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The Eighth District's Paper Dollars

By and large, dollars are not easily come by in the Eighth Federal Reserve District. This Review has pointed out from time to time that per capita income in this region runs substantially below the national average. The district's major economic problem is to find means of increasing the average number of dollars which go to its people.

One way of accomplishing this objective is to build up industry in the district—particularly industry that can use the district's basic resources as raw materials. And one of the region's major resources is its forests. Here, as wood is processed into a variety of forms for final use, dollars can almost literally be grown and then multiplied into other dollars.

Paper dollars for the district come from an industry that uses wood as a raw material. The paper and allied products industry (as it is known in the Census of Manufactures) represents a substantial—but not a major—economic activity in the district. It offers possibilities for expansion through (1) increased use of pulpwood which would directly aid the tree grower, and (2) more processing plants to use the basic product—wood pulp—and the intermediate products—paper and paperboard.

More than three-quarters of a century ago trees were converted into wood pulp on a commercial basis for the first time in the United States. The installation of the first wood-grinding equipment at Curtisville, Massachusetts in 1867 marked the beginning of the nation's modern paper and allied products industry. A person living at that time would have had difficulty foreseeing the extent to which a later, more highly developed industrial economy would become dependent upon this proc-

ess. He could not have envisaged the wide range of products that it would make possible.

It also is unlikely that in 1867 anyone anticipated how much timber would be needed today to supply this industry, which is really a double one: first, pulp mills turn wood into wood pulp, and then other plants manufacture the pulp into paper and a variety of other products. Today the paper and allied products industry is one of the principal markets for timber. It accounts for about 11 per cent of the total volume of commodity drain on the commercial forests of the country. Last year some 21 million cords of pulpwood were consumed in the domestic pulp industry. Since 1939 consumption has almost doubled, and there are estimates that 50 years from now requirements will total 40 million cords annually.

Whether or not the industry a half century hence will consume double the present quantity of wood used, there is little doubt that the long range trend is toward a considerably higher level of timber requirements than that of even the postwar peak years. This trend is of particular importance to those geographical regions with (a) large forest areas at the present time and (b) climatic and other natural conditions conducive to a rapid reproduction of timber that is suitable to the pulping process.

THE PAPER AND ALLIED PRODUCTS INDUSTRY—WHAT IT IS

The modern paper-making industry came into existence in this country when the process of converting trees into pulp was first put on a commercial basis. Today the industry is a great deal more complex than it was in 1867. At that time the pulping process had but one end-product—paper. Now woodpulp is used not only in the production of

paper but is transformed into textiles, chemicals and plastics as well. The industry has also grown more complicated since the development of a host of new uses for paper. Originally the end-use of paper was to provide a means of recording the written or printed word. Today, paper and paperboard are manufactured into hundreds of products used in the home, in construction, trade, transportation, and throughout industry generally.

As classified by the Census of Manufactures, the paper and allied products industry has three major divisions: pulp mills, paper and paperboard mills, and plants processing paper and board into other products. In 1947, the total industry had 4,100 manufacturing establishments, employing 450,000 workers. Of 19 specific major industry groups it ranked eleventh in terms of value added by manufacture and thirteenth in terms of production workers employed. Its shipments totaled \$7.1 billion in value, and it spent \$4.2 billion for materials, fuel, electricity and contract work.

The table shows the detail for the three major segments of the industry. Pulp mills with large capital investment requirements are relatively few in number but in general are large-scale enterprises. Paper and board mills also are fairly large-scale establishments. The great bulk of the number of plants in the industry are engaged in converting paper and board into thousands of products.

**THE PAPER AND ALLIED PRODUCTS INDUSTRY
IN THE UNITED STATES IN 1947**

	Pulp-Mills	Paper and Board	Paper and Board Products
Number of establishments	226	665	3,212
Total employees (000)	50	148	252
Total salaries and wages (millions).....	\$148	\$462	\$671
Production and related workers (000).....	45	129	215
Man-hours—production workers (millions)	100	298	454
Wages (millions)	\$127	\$382	\$502
Value of shipments (millions)	\$940	\$2,812	\$3,300
Value added by manufacture (millions).....	\$416	\$1,050	\$1,409
Expenditures for new plant and equipment (millions)	\$86	\$205	\$112
Value of shipments per production worker..	\$2,100	\$2,200	\$1,500
Value of shipments per man-hour.....	\$9.40	\$9.44	\$7.27
Value added per production worker.....	\$9.24	\$8.14	\$6.55
Value added per man-hour.....	\$4.16	\$3.52	\$3.10
Capital expenditures per production worker	\$1,910	\$1,590	\$520

Source: Census of Manufactures, 1947, preliminary reports. Last five items calculated from basic data.

Pulp Mills.—Timber production and marketing is directly related to the paper and allied products industry at the point where trees are converted into wood pulp. This pulping stage is the initial step in the manufacturing process. In 1947 there were 226 pulp mills in the United States. These mills employed approximately 12 per cent of the production workers in the paper and allied products industry that year, and shipments were valued at \$940 million.

Last year the domestic wood pulp industry reached an all-time peak of production. It turned out 12.9 million tons of pulp; in doing so it consumed more than 21 million cords of wood. Wood may be reduced to pulp in four ways—by the sulphate or Kraft process; the sulphite method; the soda process; and the groundwood method. The essential manufacturing process is similar for all three chemical processes, the principal variant being the chemical solution used. About 47 per cent of the wood pulp manufactured last year was made by the sulphate or Kraft process. The increased use of this process is of particular significance to the South and to this district, as will be pointed out in detail later. Sulphite pulp tonnage in 1947 represented 22 per cent of the total, while output of soda pulp amounted to only 4 per cent of all wood pulp tonnage. 73 per cent of all wood pulp produced last year was thus produced chemically. Of the remainder, 17 per cent was reduced mechanically (by a grinding process) and 10 per cent (also primarily in the South) by miscellaneous means—i.e., semi-chemically reduced, defibrated or exploded.

Paper and Board.—After pulpwood is turned into wood pulp, wood pulp is turned into paper and paperboard. In 1947 paper and board plants employed roughly one-third of all the production workers, and shipped 40 per cent of the total dollar volume of shipments in the paper and allied products industry. Last year the industry produced 11.2 million tons of paper and 10.9 million tons of paperboard.

For the past ten years tonnage has been divided about equally between paper and paperboard; paper output has been just slightly higher except during the war period. The output of board has increased considerably faster than that of paper in the past 30 years, however. From the early 1920's, when board amounted to roughly one-third of total tonnage, it has climbed to its present, relatively equal, position.

Paper production can be divided into ten major classes. The largest tonnage produced is in coarse paper, which in 1948 (as generally for the past ten years) accounted for 28 per cent of all paper production. About two-thirds of the coarse paper output is kraft paper—wrapping, bag, shipping sack, and converting paper. Book paper is second largest in volume, although it dropped slightly during the period of the war.

Building and insulating paper have ranked third in importance during the past two years after a sharp increase in production during the war years.

Ten per cent of the nation's paper output is in fine paper (largely writing paper). And the rest of the total paper tonnage includes sanitary paper, newsprint and groundwood paper, special industrial paper, tissue paper, and absorbent paper.

About 11 million tons of paperboard were produced last year. Eighty per cent of the total was in three types—container board, 47 per cent; folding boxboard, 20 per cent; and building board, 13 per cent. Of the three, only building board has increased in total output since 1940; the other two have declined. The remaining 20 per cent is divided among set-up boxboard, wet machine board and cardboard, and "other board".

Paper and Board Products—The average consumer comes in contact with the industry principally through using paper and board products. These have come into such widespread use and are such an integral part of our life that it has been said that a modern nation's civilization can be measured by its consumption of paper products. Such a criterion would establish the United States as the most civilized of all countries. Last year in the United States every man, woman and child used about 357 pounds of paper. The extensive variety of paper and board products manufactured in the United States is suggested by the classification used in the Census of Manufactures. Fifteen major groups with a total of 123 subdivisions are covered in this report.

The principal products of this industry are containers—including bags and shipping sacks. Shipments of these products represented 60 per cent of the value of all shipments of finished paper products; plants manufacturing these products consumed 73 per cent of the industry's total tonnage in 1947. The remainder of the tonnage was consumed in the production of such items as sanitary and health products, wrapping products (principally waxed paper) and packaging accessories such as corrugated paper sheets and rolls and gummed tape.

More than half (55 per cent) of the total employment in the paper and allied products industry was in this paper and board products division in 1947. The division included also over three-fourths of the industry's establishments and nearly half the dollar volume of finished product shipments. In turning out these products the industry consumed over 12 million tons of paper and board.

