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## REGIONAL INTERDEPENDENCE

AND

## DISTRICT DEVELOPMENT

*Growing interdependence is characteristic of the modern world economy. This fact has led to establishment of comprehensive measures of economic activity. Such measures are useful but conceal regional and industrial variations. The Eighth District represents a low income region which needs fuller economic development. To define the problems of district development and to gauge district progress more accurately new measuring devices are needed particularly to trace interregional relationships. Income studies can be extended to provide more adequate information for guidance in carrying out economic development here. Input-output analysis offers a promising approach.*

*Interregional relationships are of key importance to this district. District "exports" are a major income source for the district, as illustrated by the examples of Arkansas and Missouri. Industries producing these "exports" are strategic for the region. Data on commodity flows for strategic industries in Missouri and Arkansas indicate the areas with which they have close economic ties. Income growth in those areas has a direct effect on economic development in this district.*

*Regional interdependence is the net effect of underlying industrial interdependence. The chemical industry illustrates industrial interdependence which exists throughout the United States economy. Economic development can be understood better in the light of this interdependence.*

**Growing interdependence is a characteristic of the modern world economy.**

The history of the first half of the Twentieth Century has made increasingly clear the growing interdependence of the modern world. The past 50 years have seen the United States become a great world power—with the wide responsibilities that accompany that position. This nation's political and economic power results on the one hand in events here having worldwide impact, and on the other hand in increased United States sensitivity to events occurring abroad. For example, the possibility of a major depression in the United States following World War II strongly conditioned Western European and Russian political and economic policy. And in contrast, the North Korean crossing of the 38th parallel had a quick and profound impact on St. Louis manufacturers and Mississippi cotton planters.

This interdependence is characteristic not only of the world economy but also of national economies. Thus agricultural prosperity in the United States depends in large measure upon high level activity in the nonagricultural segments of the economy. And the impact of the present defense program spreads throughout the nation, affecting the various geographic areas of the United States. The Eighth District is influenced strongly both by national economic developments and by developments originating in other Federal Reserve districts.

**This fact has led to establishment of comprehensive measures of economic activity.**

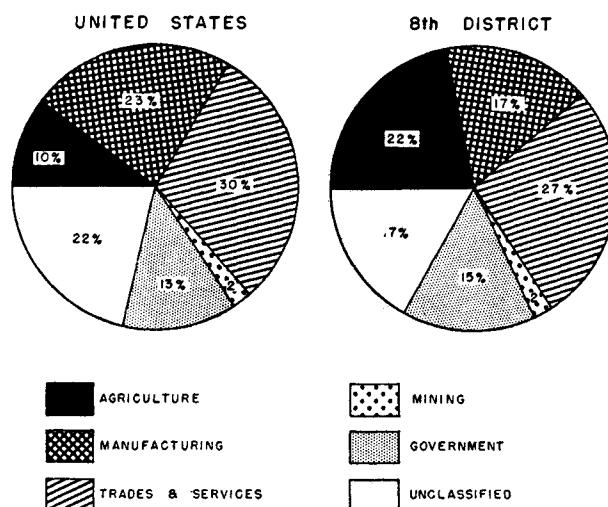
Recognition of the need to approach the economic problems of the day in terms of the economy as a whole has led to the creation of a number of comprehensive and easy-to-understand measures of economic activity, measures which help appraise the broad problems of economic policy without the analyst becoming lost in a maze of facts and figures. Today such economic concepts as Gross National Product and National Income and their component parts are widely used, not only by professional economists, but by many businessmen, farm and labor leaders, political representatives and others. These measures provide periodic and current checks on the level of economic development in the nation and the rate of economic growth. Their analysis often provides indication of what to expect in the future.

**Such measures are useful but conceal regional and industrial variations.**

But useful as they are, these broad aggregates and averages tend to conceal important deviations. The United States economy is geographically wide-

CHART I

Income patterns reflect the resource base....



spread and its several areas contain different amounts of basic resources and people. It is equally important to recognize that these various areas have attained different levels of development, that there are differences in types of economic problems as between regions. Particularly to those who live and earn their livelihood in a given area, local deviations from national averages are of great importance.

**The Eighth District represents a low income region which needs fuller economic development.**

The Eighth Federal Reserve District is one which deviates on the minus side from the national income measures. Average income per person in this district is running at just about three-fourths of the national per capita income figure. And within the district proper there are pronounced differences among various areas in income level. In Eighth District Missouri income per person is about 90 per cent of the national average, in Eighth District Mississippi it is only half the national average.

Investigation and analysis of the various components and sources of Eighth District income throw considerable light on the factors responsible for the lag in per capita income here. In brief, the relatively low level of district income reflects the facts that a large segment of district population is engaged in relatively low productivity agriculture and that there are not sufficient opportunities to shift into higher productivity jobs within the district. It is encouraging to note, however, that over the past decade income growth in the district has been at a more rapid rate than nationally, a development which indicates rising productivity per person as additional opportunities open up.

In agriculture, a smaller labor force is applying more productive methods to the land, and the trend toward mechanization and diversification is rising. With decreased reliance on single cash crops and with growth in livestock farming, the rural areas of the district are improving their relative income positions. This development illustrates the fact that the district's basic resources can be made to yield higher returns if combined with more capital and technical skill. A long-run movement from farming into nonagricultural lines, preferably to new industrial opportunities developed as integral parts of the district economy, would continue the trend toward higher average productivity and higher average income.

***To define the problems of district development and to gauge district progress more accurately, new measuring devices are needed . . .***

The essential point in connection with this brief discussion of the Eighth District economy is that the national measures do not give sufficient indication of the nature and scope of the district's problems. A body of economic data relating to the district is necessary to bring out the facts about the district's deviations from the national totals and averages. To be sure, some vague generalizations can be made about the district without comprehensive district measures, but to get reasonably precise information requires district data which can be related meaningfully to other economic intelligence.

