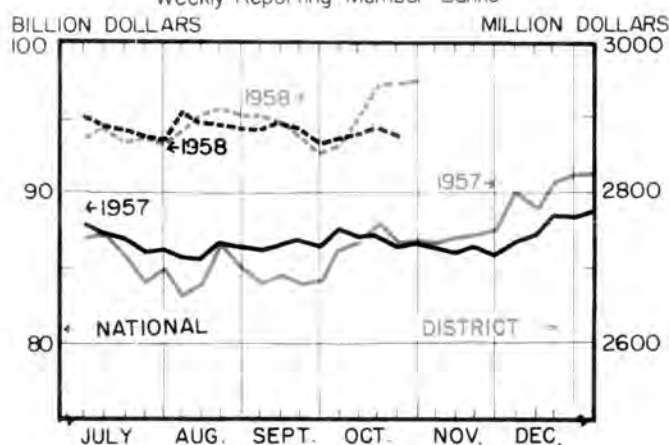
TOTAL INDUSTRIAL PRODUCTION
1947-49=100



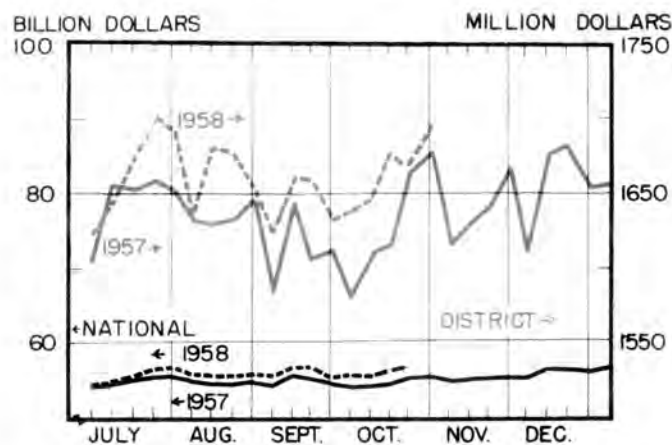
WHOLESALE PRICES
1947-49=100



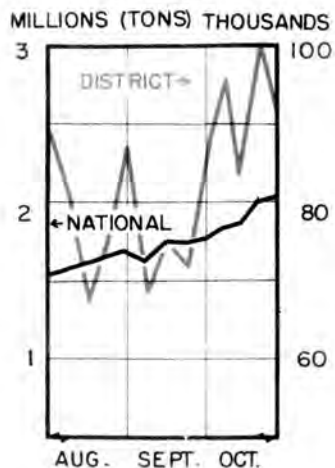
TOTAL LOANS AND INVESTMENTS
Weekly Reporting Member Banks



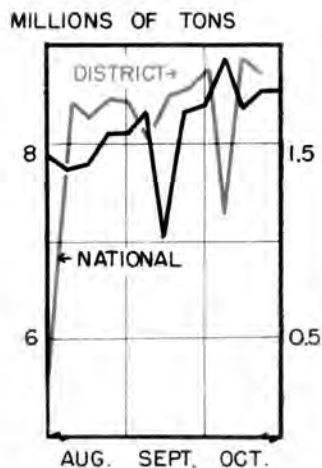
DEMAND DEPOSITS ADJUSTED



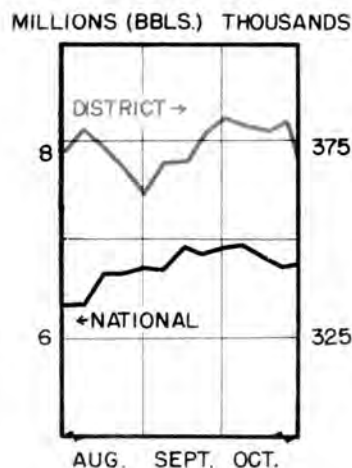
STEEL



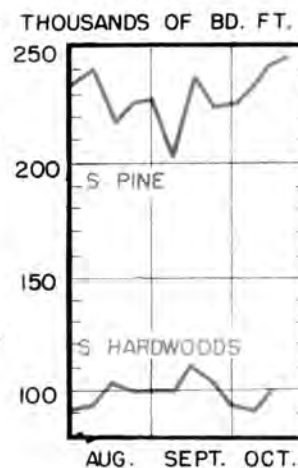
COAL



PETROLEUM



LUMBER



SOURCES: Industrial Production: Board of Governors. Wholesale Prices: Bureau of Labor Statistics. Loans and Investments: Board of Governors and FRB St. Louis. Does not include inter-bank loans. Demand Deposits: Board of Governors and FRB St. Louis. Coal: Bureau of Mines. Lumber: Southern Pine Assn., Southern Hardwood Assn. Petroleum: Oil and Gas Journal. Steel: American Iron & Steel Institute and FRB of St. Louis.