REGIONAL DISTRIBUTION AND GROWTH

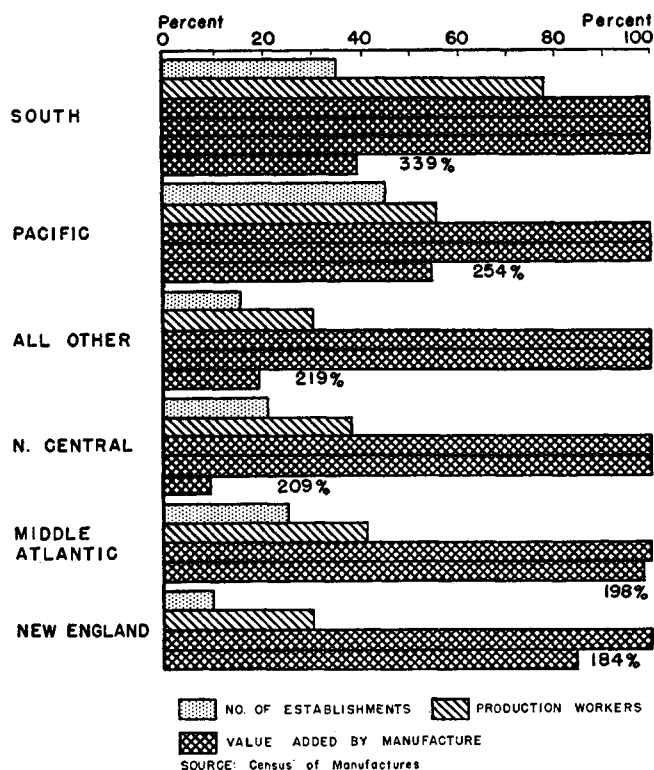
The first paper mill in the United States was built in Pennsylvania in 1690. Later, other mills were constructed in that state and in New York,

Massachusetts, Connecticut and Maine. By 1776 the industry was firmly established in this country. For many years, papermaking was concentrated in New England and New York. The native stands of spruce in these states made an excellent groundwood; with the discovery of the sulphite process they were readily adapted to this first method of making pulp.

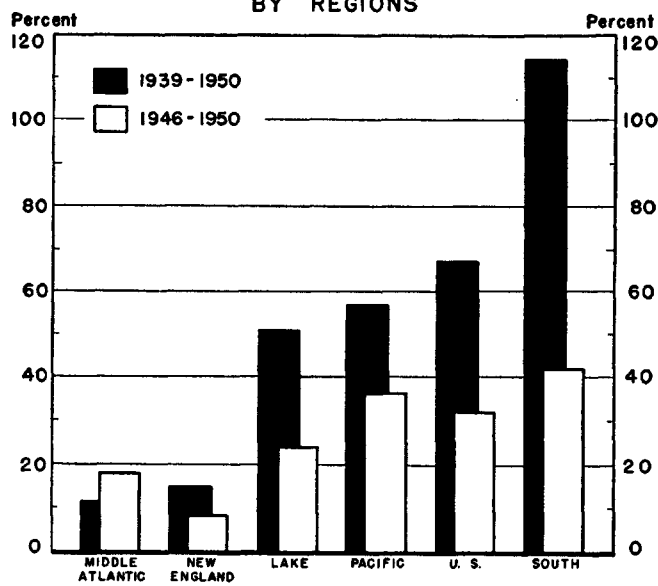
As the nation and the industry expanded, papermaking facilities were established in the Lake States of Michigan, Wisconsin and Minnesota, where there were large stands of spruce and balsam; then in the Far West, where the huge stands of western hemlock and true firs could be utilized.

At the beginning of the twentieth century over two-thirds of the industry was still concentrated in the New England states, New York and Pennsylvania. Today, in terms of the number of establishments, production worker employment and value added by manufacturer, individual eastern states continue to hold the lead. In 1947 New York and Pennsylvania had the largest number of establishments and production workers; they ranked, respectively, first and second in terms of value added by the manufacturing process. It should be pointed out, however, that as a region the states in the

PAPER AND ALLIED PRODUCTS INDUSTRY
REGIONAL GROWTH - 1939 TO 1947



INCREASE IN WOOD PULP CAPACITY BY REGIONS



NOTE: 1950 Estimated on basis of capacity under construction or definitely projected.

SOURCE: U. S. Pulp Producers Assn.

Great Lakes area narrowly led those on the middle east coast (not including New England) in both number of production workers and value added by manufacture. Louisiana was the only southern state ranked in the highest ten, and then only on the basis of employment.

THE INDUSTRY IN THE SOUTH

A lack of statistical data makes it difficult to describe the pulp and paper industry within the precise limits of the Eighth District. Material is available for district states, but this includes the parts of the states outside the district. The problem can be handled indirectly, however, through the use of regional information. Most of the forces which affect the industry in the South operate in a large portion of the Eighth District. In Arkansas, for example, and the district portion of Mississippi, the availability of timber and other natural resources has led to the establishment of pulp and paper mills that are of importance to the economies of these areas.

Statistics covering the entire paper and allied products industry, it should be noted first, do not show how important a region or a state is in terms of each separate division of the industry. This is particularly significant when one tries to evaluate both the present stage of development in the southern industry and the growth of the industry in the South. At the present time the South is more important as a producer of pulp (and hence a rel-

atively larger consumer of pulpwood) than as a producer of paper and paperboard or of finished paper and board products.

At the beginning of 1949, approximately one-half of the nation's total annual wood pulp capacity was located in the South.* The region had over four-fifths of the total sulphate capacity, about one-fourth of the soda pulp capacity, one-fifth of the groundwood capacity, and more than half of all other grades of wood pulp capacity. The southern industry is a billion dollar industry, including timber land owned and controlled by the operating companies or by individuals selling stumpage to the mills' contractors. Capital investment in plant and equipment alone is estimated at \$625 million; annual paper sales are valued at \$820 million. Last year southern mills accounted for 45 per cent of the total national pulpwood consumption and produced almost one-half of the nation's total wood pulp tonnage.

Growth in the South.—The development of the pulp and paper industry in the South coincides with the expansion of the sulphate pulping process. The first mill to manufacture pulp from southern pine by the sulphate process was built in Texas in 1911. The industry grew rapidly, and by 1929 southern kraft mills accounted for about 15 per cent of the nation's annual wood pulp capacity. Twenty years later, 45 per cent of the U. S. capacity utilized the sulphate process. During the same twenty-year period, total annual capacity in the South increased from less than one-fifth to about one-half of total national pulp capacity. The consumption of pulpwood since 1929 has grown at a very similar rate—from less than one-fifth of the national total to nearly half.

The evidence, although not conclusive, points toward the fact that the South has expanded its pulp mills and its plants for producing paper and paperboard rather more than its facilities for manufacturing finished paper and board products. Last year, for example, the South produced only 28 per cent of the nation's paper and paperboard. While total employment of production workers in the industry increased 78 per cent from 1939 to 1947, gains of 121 per cent were recorded in pulpwood consumption, 111 per cent in wood pulp production, 96 per cent in daily average wood pulp capacity, and 90 per cent in paper and board production. It is significant, however, that the southern states since 1939 have shown considerably larger percent-

* The southern region as defined by the U. S. Pulp Producers' Association, the source of these figures, includes Alabama, Arkansas, Florida, Georgia, Maryland, Mississippi, North Carolina, South Carolina, Tennessee and Texas.

age increases than any other important producing region in production worker employment and value added by manufacture.

Reasons for Growth in the South.—The shift of the paper industry's capacity to the South was almost inevitable. The production of paper requires timber, one of the principal natural resources of the South. This region, with only 17 per cent of the nation's land area, contains 30 per cent of its total forest area and about 40 per cent of all its commercial forest area. A little less than one-half of the saw timber acreage and not quite one-third of the pole timber acreage in the nation's commercial forest lands are in the South. In terms of the volume of timber in commercial forests, the South has 24 per cent of the nation's saw timber, 35 per cent of the pole timber and 28 per cent of all timber in commercial forest areas.

In the second place, climatic and soil conditions in the South are such that the species of trees best adapted to present pulping operations enjoy a rapid growth rate. More than half the estimated annual growth of soft-wood timber in commercial forests in the United States is in the South, while 48 per cent of annual growth of all timber on commercial forest lands is in these states.

The presence of large timber resources does not tell the entire story. Expansion of the industry in the South was stimulated too by the fact that logging operations can be maintained through a considerably larger period of the year in the South than in most other regions of the country. Among other things, this means less pressure to build up and finance large pulpwood inventories for use during the winter months. Also, practically all the commercial acreage is easily accessible by water, rail or highway. Finally, the availability of adequate supplies of water, chemicals, electric power and natural gas also has been an important factor.