In other words, what is needed for a region, as for the nation, is a body of information which will serve as a sort of combined measuring stick and divining rod—a measuring stick to indicate level and rate of growth, a divining rod to indicate problem areas or segments. This bank has been developing a considerable amount of information on income levels, sources and components for the district as a whole and for many small areas within the district. These data are proving most useful in lending precision to definition of the district's position and problems.

***. . . particularly to trace interregional relationships.***

So far, the income data developed for this district have been applicable primarily to analysis of relationships within the district proper—intradistrict relationships. These are of major importance, of course, but they (and other data on resource use, productivity, etc.) do not give the whole picture of the district's economic problems. There are two other sets of basic relationships that need to be understood and measured with reasonable accuracy to get this whole picture. The more important set

is concerned with relationships of the district, or one of its areas, with the other regions of the United States. The other set concerns relationships with the rest of the world. Of course, it should be recognized that all three of these sets of relationships are simply different views of an interdependent economy from a particular geographic or industrial reference point. But to give depth to the picture the three views have to be put together.

***Income studies can be extended to provide more adequate information . . .***

By extending the scope of the income study it is possible to get a clearer view of these other relationships and thus set out the district's problems and potential developments in bolder relief. And it should be stressed again that the major purpose of this kind of project is to produce a better and more accurate measuring stick and divining rod. With this it should be possible to indicate the fields in which efforts to get more income and better living for the district's people can be made most effectively, and to see areas where there needs to be more development of resources.

***. . . for guidance in carrying out economic development here.***

With this kind of information, plus intelligent leadership, many of the hit-or-miss aspects of economic development can be avoided. For example, there is little point in indiscriminate search for manufacturing industries simply as the result of a general idea that industrialization is good for a region. Location here of industry which is chronically unstable or ill suited to the resources of the district could well create as many or more problems as our present low income level. The essence of proper analysis and adequate data is to provide good guides for the people of this district in their search for more industry of the kind that fits best into this region's economy.

***Input-output analysis offers a promising approach.***

One very promising method of approach to the measurement of relationships of this region (or of a part of this region) to the rest of the national economy is through what is called "input-output analysis." This type of analysis has been developed mainly at Harvard University under Professor Wassily W. Leontief. While its operational method is a rather complicated mathematical process, the basic principle is fairly easily understood. Like most analytic procedures in economics it involves an arrangement of numerically expressed data in such form that relationships can be seen clearly. Its basic requirement is adequate data to be put into the

analytic form. So far the technique has been applied primarily to analyzing interindustry relationships on a national scale. It can be used for interregional analysis, however, and some indication of what can be accomplished through this approach is given in the following sections of this article.

***Interregional relationships are of key importance to this district.***

The importance of analyzing interregional relationships can be recognized more clearly perhaps if we note that this district has both "exports" to and "imports" from other sections of the nation. The smaller the area under consideration the more important "exports" are as an income source and the more important "imports" are in the area's expenditures. At present, there is not sufficient information to give a completely reliable estimate of the volume of Eighth District employment directly dependent upon district "exports"—goods produced here but sold to users outside the district. Such data as are available suggest that not less than one-third of our total district employment depends on this "export" business, however. For particular segments of the economy—for example, cotton farming—that figure would be much higher. Similarly, it would be higher for a particular area within the district.

***District "exports" are a major income source for this district as illustrated by the examples of Arkansas and Missouri.***

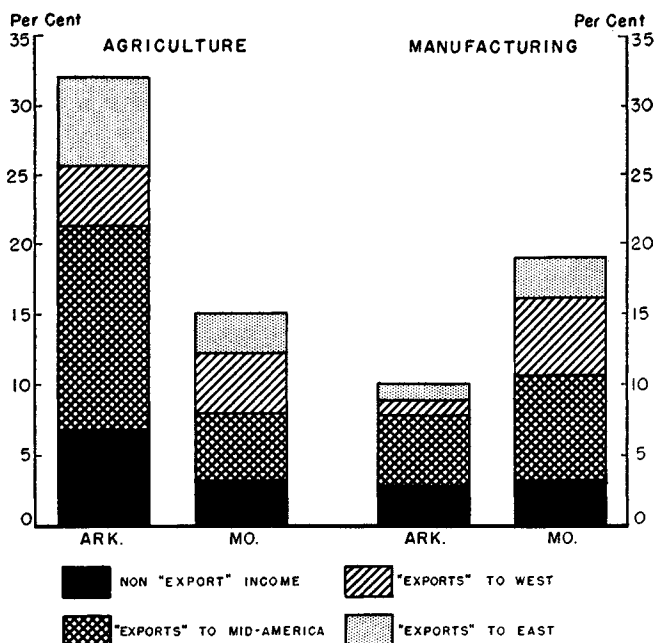
About 32 per cent of Arkansas income and about 17 per cent of Missouri income is earned in agriculture. For each state almost four-fifths of this farm income is earned by the export of agricultural commodities outside the state. Thus with respect to agriculture alone about 25 per cent of Arkansas' and 13 per cent of Missouri's total income is attributable to the out-of-state export of farm products.

Manufacturing income in Arkansas accounts for approximately 10 per cent of total state income. About 71 per cent of this, or roughly 7 per cent of total state income, is earned by direct export of manufactured products. Manufacturing activity earnings account for 20 per cent of Missouri income, and 83 per cent of Missouri manufactures are transferred across the state boundaries. Thus roughly, 17 per cent of Missouri income comes from the manufacturing production for out-of-state export.

Mining income represents a small proportion of total income in both Arkansas and Missouri (2 and 1 per cent, respectively). Most of Arkansas' mining income is attributable to the export of mineral products. Bauxite and alumina constitute a principal

**CHART II**

"Export" income — important to small areas.....



item of which a large portion is shipped to the State of Washington. By way of contrast Missouri's mining income is principally due to consumption of its own mineral products (63 per cent).

***Industries producing these "exports" are strategic for the region.***

The importance of "exports" as sources of Arkansas and Missouri income is not fully expressed, by any means, by the foregoing examples. Chart I showed that 59 per cent of total district income originated in the three categories: Trade and Services, Government, and Unclassified. Examination of these groups and their role in the district economy throws additional light on the significance of "exports" as sources of district incomes.

The service industries earn directly a large element of "export" income. Income from these "invisible exports" is earned through the performance of services in the district for residents of other areas. For example, a principal export item is tourist trade. Visitors to Missouri spend annually about \$200 million on food, lodging and entertainment. About 7 per cent of Arkansas' total income is earned by providing services to tourists.

In addition to these direct "invisible" export items, the service industry group depends indirectly upon "exports" for a large share of its income. As the term implies, these lines service other industries and households in their relatively immediate area. Thus service industries sometimes are called "residential" or "tertiary" industries (as distinguished

from the extractive or "primary" industries and the manufacturing or "secondary" industries). The level of employment and income in the service industries is directly related to the level of employment and income in the primary and secondary industries located in their service areas. Consequently, anything that increases mining, agricultural and manufacturing incomes within the area is also reflected in increased tertiary incomes. And in return, increased tertiary incomes provide to some extent an increased local market for products of local primary and secondary industries. Thus, to the extent that "exports" of primary and secondary products out of the district provide more incomes in these industries than would otherwise be available, this income is "multiplied" by the pattern of income flows within the district to the substantial benefit of the service industries.

The same general remarks apply to the groups of activities classified as Trade, as well as to those grouped in the Unclassified category. The latter group is primarily composed of the construction, communication, transportation, and public utilities industries, all of which are essentially residentiary or tertiary activities.

The Government category deserves special comment. As classified in Chart I, this consists of local, state, and Federal Government payments to individuals. Incomes received from state and local governments are quite similar to incomes from the other tertiary industries. As the wealth, income, and population of an area grow, the need for governmental services also grows. To the extent that incomes earned by "exports" to other areas contribute to the area growth, the state and local government sector is affected by these "exports."

Of the total income in the Government category, a substantial portion represents payments by the Federal Government to residents in this district. Some of this reflects payments for services performed in this area. In that sense it is in the same class as the non-Federal Government service income noted above. Some payments, however, represent a transfer of income earned in other areas to this area via the United States Government. To the extent that these represent a transfer of income from high to low income areas, economic progress in this region presumably would lead to a decrease in such payments. But as long as these payments continue, they represent inflows of income from outside the district, and have a "multiplier" effect on district incomes.

Thus it may be seen that a substantial portion of district income is indirectly generated by income inflows from other areas. The problem of economic development is in part that of increasing the earning power of these important industries. A general policy of combining district resources with more capital and technical skill provides the foundation for this development.

***Data on commodity flows for important industries in Missouri and Arkansas indicate the areas with which they have close economic ties.***

The accompanying maps summarize in broad outline certain estimated income relationships between Arkansas and Missouri and other states in the nation.

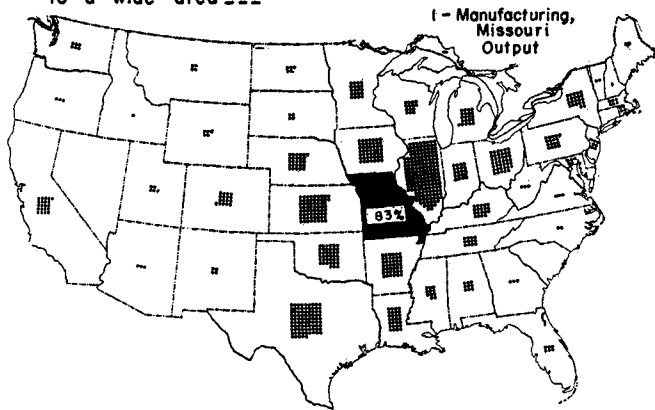
As indicated by Map 1, approximately 83 per cent of Missouri manufactures are shipped out of the state and flow in substantial amounts to all but four states in the nation. Illinois takes the largest single portion, with Texas, Kansas, and Arkansas following next in order of importance. Since these "exports" produce income for Missouri residents, the maps also indicate the relative importance of the several states as sources of Missouri income from manufacturing activities.

Of the total volume of manufactured inputs to Missouri industries and households, approximately 84 per cent are "imported" from other states (Map 2). Missouri expenditures on these goods provide income flows in varying degree to every state. Illinois is the largest single recipient of these expenditures, and Kansas, Oklahoma, and Texas follow as the most important sources of manufactured products for Missouri.

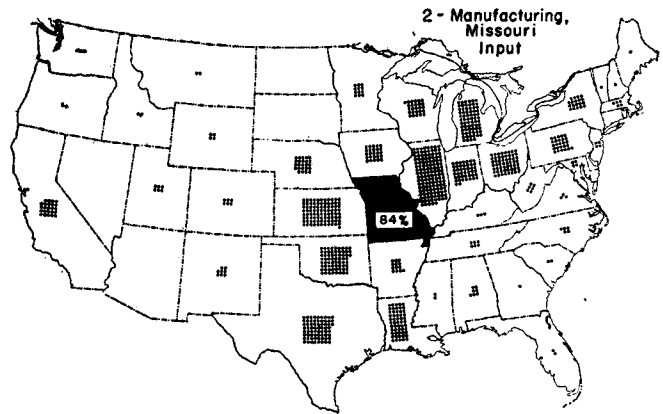
The differences in resource base and industrial structure between Arkansas and Missouri give rise to contrasting patterns of commodity flows. Less-industrialized Arkansas "exports" only 71 per cent of its manufactured commodities and to a fewer number of states than Missouri (Map 3). Thus Arkansas receives not only a smaller proportion of its manufacturing income from out-of-state sources but from a fewer number of sources as well. Louisiana, Tennessee, Mississippi, and Missouri make up the most important out-of-state market for Arkansas' manufactured goods.