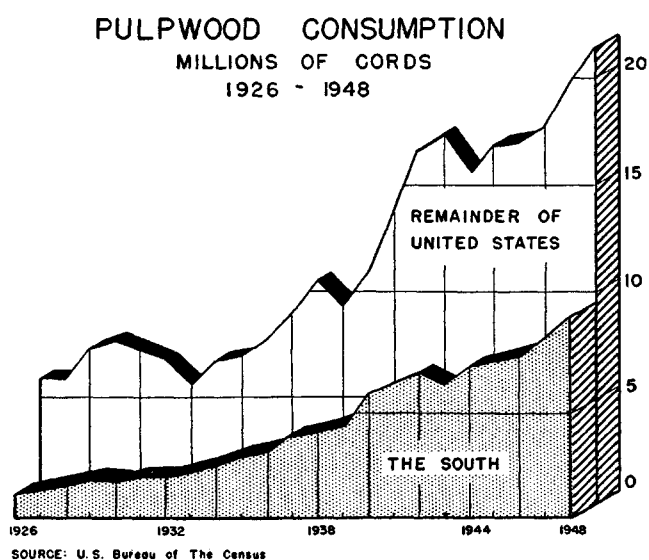
THE INDUSTRY IN THE EIGHTH DISTRICT

These factors operative in the South are primarily those which determine the status of the pulp and paper industry in the Eighth District. In the district states, including the portion of these states outside the Eighth District boundaries, 587 establishments of the industry were enumerated in the 1947 Census of Manufactures. Production worker employment totaled 51,000, and the value added by manufacture was more than \$354 million. Since 1939 there was an increase of 27 per cent in the number of establishments, 47 per cent in employment and 228 per cent in value added by manufacture.

Despite these increases, the industry has not ex-

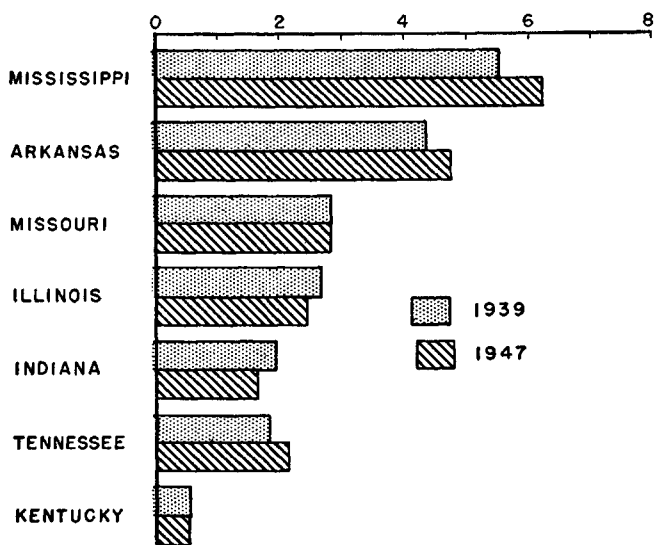
panded as rapidly as manufacturing generally in these states, either in terms of establishments or employment. Only in Arkansas, Mississippi and Tennessee did paper industry employment make up a larger percentage of all manufacturing employment in 1947 than in 1939. In terms of the value added by manufacture, however, the ratio to the state's total increased in each state except Illinois and Kentucky. The most significant increases were in Arkansas, where the dollar value of the manufacturing process climbed from 6.6 per cent of the state's total in 1939 to 8.3 per cent in 1947, and in Mississippi, where the ratio jumped from 7.4 per cent to 12.2 per cent. These relative gains were substantially more impressive than the increase for all seven states combined, where the ratio was 2.5 per cent in 1939 as compared with 2.6 per cent in 1947.

The Eighth District, by contrast with the South as a whole, is more largely represented in the paper and board portion of the industry, and in the manufacture of paper and board products, than in the production of wood pulp. Although census data are not available for the district proper, Lockwood's Directory of the Paper and Allied Trades for 1947 lists three wood pulp mills in the district. Two of these are in Arkansas and one in Mississippi,* and each utilizes the sulphate process. These are integrated operations, the Arkansas mills producing kraft products such as bags, wrapping paper, folding boxboards, gumming and water repellent paper and the like, while at the Mississippi mill kraft specialties and bleached machine glazed specialties from pulp produced in the mills are manufactured.



* The portion of Mississippi outside the district also has a number of pulp mills.

**PRODUCTION WORKER EMPLOYMENT
PAPER AND ALLIED PRODUCTS
PERCENT OF TOTAL IN EACH DISTRICT STATE**



SOURCE: Compiled From Census of Manufactures Report

**PULPWOOD PRODUCTION AND CONSUMPTION
IN THE EIGHTH DISTRICT**

About 43 per cent of the land area in this district is forest land, according to estimates made in 1945 by the U. S. Forest Service and various state and other forestry organizations. The percentage varies from 17 per cent in the district portion of Illinois to 59 per cent in Arkansas. In more than one-fifth of the 362 counties in the district, forests cover 60 per cent or more of the land area. The rate of growth in much of the district is rapid, but despite this the volume of timber being removed from the district's commercial forest lands exceeds that of the annual growth.

Most of the annual timber growth is in the forests of Arkansas and Mississippi. These two states accounted for one-half of all timber growth and for 63 per cent of all saw timber growth in the district states in 1944. As noted earlier, it is in these states that the district's wood pulp industry is located.

The amount of timber cut from the forests in Arkansas for pulpwood in 1944 was estimated at 42 million cubic feet. Consisting almost entirely of softwoods, the pulpwood drain represented about 6 per cent of the total commodity drain on commercial forests in the state that year. In Mississippi, pulpwood volume in 1944 was estimated at 11 per cent of the total commodity drain. A sizable portion of that amount, however, was taken from forests outside the Eighth District. Approximately one-third of Mississippi's forest acreage is included in

this district. Data for subsequent years are not available but if production in these two states increased at the same rate as nationally, production in 1948 would have climbed to about 55 million cubic feet in Arkansas and 95 million in Mississippi.

Much of the pulpwood produced in Arkansas is manufactured into wood pulp and paper in the mills located in that state. A substantial amount, however, also is shipped to mills located just across the state line in northern Louisiana. At the same time, part of the pulpwood requirements at the mills in Arkansas are met by importing pulpwood from Texas, Oklahoma and Louisiana. In general, shipments are by rail, although trucking operations have increased somewhat in importance. With present truck facilities and under current operating conditions, a forty-mile truck haul approaches the maximum, according to one operator. It is hoped, however, that newly designed equipment may make it feasible to extend truck operations to as much as a 90-mile radius.

A large share of the timberland in this district is in small holdings—much of it in farm woodlots. Marketing timber provides additional income for the farmer. In the southern portion of this district, a farmer generally sells his pulpwood to the mills by one of several methods. He may sell, for a lump sum, all the stumpage on the tract. Currently for this he may net \$1 to \$3 per cord. Or the transaction may involve a straight stumpage sale by the cord, in which case he may receive from \$1.50 to \$3.00 per cord. If the farmer prefers to utilize his own labor by cutting the pulpwood and stacking it in the woods he may obtain upwards of \$5.00 per cord. By cutting the wood and banking it along the highway, he can increase his return to perhaps \$6.00 per cord. If, however, he has the time and equipment he can cut the wood and deliver it to the railroad car and increase his return to \$10.00 per cord. Finally, pulpwood delivered to the mill may bring above \$11.00 per cord on a short haul plus a premium of \$1.00 per cord on longer hauls. Shipped by rail, the present pulpwood prices, f.o.b. cars, are about \$10.75 per cord where the freight charge is in excess of \$4.00 per cord, and \$11.10 where this transportation cost is less than \$4.00.

**THE INDUSTRY AS A FUTURE MARKET
FOR TIMBER**

The present is an uncertain time in which to attempt to gauge the future level of pulpwood consumption. So far this year the paper and paper-board industries have operated well below the levels

of the two previous years in terms of the percentage of capacity actually utilized. In part this reflects the general decline from peak levels of business activity experienced so far this year. It may also reflect the fact that considerable new productive capacity has come into operation.

In the first quarter of this year consumption of pulpwood nationally was about 2 per cent larger than in the same period in 1948, reflecting an 11 per cent increase in the South; in all other regions, consumption was below last year. Actual receipts of pulping wood from U. S. forests have been smaller this year as inventories were being used up.

Total production of wood pulp is slightly larger than last year because of gains in sulphate and groundwood pulp. Sulphite production and output of all other pulp is below the volume of the first quarter in 1948. Physical volume of paper and board output in the first quarter was off about 8 per cent from a year earlier.

The current situation in the industry nationally may not present an accurate long-range view of the industry in the South. In this region the industry has certain definite advantages which point toward further growth. Fundamental, of course, are the natural advantages of timber resources that can be, and in many areas under proper management are being, replaced at a considerably faster rate than in other sections of the country. In addition the average mill in the South is newer, larger and more efficient than the average in most other parts of the country.