Similar contrasts are evident with respect to inputs of manufactures into Arkansas industries and households (Map 4). Predominantly agricultural Arkansas purchases about 67 per cent of its consumption of manufactures from out-of-state sources as contrasted to Missouri's 84 per cent. This

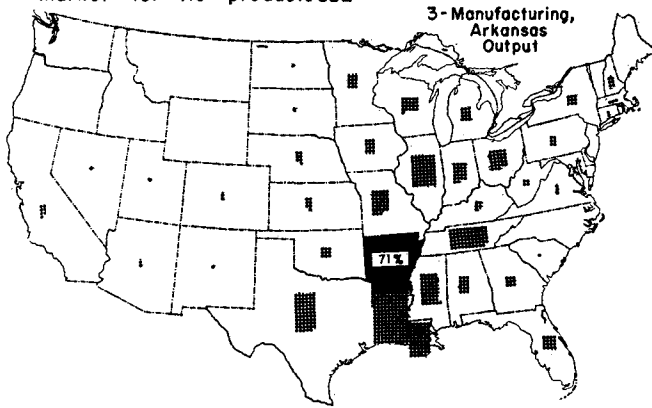
Missouri exports a large portion of its production to a wide area ---



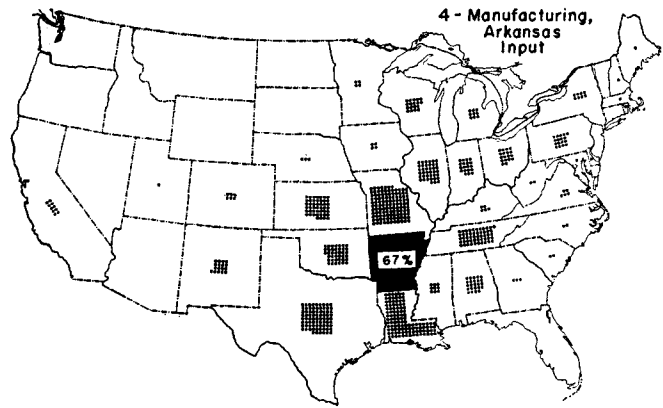
--- and imports a high percentage of its consumption.



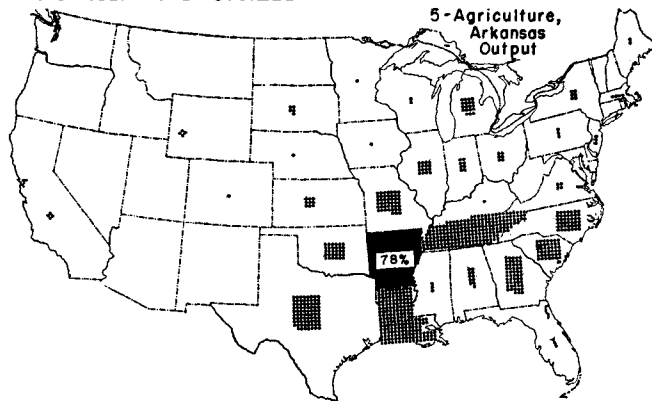
Less industrialized Arkansas has a more limited market for its products ---



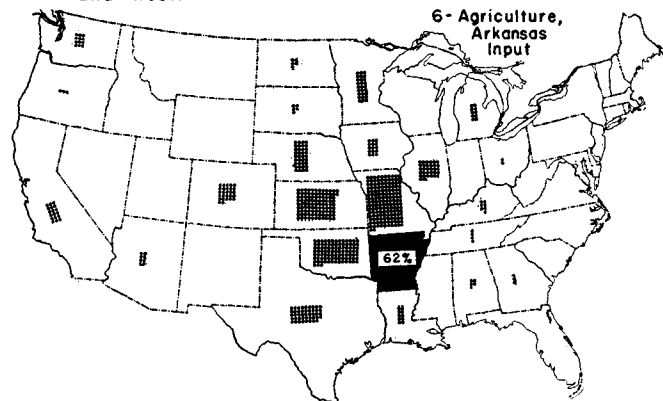
--- and purchases less from other states.



Arkansas agricultural products move mainly to the south and east ---



--- imports come largely from states to the north and west.



Maps 1, 3, and 5 show the geographic distribution of "exported" manufactures and agricultural commodities from Missouri or Arkansas. Maps 2, 4, and 6 present the same information for sources of "imports".  
One dot = 0.1 per cent of total Missouri or Arkansas production or

consumption of specified products.

Map 1, for example, reveals that Missouri "exports" about 83 per cent of its manufacturing output. The 21 dots in California indicate that Missouri "exports" 2.1 per cent of its manufactures to California.

is explained principally by the difference in industrial structure and income levels between the two states. Around 80 per cent of total value added in Arkansas is represented by industries processing materials native to the state. These industries require relatively small amounts of manufactured or semi-manufactured inputs to support their operations. In addition, the relatively low per capita income of the state (61 per cent of the national average) sharply curtails the Arkansas market for manufactured consumer goods.

As would be expected, the data with respect to income relationships with other areas via agricultural products present a pattern somewhat different from that of manufactured products. The most striking features (Maps 5 and 6) are: 1) Agricultural production gives rise to income relationships with a fewer number of states in general than manufacturing production. This is characteristic of most states, not only Arkansas. 2) Agricultural products typically move in an easterly direction. Arkansas agricultural output is exported largely to states to the east and south. Agricultural inputs in Arkansas originating outside of the state come mainly from the west and north. 3) Agricultural states "export" relatively more of their agricultural production than of their manufactures but "import" substantially less.

***Income growth in those areas has a direct effect on economic development in this district.***

The maps on page 110 serve to give a general impression of the diversity of income relationships these states have with other states in the country. Grouping states into somewhat arbitrary areas serves to clarify the impression created by the maps. For purposes of illustration we might divide the United States into three large regions, Mid-America, all states to the west, and all states to the east. Mid-America includes the following states from north to south: Minnesota, Wisconsin, Iowa, Illinois, Indiana, Missouri, Kentucky, Tennessee, Arkansas, Louisiana, and Mississippi. Chart II summarizes the income relationships of Arkansas and Missouri with these areas with respect to agriculture and manufactures.

It is through the "import-export" patterns lying behind such income relationships that developments in the rest of the economy are transmitted to this district. If industries in the district transfer most of their "exports" to growing prosperous areas, this will imply increasing incomes here. Changes in resource utilization in other areas which open new

markets for the products of the resources in this district will likewise be reflected in increased levels of living.

***Regional interdependence is the net effect of underlying industrial interdependence.***

For purposes of specific policies for economic development such observations need to be sharpened. The data so far provide only very general indications of the importance of external income relationships for the area. To understand how developments in other areas may affect district incomes we need not only more specific information on the kinds of goods produced and "exported" by the district but the role played by the production of such goods in this region's economy. An increase in the demand for aluminum implies increased shipments of alumina from Arkansas to Washington, not of mineral products in general. Increased alumina production in turn holds quite different implications for district incomes than increased activity in some other line of production using different resources.

Interregional income relationships are the product of the exchange of a wide variety of goods and services. This interregional exchange is simply a manifestation of an underlying industrial interdependence—an interdependence which in many cases is national in scope. Goods produced and "exported" by this district represent inputs to industries and households in other areas. Similarly district "imports" which serve as inputs to industrial and household consumers in this area represent outputs of industries in other regions. Consequently we may better understand interregional income relationships in the light of a knowledge of the regional industrial structure of the economy.

***The chemical industry illustrates industrial interdependence . . .***

The phrase "industrial interdependence" is descriptive of a very complicated set of circumstances. The interrelation of each activity with all others in the economy is partly observable in the budget of each enterprise and household. An industry (as used here, this simply means any group of economic activities including government and households) is directly connected with the economy as a whole by its purchases on the one hand and its sales on the other. Systematic classification of these inputs and outputs by industrial groups gives a clearer picture of the position of an industry with respect to the rest of the economy.

**Purchases and sales link each industry to all others . . .**

**CHEMICAL INDUSTRY, INPUT-OUTPUT**

| Industry Group             | (1)  | (2)  | (3)  |
|----------------------------|--|--|--|
|                            | Distribution of Chemical Industry Sales to Other Industry Groups | Distribution of Chemical Industry Purchases From Other Industry Groups | Chemicals Per cent of Consuming Industry Costs |
| Agriculture .....          | 8.6%   | 4.8%   | 2.8%   |
| Food Products .....        | 3.7  | 1.4  | 0.9  |
| Ferrous Metals .....       | 1.1  | ...  | 1.3  |
| Motor Vehicles .....       | 1.0  | 0.1  | 0.7  |
| Metal Fabricating .....    | 3.2  | 0.9  | 1.5  |
| Nonferrous Metals .....    | 0.1  | 2.1  | 0.2  |
| Nonmetallic Minerals ..... | 0.5  | 3.6  | 0.8  |
| Fuel and Power.....        | 0.4  | 5.5  | 0.1  |
| Lumber and Paper.....      | 3.4  | 1.8  | 1.8  |
| Textiles and Leather.....  | 9.6  | 0.4  | 5.2  |
| Rubber .....               | 0.9  | 0.1  | 3.4  |
| Other Manufacturing .....  | 1.2  | 0.1  | 2.4  |
| Construction .....         | 10.9   | 0.6  | 3.4  |
| Transportation .....       | 0.6  | 6.6  | 0.2  |
| Trade .....                | ...  | 3.5  | ...  |
| Foreign Trade .....        | 6.0  | 2.5  | 5.1  |
| Services .....             | 1.0  | 5.7  | 0.2  |
| Government .....           | 0.5  | 3.6  | 0.1  |
| Other Industries .....     | 18.4   | 25.3   | 2.5  |
| Household .....            | 28.9   | 31.4   | 1.2  |
| Total .....                | 100.0%   | 100.0%   | 1.4%   |

Table 1 depicts the chemical industry in terms of its inputs (purchases) and outputs (sales). To simplify the accounts, all economic activities in the economy have been consolidated into 21 industrial groups.

The wide distribution of both inputs and outputs for this industry is noteworthy. Partly this is the result of a rather wide classification system, but more importantly it reflects the importance of chemistry in our modern technology. Chemical industry output is a direct input to a large number of industries and consequently is directly influenced by a wide range of activities in the economy. Chemical producers in turn transmit these influences to a wide range of other industrial groups, but in varying degree.

Column 1 of Table 1 shows the distribution of output of the chemical industry to other industries as percentages of total chemical sales. As only about 29 per cent of the industry's product entered directly into household consumption, the remaining 71 per cent of the output was subject to what might be called derived or indirect demand. Some of this derived demand comes through very many industrial processes before it reaches the chemical industry—a sort of modern day parallel to the childhood story about the war that was lost for want of a horseshoe nail. This derived demand can be understood and anticipated if we understand the complicated chain of transactions which lies between the industry and the original source of the demand.