It would appear that these factors tend to give the southern industry something of a long-range advantage over the industry located in other regions. If these advantages accrue to the southern pulp and paper industry as a whole, the potential for this district should be somewhat the same, particularly in the southern part of the district.

In addition to the general possibilities there appears to be a real opportunity for further expansion in at least one major field. This is the production

of newsprint. Last year consumption of newsprint amounted to about 5.1 million tons. Yet domestic production totaled only 866,000 tons. The remainder was supplied by imports, 88 per cent of which came from Canada. In the 1920's domestic production ranged from 1 to 1.5 million tons annually. In 1939 it amounted to 954,000 tons. Production in the South and in the nation will be increased considerably when a new plant in Alabama comes into production next year. However, it should be noted that the output of that mill already is contracted for. If newsprint can be produced in the South on a competitive basis with imported newsprint, it would appear to offer a real opportunity for expansion in that direction in the South.

Even without further expansion of capacity in this region, the existing industry provides a large market for pulpwood. The basic problem in the long run in this region is more likely to be that of an assured supply of pulpwood rather than one of a surplus—unless timber management practices are improved over a considerably larger area. Most mills have excellent forestry programs in operation in land they control and are attempting to extend these programs to suppliers' timber holdings.

The district can expand its facilities for processing wood pulp into paper and the other related goods. And given the area's basic advantages in timber growing, it may well be possible to step up pulpwood output to provide a basis for the expansion of pulp production itself. Dynamic industrial growth of this sort is what the district, particularly the southern part, needs most today. The recent study by the National Planning Association Committee of the South emphasizes how important a factor this can be in raising the general income level of the whole South. With the great forest resources of this region it seems logical to expect an important phase of industrial growth to occur in the paper and allied products lines.

Weldon A. Stein



Survey of Current Conditions

Recent surveys of consumers to determine, among other things, their intentions with respect to expenditures this year suggest that economic activity may receive more support from this segment than has been anticipated. A firm forecast of the volume of consumers' expenditures in 1949, based solely on the study released by the Board of Governors of the Federal Reserve System, would be risky. Nevertheless, this survey can be taken as a reliable indication that a substantial potential market for consumers' durables and housing still exists. At the same time these findings provide business with a strong incentive to adjust price schedules and product quality and design to levels where this demand can be met.

This survey was made in the early part of the year, at a time when total personal income was only about 2 per cent larger than in April, the most recent month for which figures are available. Much of that decline in income resulted from a drop in farm income; total nonagricultural income in April was only about 1 per cent below the January level. This stability in income, at a time when production and employment cutbacks were rather severe, coupled with the fact that the potential market for consumers' goods remains large will probably offer

considerable support to the economy in the coming months.

These indicators also have some possible implications with respect to the outlook for consumers' prices. Apparently consumers believe prices are going to decline further from the levels that prevailed in January. It may well be that part of their intentions with respect to expenditures were based on that assumption. If so, it would seem to put substantial pressure on manufacturers and distributors to work toward lower prices. Actually, the sales experience so far this year suggests that large price reductions, on the average, are not necessarily required to stimulate demand. Physical volume of sales to consumers has held up pretty well and dollar sales are not sharply below last year's volume.

EMPLOYMENT

Nonagricultural employment in the nation dropped slightly between April and May, continuing the downward trend evident since last December. This movement has been interrupted but once in the past six months—a small increase occurred between February and March. A large seasonal rise in agricultural employment resulted in a gain in total employment between April and May.

Total employment so far this year has remained slightly higher than the year ago level, except in April. Higher total employment this year reflects gains in agricultural employment, which had been declining steadily since the end of the war but in 1949 has been increasing. Thus, during the first five months of 1949 it averaged 5 per cent higher than in the first five months of 1948, which in turn averaged 4 per cent below the same period in 1947. Average total employment for the January-May period was 0.4 per cent higher than for the comparable 1948 period, while nonagricultural employment was 0.7 per cent lower.

The labor force—the number of people working or seeking work—has continued to grow. Thus, while total employment is approximately as high as last year, unemployment has almost doubled. In May, 1949 about 5 per cent of the labor force was unemployed as compared with 3 per cent in May, 1948. Much of the unemployment increase occurring between April and May was due to the entrance of students into the labor market for either regular or summer jobs. Unemployment probably will in-

WHOLESALE

Line of Commodities Data furnished by Bureau of Census U.S. Dept. of Commerce*	Net Sales May, 1949 compared with		Stocks May 31, 1949 compared with
	Apr., 1949	May, 1948	May 31, 1948
	Drugs and Chemicals.....	- 5%	+ 7%
Dry Goods	- 7	-16	-18
Groceries	- 1	-10	- 9
Hardware	- 4	-17	+11
Tobacco and its Products.....	+ 3	+ 2	- 1
Miscellaneous	- 2	- 4	+13
**Total All Lines.....	- 3%	-11%	- 3%

*Preliminary.
**Includes certain items not listed above.

PRICES

WHOLESALE PRICES IN THE UNITED STATES					
Bureau of Labor Statistics (1926=100)	May, '49 compared with			May, '49 compared with	
	May, '49	Apr., '49	May, '48	Apr., '49	May, '48
All Commodities....	155.7	156.9	163.8	-0.8%	-4.9%
Farm Products....	171.2	170.3	189.1	+0.5	-9.5
Foods	163.9	162.9	177.4	+0.6	-7.6
Other	146.7	148.8	148.9	-1.4	-1.5

RETAIL FOOD PRICES					
Bureau of Labor Statistics (1935-39=100)	May 15, 1949			May 15, 1949 compared with	
	May 15, 1949	Apr. 15, 1949	May 15, 1948	Apr. 15, '49	May 15, '48
U. S. (51 cities)....	202.4	202.8	210.9	-0.2%	-4.0%
St. Louis.....	207.8	207.5	218.2	+0.1	-4.8
Little Rock.....	201.9	201.2	209.2	+0.3	-3.5
Louisville	189.4	187.6	201.6	+1.0	-6.1
Memphis	215.6	214.9	223.2	+0.3	-3.4

crease during the next couple of months as many additional students seek summer jobs.

The number of workers separated from their jobs in April was just about the same as last year. The big difference from a year ago, however, was that only half as many people quit their jobs, while more than twice as many were laid off. Also, the hiring or accession rate was lower than a year ago, resulting in increased unemployment. The lay-off rate was at a postwar high in April as approximately 3 out of every 100 workers were laid off. Industries with the highest lay-off rates included iron and steel, machinery, transportation equipment, non-ferrous metals, furniture, textile-mill products and food.

About one out of every 25 persons at work in May was involuntarily working part-time (less than 35 hours a week) according to a special Bureau of the Census survey. Almost two-thirds of these involuntary part-time workers had jobs which ordinarily provided full-time work, while the remainder had regular part-time jobs but wanted full-time employment. Similar surveys conducted in March and September, 1948, showed only about half as many part-time workers who wanted full-time jobs, as did the May survey. However, 38 per cent of the persons employed in nonagricultural industries were still working more than 40 hours a week in May.

Despite the increase in part-time workers, the average weekly hours worked by all employees in nonagricultural industries in May, 1949 was 41.7 as compared with 41.9 in May, 1948. Manufacturing and construction were the only industries to show any appreciable decline over the past year in the proportion of employees working more than 40 hours a week. Even in manufacturing, where the majority of the recent cutbacks occurred, 19 per cent of the workers had a work week in excess of 40 hours in May.

In the St. Louis area nonagricultural employment decreased slightly between April and May as the drop in manufacturing employment was too large to be offset completely by seasonal increases in other industries. Total employment was about the same in May as in April because of a gain in agricultural employment which offset the decline in nonagricultural industries. Normally, both total and nonagricultural employment increase between these two months.

Employment increased in the construction, public utilities and service industries in St. Louis between April and May, declined in manufacturing, and remained about the same in mining, trade, finance

and government. The drop of almost 3,000 in manufacturing was the largest monthly decline since the immediate postwar period. The primary and fabricated metals, leather, apparel, ordnance and machinery industries employed fewer people, while the transportation equipment and food industries increased employment.

Almost 6,000 fewer people were working in the St. Louis area this May than a year ago. April and May, 1949 were the only months since the end of the war in which St. Louis employment did not show a gain over the previous year. Finance and service were the only industries employing more people in May than they did a year ago, although the declines in the other industries, except for manufacturing, were insignificant. Total nonmanufacturing employment was approximately the same as a year ago, with manufacturing accounting for practically all the decline.

In all seven of the Eighth District states except Arkansas, nonagricultural employment was very slightly lower, and manufacturing employment was considerably lower in the first quarter of 1949 than in the comparable period of 1948. Nonagricultural employment in the seven district states was less than 1 per cent lower than last year, while manufacturing employment was about 5 per cent lower.