Column 3 presents the same information on sales in a different perspective. Chemical industry sales are shown here as a cost item to consuming industries. In other words, column 3 illustrates the im-

portance of chemicals as cost items to the several industrial groups consuming chemicals. Thus, 1.2 per cent of household expenditures were directly for chemical products, while to the textile and leather industry, chemicals represented 5.2 per cent of the total cost of manufacturing.

Column 1 and column 3 provide some interesting comparisons on the nature of interindustry relations. Sales to the rubber industry amounted to only 0.9 per cent of the total output of the chemical industry, while the food products industry purchases of chemicals amounted to 3.7 per cent of chemical output. Yet a \$10 million increase in food products output would have resulted in less than a \$100 thousand increase in the output of chemicals. On the other hand, a similar increase in rubber output would have resulted in \$340 thousand increment to chemical output. A similar increment to output in each of the other industries would also have had widely different effects on the chemical industry. Thus, it is important for an analysis of income and development in an area to know not only what is produced there and in what areas it is sold, but to what uses the products are put. These relationships underlie the income relations of this district with other areas.

Column 2 shows the purchases of the chemical industry from industries listed as a percentage of total chemical output. This serves to illustrate how part of the impact of change in the economy is relayed back to the economy by the chemical industry. It also shows how in the process the effects vary among the industries supplying inputs to the chemical industry. The effects of increased output in this industry will be passed on to the rubber manufacturers to a much lesser degree than to fuel and power producers, the transportation industry, services (industries important to the generation of local incomes), agriculture and others.

However, Table 1 shows us only the direct effects of change in the rest of the economy on the chemical industry. There are a great many indirect effects (operating through the derived demand discussed above) which may be more important in total than those plainly implied by sales and costs accounts. If we construct a similar table for each industry and view them all together we can trace out the total implication of economic change on resource allocation among industries. For example, Table 1 indicates only 6 per cent of chemical output was dependent upon export trade. If we consider the industries consuming chemicals whose products also enter foreign trade, this figure becomes 9 per cent. If, however, we examine all of the inter-



industry relationships, we find that approximately 15 per cent of chemical output depended upon American exports.

*. . . which exists throughout the United States economy.*

For the United States as a whole, examination of the distribution of output for each industry reveals that about 2 per cent of total employment was directly involved in American export trade. Consideration of the secondary employment raises this to 4 per cent. An estimate of the total (direct and indirect) importance of exports to the economy raises this to the significant figure of 10 per cent.

The foregoing remarks have all been made with reference to the nation. It can readily be seen, however, that they are directly applicable to smaller areas. If an economy with only a small per cent of its employment directly generated by exports actually has 10 per cent in one way or another dependent upon export markets, imagine the importance of "exports" to a region where 30 per cent of the employment is directly engaged in such industries. Consequently, if we are to fully comprehend the significance of regional income relationships with other areas we need information on the industrial structure of this area and its industrial input-output links with the rest of the nation.

*Economic development can be better understood in the light of this interdependence.*

Research is currently under way which will provide detail on the interindustry and interregional flow of commodities and services for major regions in the United States. These commodity and service flows also represent income flows. This information will be of major value in analyzing both short and long run problems of economic development.

In fact, of course, the short and long run considerations for economic development are not really separable. The essential need for long run consideration is that it permits better selection of various short run alternatives. With adequate information it should be easier to pick the correct short run policies.

In any event the facility with which district resources can be adapted best to changing conditions in the rest of the economy is likely to be a measure of its successful development. In part, this adaptability will depend upon a skilled and productive labor force working with adequate tools and capital equipment. In part, it will depend upon diversification.

It should be stressed that diversification means something different from a wide variety of classi-

fiable income sources. It simply means that the resources of this district should be developed to the point where they are capable of efficiently supplying a wide range of industrial and household needs, directly or indirectly. Thus, a highly developed forest products industry, although operating with a specialized resource, may provide the kind of diversification the district needs. Forest products find their way into a great variety of industrial uses and if this district's forest resources could be fully developed, their products would be able to serve an increasing number of uses. Agriculture, leather, and many other of the extractive and manufacturing industries for which this area is ideally suited could be developed toward more diversification in this sense.

In all of these cases there is the problem of priorities. The question inevitably turns to the specific from the general. Which resources should be developed most extensively? In which industries should capital formation be most encouraged? The answers to these and similar questions rest partly upon an assay of district resources and partly upon the way in which we envisage the impact of economic change in the rest of the nation on this region. It is for purposes of this latter estimate that we may perhaps most fruitfully speak of the short and long run.

In the short run, economic development of this or any area must be cognizant, to the degree possible, of the effects of current and anticipated changes in the country as a whole. There is small value, for example, in undertaking development programs which may run directly counter to adjustments likely to be forced on an area by the rest of the economy.

For the longer run, we are interested in questions such as the following. Which types of capital expenditure are most likely to (a) provide the greatest impetus to income growth within the region, and (b) provide the focal point for the greatest development of industries strategic for interregional income flows? What will be the effect on the region of long run developments in other areas? What adjustments to these will most facilitate this region's ability to share in such developments? We are really asking: How can this district make the greatest contribution to national economic development? By so doing we will insure maximization of our own rate of growth. To this end the extension of income studies along the lines indicated can provide much needed information.