INDUSTRY

The level of industrial activity in the district in May was somewhat lower than in April and a year ago. Compared with the previous month, operations were scheduled at a lower rate in the basic steel and lumber industries. Coal production was lower than in April but oil output remained about the same. Manufacturing activity, in the aggregate, was off slightly. On-site construction activity was slightly lower than in April although dollar value of permits issued for new construction totaled slightly higher.

Electric power consumed in the district's major industrial centers was below the April level and for the first time in the postwar period was lower than in the corresponding month of the previous year. The 6 per cent drop compared with last year was due to declines in Pine Bluff, Louisville, Memphis and Evansville, which offset increases in St. Louis and Little Rock. On a month-to-month basis all cities registered decreases except St. Louis.

Manufacturing—Total manufacturing output in the district in May was lower than in April, although slight gains were registered in some lines, primarily in the district's smaller industrial groups. Also trends were not the same in all parts of the district. Operations decreased in the automobile,

chemical, iron and steel, rubber, textiles, farm machinery, lumber and furniture industries. In some parts of the district a lower level of operations was indicated in the manufacture of machinery, food products and stone, clay and glass products. District output of metals and metal products and electrical manufactures was about the same. Activity was slightly higher than in April in the manufacture of stone, clay and glass products, food products, machinery and transportation equipment, and in the brewing industry.

Steel—Operations of the basic steel industry in the St. Louis area in May were scheduled at 61 per cent of capacity—a two-year low. The rate was 9 points below the April level and 11 points lower than a year ago. The reduced activity was partly due to repairs and relining of furnaces and slag mills, but also reflected decreased orders. The mills report than consumers are buying as close to current requirements as possible in nearly all major lines. Demand continues fairly strong for pipe and construction steel and that used in the manufacture of agricultural machinery. Although demand is low in the household goods lines, trade reports indicate

that in many cases inventories have been adjusted and demand is expected to increase.

Lumber—Production of basic lumber in May remained at about the April level but was considerably below that of a year ago. The lumber market continues very soft especially in the hardwood lines. Buying by furniture and flooring manufacturers is especially slow. The low production in recent months may help to stabilize the industry inasmuch as output has been reduced to a level about equal to orders.

Operations of southern hardwood mills in May averaged only 58 per cent of capacity compared with 59 per cent in April and 82 per cent a year ago. Weekly production by southern pine operators in May was 2 per cent higher than in April but 29 per cent lower than in May, 1948.

Whiskey—At the end of May, 30 of Kentucky's 63 distilleries were in operation. This compares with 37 at the end of April and 42 a year ago. Whiskey production in April totaled 6.3 million tax gallons, 16 per cent less than in March and 40 per cent less than in April, 1948. The lower operations of the past two months reflect in part the beginning of the usual seasonal decline but also the all-time high level of stocks in bonded warehouses. United States production in April was 20 per cent lower than in March.

Meat Packing—Meat packing operations in the St. Louis area in May were slightly higher than in April but much lower than a year ago. In May there were 380,000 animals slaughtered under Federal inspection compared with 365,000 in April and 529,000 in May, 1948. Killings of sheep and calves were higher than in the previous month, whereas slaughter of cattle and hogs was about the same. Total United States slaughter in May was 2 per cent lower than in April but 2 per cent higher than in May a year ago.

Shoes—According to preliminary estimates, shoe production in the district in April totaled 7.3 million pairs, a decline of 15 per cent compared with the previous month and of 11 per cent compared with a year ago. For the first four months of the year, output in 1949 totaled 10 per cent less than in the comparable period of 1948. United States production in the first four months of 1949 was 5 per cent below that of 1948.

Oil and Coal—The daily average output of crude oil in the district in May was fractionally higher than a year ago. Daily output averaged 306,000 barrels compared with a 304,000-barrel average in April, 1949 and May, 1948. On a month-to-month basis a 5 per cent increase in Indiana output along

CONSTRUCTION

(Cost in thousands)	BUILDING PERMITS							
	New Construction				Repairs, etc.			
	Number		Cost		Number		Cost	
	1949	1948	1949	1948	1949	1948	1949	1948
Evansville	64	71	\$ 163	\$ 183	98	103	\$ 139	\$ 55
Little Rock ..	42	81	353	499	221	294	161	148
Louisville	152	209	831	1,432	91	115	54	116
Memphis	1,951	834	3,782	2,869	241	181	225	155
St. Louis	263	320	2,204	2,198	318	338	361	515
May Totals.....	2,472	1,515	\$7,333	\$7,181	969	1,031	\$ 940	\$ 989
Apr. Totals.....	2,177	1,796	\$6,561	\$8,411	838	1,246	\$1,012	\$1,040

INDUSTRY

(K.W.H. in thous.)	CONSUMPTION OF ELECTRICITY							
	No. of Custom-ers*				May, 1949 compared with			
	May, 1949	Apr., 1949	May, 1948	Apr., 1948	Apr., '49	May, '48	Apr., '49	May, '48
Evansville	40	8,169	8,227	8,618 R	-0.7%	-5.2%		
Little Rock	35	4,547	4,933 R	4,221	-7.8	+7.7		
Louisville	80	54,985	68,942	67,128	-20.2	-18.1		
Memphis	31	5,731	6,167	6,149	-7.1	-6.8		
Pine Bluff	26	4,629	4,706	6,033	-1.6	-23.3		
St. Louis	139	80,811	79,971	76,822 R	+1.1	+5.2		
Totals	351	158,872	172,946 R	168,971 R	-8.1%	-6.0%		

* Selected industrial customers.
R — Revised.

LOADS INTERCHANGED FOR 25 RAILROADS AT ST. LOUIS

First Nine Days						
May, '49	Apr., '49	May, '48	June, '49	June, '48	5 mos. '49	5 mos. '48
104,513	103,103	123,858	30,134	34,063	526,911	608,249

Source: Terminal Railroad Association of St. Louis.

CRUDE OIL PRODUCTION—DAILY AVERAGE

(In thousands of bbls.)	May, 1949 compared with					
	1949		1948		Apr., 1949	
	May, 1949	Apr., 1949	May, 1948	Apr., 1948	May, 1948	Apr., 1948
Arkansas	80.3	81.2	86.4	-1%	-7%	
Illinois	177.4	175.9	171.6	+1	+3	
Indiana	24.5	23.3	20.7	+5	+18	
Kentucky	23.7	23.4	25.2	+1	-6	
Total	305.9	303.8	303.9	+1%	+1%	

with slight increases in Illinois and Kentucky offset the slight decline in production in Arkansas.

Coal production in the district's mines in May totaled 7.9 million tons, a decline of 7 per cent from April and of 24 per cent from the 10.4 million tons mined in May, 1948. Compared with April, output was off in all the producing states, ranging from a slightly less than 1 per cent decrease in western Kentucky to a 43 per cent decline in Arkansas. On a year-to-year basis substantial decreases were registered in all producing states. United States production in May totaled 48 million tons, 2 per cent less than in April and 14 per cent less than in May, 1948. Stocks of coal in the United States in April stood at about 65 million tons, about 5 million tons higher than in March, nearly double the April, 1948 total, but about 4 million tons below the postwar peak in November, 1948.

Construction—The value of permits awarded for new construction and repairs in the district's major cities in May totaled \$8.3 million. This was 9 per cent higher than the April total and about 1 per cent higher than awards in May a year ago. The month-to-month rise was due to a 39 per cent increase in the value of permits in Memphis; considerable decreases were registered in Little Rock and Evansville, and there was a slight drop in permit value in Louisville. The St. Louis total was unchanged.

Permits awarded for new construction totaled \$7.3 million, a 12 per cent increase over April. This was traceable to residential construction, which—accounting for \$4.6 million of all new construction—increased 35 per cent over the April total. The value of residential permits in Louisville, St. Louis and Memphis increased substantially (more than double in the case of Memphis), offsetting declines of more than two-thirds in Little Rock and Evansville. Dollar value of new residential construction was 15 per cent higher than that of May a year ago, whereas new nonresidential permits were off 14 per cent.

TRADE

Consumer spending at district department stores during May declined 5 per cent from that of April, and was 3 per cent less than that of May, 1948. In the first five months of 1949, district sales averaged 3 per cent less than in the same period in 1948. Of the major cities of the district, sales volume increased 2 per cent in Fort Smith and 2 per cent in Memphis; declines ranged from 5 per cent in St. Louis to 16 per cent in Springfield. In

TRADE

DEPARTMENT STORES

	Net Sales			Stocks on Hand	Stock Turnover	
	May, 1949 compared with Apr., '49	5 mos. '49 May, '48	5 mos. '49 to same period '48	May 31, '49 comp. with May 31, '48	Jan. 1, to May 31, 1949	
8th F. R. District.....	5%	-3%	-3%	-6%	1.59	1.58
Ft. Smith, Ark.....	7	+3	+2	-15	1.64	1.56
Little Rock, Ark.....	7	-1	-0	-6	1.68	1.71
Quincy, Ill.....	0	+4	+6	-8	1.35	1.47
Evansville, Ind.....	6	-10	-11	-19	1.40	1.50
Louisville, Ky.....	17	-3	-1	-4	1.74	1.76
St. Louis Area ¹	3	-4	-5	-6	1.57	1.57
St. Louis, Mo.....	3	-4	-5	-6	1.57	1.57
E. St. Louis, Ill.....	1	+4	+5
Springfield, Mo.....	4	-9	-16	-17	1.29	1.39
Memphis, Tenn.....	+3	-0	+2	-3	1.69	1.56
*All other cities.....	6	-2	-2	-9	1.27	1.26

*El Dorado, Fayetteville, Pine Bluff, Ark.; Harrisburg, Mt. Vernon, Ill.; New Albany, Vincennes, Ind.; Danville, Hopkinsville, Mayfield, Paducah, Ky.; Chillicothe, Mo.; Greenville, Miss.; and Jackson, Tenn.
¹ Includes St. Louis, Mo.; Alton, Belleville and East St. Louis, Ill.
 † Outstanding orders of reporting stores at the end of May, 1949 were 35 per cent less than on the corresponding date a year ago.
 ‡ Percentage of accounts and notes receivable outstanding May 1, 1949, collected during May, by cities:

	Instalment Accounts		Excl. Instal. Accounts	
%%%%
Fort Smith.....	45%	23%	61%
Little Rock....	20	46	23	55
Louisville.....	24	48	19	54
Memphis.....	27	45	23	51

INDEXES OF DEPARTMENT STORE SALES AND STOCKS 8th Federal Reserve District

	May, 1949	Apr., 1949	Mar., 1949	May, 1948
Sales (daily average), unadjusted ¹	328	327	287	333
Sales (daily average), seasonally adjusted ²	335	321	309	340
Stocks, unadjusted ³	296	321	314	313
Stocks, seasonally adjusted ³	296	321	323	313

¹ Daily Average 1935-39=100.

² End of month Average 1935-39=100.

SPECIALTY STORES

	Net Sales			Stocks on Hand	Stock Turnover	
	May, 1949 compared with Apr., '49	5 mos. '49 May, '48	5 mos. '49 to same period '48	May 31, '49 comp. with May 31, '48	Jan. 1, to May 31, 1949	
Men's Furnishings—	10%	-5%	+1%	-7%	1.13	1.17
Boots and Shoes..—	27	-6	+2	-9	1.83	1.76

Percentage of accounts and notes receivable outstanding May 1, 1949, collected during May:
 Men's Furnishings..... 46% Boots and Shoes..... 46%
 Trading days: May, 1949—25; April, 1949—26; May, 1948—25.

RETAIL FURNITURE STORES **

	Net Sales		Inventories		Ratio of Collections	
	May, 1949 compared with Apr., '49	May, '48	Apr., '49	May, '48	May, '49	May, '48
8th Dist. Total ¹	+11%	-3%	-5%	-10%	26%	29%
St. Louis Area ²	+15	-4	-3	-7	33	36
St. Louis.....	+16	-4	-3	-7	33	36
Louisville Area ³	+19	-4	-12	-16	19	19
Louisville.....	+19	-4	-12	-17	18	17
Memphis.....	+7	+11	-3	-18	17	21
Little Rock.....	-6	-5	-4	-0	21	24
Fort Smith.....	-17	+8	*	*	*	*

*Not shown separately due to insufficient coverage, but included in Eighth District totals.

¹ In addition to following cities, includes stores in Blytheville, and Pine Bluff, Arkansas; Hopkinsville, Owensboro, Kentucky; Greenville, Greenwood, Mississippi; Hannibal and Springfield, Missouri; and Evansville, Indiana.

² Includes St. Louis, Missouri; Alton, Illinois.

³ Includes Louisville, Kentucky; and New Albany, Indiana.

** 44 stores reporting.

PERCENTAGE DISTRIBUTION OF FURNITURE SALES

	May, '49	April, '49	May, '48
Cash Sales.....	13%	14%	15%
Credit Sales.....	87	86	85
Total Sales.....	100%	100%	100%

Little Rock dollar sales volume was unchanged from that in the first five months of 1948.

Data from a selected group of department stores reporting weekly on specified major housefurnishing divisions indicate that the reduction in sales of "large ticket" items has been partly responsible for lagging dollar volume. Sales of furniture and bedding items during the week ending June 11 were substantially under those last year; domestic floor covering and major appliance sales were also off, while sales in the radio-phonograph group, bolstered by sales of television sets, were but slightly under year-ago volume.

On a seasonally adjusted daily average basis, district sales in May were 335 per cent of the 1935-39 average as compared to 321 per cent in April and 340 per cent in May, 1948. Among the major cities of the district, the Memphis index—385 per cent of the base period—was higher than both April, 1949 and May, 1948. In St. Louis the index was higher than in April but slightly under that of last May. In Little Rock seasonally adjusted sales were under those in the previous month but slightly higher than a year ago, while in Louisville adjusted sales for May were less than in both previous periods.

At those St. Louis stores reporting sales by departments, main store departments average 9 per cent under last year while basement divisions averaged 6 per cent over May, 1948. A few scattered upstairs divisions gained over last year's volume. Declines were greatest in the miscellaneous department classification (games, luggage, candy, cigarettes, etc.), where sales averaged 22 per cent under last year. Housefurnishings in main store departments totaled 13 per cent under May, 1948. In the latter division, however, special promotions of lamps and shades (12 per cent over a year ago) and a continuing boom in sales of television sets (76 per cent greater than last year) were responsible for the largest gains, percentagewise, in the main store.

The contrast, percentagewise, between the gains in upstairs and downstairs sales was highlighted in the men's and boys' wear divisions. Upstairs sales volume of men's and boys' wear declined 7 per cent, while in the comparable downstairs division sales gained 20 per cent from May, 1948. Main store women's and misses' ready-to-wear apparel and accessories sales performance (down 3 per cent and 5 per cent, respectively) also was bettered in the comparable basement divisions, where sales averaged 5 per cent more than in May, 1948. Even though sales gains have been substantial in basement divisions for quite some time, the increased

**PRINCIPAL ASSETS AND LIABILITIES
FEDERAL RESERVE BANK OF ST. LOUIS**

(In thousands of dollars)	Change from		
	June 15, 1949	May 18, 1949	June 16, 1948
Industrial advances under Sec. 13b. \$	\$	\$
Other advances and rediscounts.....	4,987	- 7,972	-11,388
U.S. Securities	1,051,692	-13,278	-85,280
Total earning assets.....	\$1,056,679	\$-21,250	\$-96,668
Total reserves	\$ 727,879	\$-35,849	\$+99,414
Total deposits	693,526	-56,312	-16,265
F.R. notes in circulation.....	1,077,048	- 6,875	- 2,556
Industrial commitments under Sec. 13b	\$	\$	\$- 580

**PRINCIPAL ASSETS AND LIABILITIES
WEEKLY REPORTING MEMBER BANKS
EIGHTH FEDERAL RESERVE DISTRICT**
(In thousands of dollars)

34 banks reporting	Change from		
	June 15, 1949	May 18, 1949	June 16, 1948
ASSETS			
Gross commercial, industrial, and agricultural loans and open market paper	\$ 476,883	\$-40,548	*
Gross loans to brokers and dealers in securities	5,579	- 306	*
Gross loans to others to purchase and carry securities.....	20,570	- 221	*
Gross real estate loans.....	164,556	+ 1,172	*
Gross loans to banks.....	480	+ 4,125	*
Gross other loans (largely consumer credit loans)	206,660	- 289	*
Total	874,728	-44,317	*
Less reserve for losses.....	9,683	- 87	*
Net total loans.....	\$ 865,045	\$-44,230	-\$22,096
Treasury bills	47,732	+11,065	+ 3,245
Certificates of indebtedness.....	199,022	+26,297	+45,726
Treasury notes	47,680	- 2,182	-38,370
U.S. bonds and guaranteed obligations	749,802	+11,935	+44,498
Other securities	138,498	+ 1,531	- 6,643
Total investments	\$1,182,734	\$+48,646	\$+48,456
Cash assets	794,158	+38,605	+17,687
Other assets	25,987	+ 1,013	+ 527
Total assets	\$2,867,924	\$+44,034	\$+44,574
LIABILITIES			
Demand deposits of individuals, partnerships, and corporations.....	\$1,482,982	\$+44,952	\$+49,249
Interbank deposits	551,299	+11,951	- 2,492
U.S. Government deposits.....	21,468	-11,787	-14,765
Other deposits	128,155	+ 3,365	- 1,277
Total demand deposits.....	\$2,183,904	\$+48,481	\$+30,715
Time deposits	487,550	+ 2,835	+12,870
Borrowings	2,300	- 7,320	- 4,200
Other liabilities	16,311	- 1,226	+ 144
Total capital accounts.....	177,859	+ 1,264	+ 5,045
Total liabilities and capital accounts	\$2,867,924	\$+44,034	\$+44,574
Demand deposits, adjusted**.....	\$1,373,601	\$+20,597	\$+56,701

*Comparative data not available due to change in method of reporting.
**Other than interbank and government demand deposits, less cash items on hand or in process of collection.