Guy Freutel

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# Survey of Current Conditions

Beset by floods and excessive rains, disappointing consumer spending, and military expenditures below anticipated rates, the economy of the Eighth District slowed down somewhat during July from the high levels of activity reached earlier this year. Flood damage to crops and businesses along the river was heavy. In addition interruption of transportation and normal living patterns slowed production in some businesses not directly hit by high waters. Nevertheless, the material cost of the flood, in this district, while immeasurable in terms of distress to those affected, will not be large in terms of total District income this year.

Several factors, along with the flood, contributed to the slowing down of activity in the Eighth District. During June and early July, consumers and businesses continued their policy of cautious buying. Prices at retail were generally steady and at wholesale eased off some. Beef slaughter and whiskey production were down sharply in June from the previous month. Bank loans to business decreased. Agricultural prospects in several important district farming areas were not too bright at mid-July.

On the other hand, district manufacturing activity as indicated by electric power consumption remained at the high level of previous months. Steel, coal, and crude oil production were virtually unchanged in June.

Nationally, both employment and unemployment were up in June, when increases are normally expe-

rienced. Manufacturers' inventories have been increasing (up \$1 billion from April to May to \$39 billion) but so have their unfilled orders. Manufacturers sales were up slightly. Consumers have purchased goods in sizable volume, but not fast enough to prevent retailers' stocks from increasing, and not as rapidly as might have been anticipated on the basis of expanding personal income alone.

The index of industrial production declined more than seasonally in July. Wholesale prices—except for foods—moved downward somewhat in June and early July and consumer prices showed greater stability than had appeared for many months.

Some indicators suggest that activity in the private sector of the national economy is easing downward. In such a situation large and growing business inventories, softening wholesale prices, and disappointing sales might be regarded as sources of potential economic difficulty. Balanced against this picture, however, is the large and growing defense program, with expected government deficits, which will exert a two-fold influence in coming months. First, the growth in defense production will tend to maintain employment and income. The bulk of the defense program lies in the future. About \$42 billion in defense orders have been placed since Korea. Some \$10 billion in military goods have been delivered and industry now has \$32 billion in contracts on its books. In addition, contracts are still being let. Second, a program of this size may divert materials from civilian markets to the extent that cumbersome inventories may become comfortable stock piles of needed consumer goods.

## PRICES

| WHOLESALE PRICES IN THE UNITED STATES |           |          |           |                          |           |
|---------------------------------------|-----------|----------|-----------|--------------------------|-----------|
| Bureau of Labor Statistics (1926=100) | June, '51 | May, '51 | June, '50 | June, 1951 compared with |           |
|                                       |           |          |           | May, '51                 | June, '50 |
| All Commodities....                   | 181.7     | 182.8    | 157.3     | - 0.6%                   | +15.5%    |
| Farm Products....                     | 198.6     | 199.6    | 165.9     | - 0.5                    | +19.7     |
| Foods.....                            | 186.3     | 187.2    | 162.1     | - 0.5                    | +14.9     |
| Other.....                            | 170.5     | 171.5    | 148.8     | - 0.6                    | +14.6     |

| CONSUMER PRICE INDEX*                    |               |               |               |                             |              |
|--|---------------|---------------|---------------|-----------------------------|--------------|
| Bureau of Labor Statistics (1935-39=100) | June 15, 1951 | Mar. 15, 1951 | June 15, 1950 | June 15, 1951 compared with |              |
|  |               |               |               | Mar. 15, '51                | June 15, '50 |
| United States.....                       | 185.2         | 184.5         | 170.2         | + 0.4%                      | + 8.8%       |
| St. Louis.....                           | 185.0         | 185.2         | 168.8         | - 0.1                       | + 9.6        |
| Memphis.....                             | 187.8         | 186.5         | 172.7         | + 0.7                       | + 8.7        |
| * New series.                            |               |               |               |                             |              |

| RETAIL FOOD*                             |               |              |               |                             |              |
|--|---------------|--------------|---------------|-----------------------------|--------------|
| Bureau of Labor Statistics (1935-39=100) | June 15, 1951 | May 15, 1951 | June 15, 1950 | June 15, 1951 compared with |              |
|  |               |              |               | May 15, '51                 | June 15, '50 |
| U. S. (51 cities).....                   | 226.9         | 227.4        | 203.1         | - 0.2%                      | +11.7%       |
| St. Louis.....                           | 238.2         | 238.4        | 210.2         | - 0.1                       | +13.3        |
| Little Rock.....                         | 225.2         | 225.1        | 200.1         | - 0-                        | +12.5        |
| Louisville.....                          | 215.5         | 213.7        | 192.0         | + 0.8                       | +12.2        |
| Memphis.....                             | 233.0         | 234.6        | 208.3         | - 0.7                       | +11.9        |
| * New series.                            |               |              |               |                             |              |

## EMPLOYMENT

Total employment in the nation rose somewhat during June, largely as a result of the seasonal expansion of agricultural activity and construction.

## WHOLESALE

| Line of Commodities  | Net Sales     |           | Stocks        |
|--|---------------|-----------|---------------|
|  | June, 1951    |           | June 30, 1951 |
|  | compared with |           | compared with |
| Data furnished by Bureau of Census, U. S. Dept. of Commerce* | May, '51      | June, '50 | June 30, 1950 |
| Drugs and Chemicals.....                                     | - 3%          | +22%      | ....%         |
| Dry Goods.....   | - 3           | +22       | ....          |
| Groceries.....   | - 2           | + 8       | +26           |
| Hardware.....  | - 2           | - 2       | +58           |
| Tobacco and its Products.....                                | - 2           | - 2       | ....          |
| Miscellaneous.....   | -10           | - 3       | +26           |
| **Total All Lines.....                                       | - 5%          | + 5%      | +33%          |

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

Due largely to the influx of students and graduates into the labor market during June, the labor force increased by nearly one million persons over May and swelled the number of persons seeking work. However, unemployment in June was 41 per cent under the June, 1950 level.