DEBITS TO DEPOSIT ACCOUNTS

(In thousands of dollars)	May, 1949	Apr., 1949	May, 1948	May, '49 comp. with Apr., '49	May, '48
El Dorado, Ark.....	\$ 21,619	\$ 20,670	\$ 20,424	+ 5%	+ 6%
Fort Smith, Ark.....	37,650	39,890	34,759	- 6	+ 8
Helena, Ark.....	6,386	7,034	6,626	- 9	- 4
Little Rock, Ark.....	115,984	118,345	118,055	- 2	- 2
Pine Bluff, Ark.....	21,853	26,397	22,236	-17	- 2
Texarkana, Ark.* ..	9,615	9,806	9,291	- 2	+ 3
Alton, Ill.	20,826	23,083	25,049	-10	+ 17
E.St.L.-Nat.S.Y.,Ill.	100,600	101,672	102,267	- 1	- 2
Quincy, Ill.	27,726	28,710	28,174	- 3	- 2
Evansville, Ind.	106,580	109,488	101,227	- 3	+ 5
Louisville, Ky.	466,912	458,718	453,794	+ 2	+ 3
Owensboro, Ky.	26,061	26,978	27,984	- 3	- 7
Paducah, Ky.	13,235	13,414	14,172	- 1	- 7
Greenville, Miss.	15,771	18,457	15,922	-15	- 1
Cape Girardeau, Mo.	9,814	10,486	10,317	- 6	- 5
Hannibal, Mo.	7,094	7,560	7,131	- 6	- 1
Jefferson City, Mo.	51,387	58,178	43,906	-12	+ 17
St. Louis, Mo.....	1,419,964	1,413,310	1,404,346	- 0	+ 1
Sedalia, Mo.	10,140	9,883	9,702	+ 3	+ 5
Springfield, Mo.	50,946	52,519	55,093	- 3	- 8
Jackson, Tenn.	16,557	16,799	19,101	- 1	- 13
Memphis, Tenn.	448,055	466,450	428,908	- 4	+ 4
Totals	\$3,004,775	\$3,037,847	\$2,958,484	- 1%	+ 2%

*These figures are for Texarkana, Arkansas only. Total debits for banks in Texarkana, Texas-Arkansas, including banks in the Eleventh District, amounted to \$22,595.

volume has not been sufficient to effect an over-all gain for the entire store. During 1948, sales of the entire basement store accounted for slightly less than one-fifth of total store volume.

The record of inventories by departments on May 31 at St. Louis department stores shows that more than half of the various divisions have inventories smaller than as of the same date last year. But the sharp declines from year-ago figures registered in many upstairs departments were offset in others so that aggregate inventories averaged only 2 per cent under those of May 31, 1948. Basement department inventories also declined sharply in some lines, reflecting higher sales demand here, and in the aggregate totaled 13 per cent less than for the comparable date last year.

For the district, inventories at department stores on May 31 were 6 per cent less than on April 30 and 6 per cent under those on May 31, 1948. The value of outstanding orders at the end of May (at the lowest point on April 30 since August, 1942) was down 3 per cent from the end of the previous month and 35 per cent from May 31, 1948.

The composition of sales as to type of sale—cash or credit—during May showed little change from a year ago. In the month, cash sales accounted for 49 per cent of total sales, open credit sales 44 per cent and instalment sales 7 per cent. In May, 1944 and 1945 cash sales accounted for 61 per cent of the total, open credit sales for 36 per cent and instalment sales for 3 per cent. In May, 1941 (the first year for which data are available) cash sales constituted 43 per cent of total sales, open credit sales 49 per cent and instalment sales 8 per cent.

BANKING

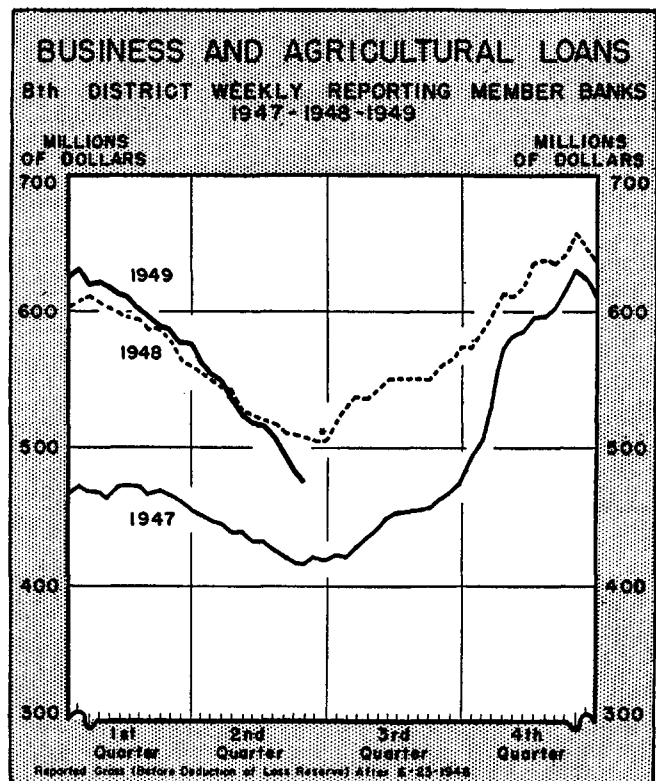
Total loan volume in Eighth District weekly reporting banks dropped \$44 million in the four weeks to mid-June. Banks in all six of the largest cities reported a reduction in volume. The latest four weeks recorded the most pronounced decline for any four-week period so far in 1949, and was much sharper than the drop which took place in the comparable four weeks of 1948 and 1947. For the first time since 1942 loan volumes were below the level of the previous year. This was due mainly to the decrease at St. Louis banks, which at mid-June had about \$22 million less in loans than a year ago (4 per cent). Louisville banks had \$10 million less (8 per cent) and East St. Louis-National Stockyards, Illinois, banks were off \$5 million (12 per cent). On the other hand, at mid-June this year, Memphis, Evansville and Little Rock banks

reported gains of 10, 5 and 23 per cent, respectively, over a year ago.

While gross loan volume was only \$19 million or 2 per cent under a year ago, there was a marked change in the composition of the total. Business and agricultural loans were \$32 million below mid-June, 1948, and loans on securities were off \$11 million. Real estate loans, however, were up \$17 million over a year ago and "all other" (largely consumer) loans were up \$8 million.

The decline in business loans represented one of the significant changes in banking in the first half of the year. The contraction this year to mid-June amounted to \$150 million compared with \$100 million in 1948, and less than \$50 million in 1947 and 1946. The cumulative percentage decline from the end of 1948 to mid-June, 1949 was 28 per cent; in 1948 it was 18 per cent.

The decline in business loans has occurred mainly at the city banks. According to latest reports from banks in rural areas in this district, net total loans were up \$8 million in the first four months of the year with no change during the month of May. Larger banks registered loan declines totaling \$127 million in the same five-month period. By way of contrast, in the first five months of 1948, smaller rural banks added \$43 million to their loans and



other member banks reduced their loans by \$81 million.

The shrinkage in business loans at large city banks and the smaller expansion of loans this spring at country banks is attributed partly to more severe screening of loan applications by bankers, but primarily to lessened demand for credit. As business activity decreases, as prices soften, and as a competitive prewar marketing condition returns, the experienced business operators find a relatively smaller cash balance satisfactory and tend to reduce their borrowing for inventories and to take on new commitments less readily. To some extent, too, other financial institutions are making loans to meet the intermediate credit needs of businesses, some of which would otherwise have been supplied by the banks.

During the past few weeks the decline in business loans has become increasingly sharper by comparison with the patterns of 1948 and 1947 (see chart).

Gross demand deposits at mid-June were \$48 million above the level of mid-May. On June 15 only the Louisville weekly reporting banks had less in demand deposits than on May 18. Demand deposits of individuals, partnerships and corporations—the principal component of gross demand deposits—were likewise above mid-May on June 15 in the 34 weekly reporting banks combined and in each of the reporting centers except Louisville. Deposit volumes decreased seasonally during the last two weeks in May but regained more than the two weeks' loss in the first half of June. Compared with a year ago demand deposits were up \$31 million, declining Government accounts partially offsetting the \$49 million gain in individual

and business deposits. Time deposits continued to expand in the four weeks to mid-June and were about 3 per cent over a year ago.

The growth in deposit volume—time and demand—over a year ago occurred, despite the net shrinkage in loans, because of the increase in bank investments in Governments. Bond holdings increased \$44 million; note, certificate of indebtedness and bill holdings increased \$11 million. At the same time, investments in other securities decreased nearly \$7 million. Total investments were greater than a year ago at each of the six reporting centers.

AGRICULTURE

Crop conditions over the nation as of June 1 justified more optimism than on that date in any of the last twelve years. Wheat production for 1949 was estimated at 1,336 million bushels, a 15-million bushel increase over the May 1 forecast. If the June estimate for the wheat crop is realized, the American farmer will harvest a crop 4 per cent larger than that of 1948 and only 2 per cent smaller than the record crop of 1947. Conditions also were favorable for corn, tobacco and cotton production.

But some areas of the Eighth District did not share in the favorable national picture. A considerable part of Missouri by mid-June was still too wet for planting, haying and cultivating. Some corn had not yet been planted; other fields were becoming grassy. On the other hand, in district portions of Indiana and Illinois, where crop production was being retarded by a lack of surface moisture, rains during the second week of June were most welcome. Crop conditions in Arkansas and in district portions of Mississippi were generally average or above through the first of June. After that date excessive rains apparently resulted in appreciable damage in some areas.

Agricultural prices declined 1.5 per cent during the month ending May 15 to an index of 256 (1910-14=100), a new low since OPA decontrol. This index was nearly 1 per cent under the previous low point in February, 1949. The decline in prices received was due to lower prices for most meat animals, dairy products and truck crops. The prices farmers paid declined 0.4 per cent to an index of 245. The net result was a drop in the ratio of prices received to prices paid from 106 to 104 during the month, the lowest since June, 1942.

Cash receipts from farm marketings for the first six months of 1949 were nearly \$12 billion, about 7 per cent less than in the first half of 1948. Receipts from livestock and livestock products were \$7.4 billion, 10 per cent less than a year earlier. Crop

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(In thousands of dollars)	CASH FARM INCOME					
	Apr., 1949		4 month total Jan. to Apr.			
	Apr., 1949	compared with Mar., 1949	1949	1949 compared with 1948		1947
Arkansas	\$ 29,093	-15%	+65%	\$ 151,348	+44%	+29%
Illinois	128,183	-7	-3	541,995	-0	-4
Indiana	66,154	-7	-15	269,121	-8	-4
Kentucky.....	20,854	-8	-7	171,127	+9	-19
Mississippi....	25,496	-35	+41	184,100	+66	+66
Missouri	60,584	-4	-8	268,290	-3	5
Tennessee ..	20,911	-19	-8	122,871	-7	-13
Totals	\$351,275	-11%	-1%	\$1,708,852	+6%	-0%

	RECEIPTS AND SHIPMENTS AT NATIONAL STOCK YARDS					
	Receipts			Shipments		
	May, 1949	May, 1949 compared with Apr., '49 May, '48		May, 1949	May, 1949 compared with Apr., '49 May, '48	
Cattle and calves	98,126	+14%	-16%	31,163	+6%	-36%
Hogs	247,433	3	+3	80,570	5	+8
Sheep	60,417	+147	-12	38,522	+230	+12
Horses	801	5	-47	801	5	-47
Totals	406,777	+11%	-5%	151,056	+19%	-5%

receipts were \$4.5 billion, 3 per cent more than in 1947. Prices received for the crops averaged 15 per cent lower than in 1947, but larger total marketings more than offset the lower prices.

Farm mortgage debt in the United States increased \$226 million, or 5 per cent, during 1947. This was more than double the \$104 million increase in 1946. Five district states exceeded the national average in percentage increase: Arkansas, 9 per cent; Mississippi, 8 per cent; Tennessee, 7 per cent; Indiana and Kentucky, 6 per cent. Missouri registered a gain of only 3 per cent, and a fractional decline occurred in Illinois—the only dis-

trict state, and one of five in the nation, in which there was a decline.

Outstanding debt in hands of government sponsored credit agencies declined during 1947, but holdings of insurance companies, insured commercial banks and individuals increased. The largest dollar increase in outstanding loans (\$129 million) was made by individuals; life insurance companies (\$99 million) were next. Holdings of farm loans by insurance companies increased 11 per cent, however, while those of individuals increased only 7 per cent. Farm loans held by commercial banks increased \$54 million, or 7 per cent.

National Summary of Business Conditions

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Production at factories and mines declined further in May and June. Construction activity increased somewhat and employment in most other lines was maintained. Prices of industrial commodities continued downward and prices of farm products and foods declined in June following some advance in May. Department store sales were maintained at relatively high levels.

Industrial production—The Board's seasonally adjusted index of industrial production declined 5 points in May to 174 per cent of the 1935-39 average and, according to present indications, may show a similar decrease in June. The May decline reflected mainly a further substantial reduction in activity in industries manufacturing durable goods. Output of nondurable goods and of minerals, which earlier had declined more than output of durable goods, showed only slight decreases in May.

Activity in the iron and steel, machinery and nonferrous metals industries showed marked declines in May, reflecting a reduced volume of orders. Steel production averaged 93 per cent of capacity and since then has declined further to a scheduled rate of 84 per cent of capacity during the week beginning June 20, as compared with the peak of 103 in March. Machinery production has declined about one-fifth since the end of last year. Output of passenger cars was temporarily curtailed in May as a result of a major work stoppage, but by mid-June increased to new record postwar rates. Activity in most other industries manufacturing durable goods declined slightly in May.

Activity in the cotton and rayon industries decreased further. Output of wool textiles, however, increased from the exceptionally low April rate, which was about 40 per cent below peak postwar levels. Cotton consumption in May was at the lowest rate since 1939. Petroleum refining activity showed a slight gain in May, and newsprint consumption rose further to a new record rate. Activity in most other nondurable goods industries showed little change.

Minerals output was slightly smaller in May. Activity at nonferrous metal mines was substantially curtailed and iron ore output, after allowance for seasonal changes, was slightly below the exceptionally high April level. Crude petroleum production showed little change. Coal output increased somewhat in May, but has been curtailed sharply in June.

Construction—Value of construction contracts awarded, according to the F. W. Dodge Corporation, rose slightly in May reflecting further increases in awards for public construction. Private awards were slightly smaller than in April and continued considerably below a year ago. The number of new housing units started increased further in May and was close to the peak level of 100,000 units a year ago, according to estimates of the Department of Labor.

Distribution—Value of department store sales in May showed little change from April, after allowance is made for the usual seasonal fluctuation. Sales in the first half of June were 7 per cent below

the high level of the corresponding period in 1948, reflecting in part lower retail prices for apparel and housefurnishings.

Shipments of railroad freight declined in May and early June, reflecting mainly a marked reduction in loadings of miscellaneous products. Total carloadings, after allowance for seasonal changes, have declined about 12 per cent since last autumn.

Commodity prices—The general level of wholesale commodity prices declined 2 per cent from the middle of May to the third week of June. Meat and livestock prices showed small net change, as decreases in mid-June followed advances in the latter part of May. Cash wheat prices declined about 10 per cent as marketings of another large crop commenced. Prices of industrial commodities, especially textiles, paper, metals and building materials, continued downward from May to June.

In May retail prices of most groups of consumers' goods were somewhat lower than in April. The B.L.S. index for all items, including rents and other services, was 169.2 as compared with 169.7 in April and the recent low point of 169.0 in February.

Bank credit—Business loans at banks in leading

cities declined substantially during May and by somewhat smaller amounts during the first half of June. Real estate and consumer loans increased slightly. Banks purchased about 2 billion dollars of Government securities of both long and short maturities, in part out of reserve funds released by the reduction in reserve requirements effective in early May.

Treasury expenditures were considerably greater than receipts in the first half of June, and Treasury deposits at the Reserve Banks declined substantially. This supplied banks with reserve funds and banks bought Government securities from the Federal Reserve System and increased their excess reserve balances. Subsequently banks lost reserve funds as Treasury balances at the Reserve Banks were built up by quarterly income tax payments. Reserve System holdings of Government bonds declined further during June.

Security markets—Common stock prices decreased about 9 per cent, with a moderate volume of trading, in the four weeks ended June 13 and recovered part of the decline in the following 10 days. Prices of high-grade corporate bonds changed little.