Manufacturing employment in the nation held steady in June, with seasonal layoffs in textile and apparel plants, and declines in television, furniture and automobile industries offset by increases in defense plants and metal working plants. Slackening demand for some products and curtailed use of steel and other metals in nondefense production caused the declines. The layoffs affected mostly the unskilled workers and did not have an appreciable effect in easing the shortage of skilled workers.

In June total employment in the five major industrial areas of the Eighth District was up less than 1 per cent from May but was 4 per cent greater than June, 1950. Total nonagricultural employment was unchanged from May.

In the St. Louis metropolitan area, employment was about the same as in May but about 4 per cent higher than it was in June, 1950. Seasonal layoffs in the shoe and apparel industries caused unemployment to increase in June. Continued claims for unemployment compensation for the week ended June 23 in St. Louis city and county were up 18 per cent over the week ending May 26. Total employment in the East St. Louis area also showed a substantial decline during June. Layoffs in meat packing, fertilizer plants and one defense plant which had to retool were the main causes of the decline.

In Evansville total nonagricultural employment decreased slightly in June from May but was 1 per cent over the June, 1950 level. Employment decreases in refrigerator and automobile manufacturing plants were the chief cause of the decline and further decreases were announced in early July.

Nonagricultural employment in Little Rock during June was off less than one per cent from May but was still higher than a year ago. Manufacturing employment dropped slightly, and trade employment somewhat more. These declines were almost offset by an increase in construction employment.

At Louisville there was a slight increase in nonagricultural employment as a result of increases in construction and government, which more than offset the decline in manufacturing employment.

The total employment picture in Memphis was about the same as in May with declines in trade and increases in construction. Total nonagricultural

employment in Memphis was up slightly from May and was higher than a year ago.

## INDUSTRY

Eighth District manufacturing activity in June was about equal to that of May, but remained well above the level of June, 1950. Daily average industrial consumption of electric power was slightly greater in June than in May, and steel, coal and oil production was maintained at about the same level in June as in May. However, some lines—lumber and whiskey—reported decreased activity and easing prices. Rail transportation decreased somewhat reflecting, in part, the flood conditions in Missouri.

Leading district cities used 4 per cent more industrial electric power in June, on a daily average basis, than in May and 15 per cent more than in June a year ago. Increased total amounts of power were used by the rubber, food, leather, and paper and paper products industries in June compared with May in the five major district cities. Power consumption decreased in that period in the lumber and wood products, textile, primary metals, and transportation equipment lines.

The district steel industry operated at 93 per cent of capacity in June, a rate one point higher than in May and 11 points above June, 1950. In the first four weeks of July, operations were scheduled at an average rate of 87 per cent of capacity, with part of the decrease relative to the June rate accounted for by the Independence Day holiday.

In June, 116,000 load interchanges were reported by the St. Louis Terminal Railroad Association,

## INDUSTRY

| CONSUMPTION OF ELECTRICITY                          |            |           |                 |                          |            |            |
|---|------------|-----------|-----------------|--------------------------|------------|------------|
| (K.W.H. in thous.)                                  | June, 1951 | May, 1951 | June, 1950      | June, 1951 compared with |            |            |
|   | K.W.H.     | K.W.H.    | K.W.H.          | May, '51                 | June, '50  |            |
| Evansville.....                                     | 16,440     | 16,039    | 15,862R         | + 2.5%                   | + 3.6%     |            |
| Little Rock....                                     | 12,035     | 12,497    | 10,093R         | + 3.7                    | + 19.2     |            |
| Louisville.....                                     | 82,724     | 82,746    | 74,171          | - 0 -                    | + 11.5     |            |
| Memphis.....  | 29,265     | 28,446    | 27,763          | + 2.9                    | + 5.4      |            |
| Pine Bluff.....                                     | 9,615      | 9,079     | 7,149           | + 5.9                    | + 34.5     |            |
| St. Louis.....                                      | 101,602    | 105,011   | 94,410R         | - 3.3                    | + 7.6      |            |
| Totals.....   | 251,681    | 253,818   | 229,448R        | - 0.9%                   | + 9.7%     |            |
| R—Revised.  |            |           |                 |                          |            |            |
| LOADS INTERCHANGED FOR 25 RAILROADS AT ST. LOUIS    |            |           |                 |                          |            |            |
| June, '51   | May, '51   | June, '50 | First Nine Days |                          | 6 mos. '51 | 6 mos. '50 |
| 116,421   | 118,122    | 110,339   | 30,032          | 29,561                   | 700,140    | 641,200    |
| Source: Terminal Railroad Association of St. Louis. |            |           |                 |                          |            |            |
| CRUDE OIL PRODUCTION—DAILY AVERAGE                  |            |           |                 |                          |            |            |
| (In thousands of bbls.)                             | June, 1951 | May, 1951 | June, 1950      | June, 1951 compared with |            |            |
|   |            |           |                 | May, '51                 | June, '50  |            |
| Arkansas.....                                       | 77.4       | 77.9      | 79.1            | - 1%                     | - 2%       |            |
| Illinois.....                                       | 168.6      | 167.0     | 172.0           | + 1                      | - 2        |            |
| Indiana.....  | 29.9       | 28.8      | 30.2            | + 4                      | - 1        |            |
| Kentucky.....                                       | 27.9       | 26.9      | 26.1            | + 4                      | + 7        |            |
| Total.....  | 304.0      | 300.6     | 307.4           | + 1%                     | - 1%       |            |

2,000 fewer than in May. There were 6,000 more interchanges this June, however, than in June, 1950. In the first nine days of July, 30,000 loads were interchanged at St. Louis, 3,700 fewer than in the corresponding period in June but 400 more than in the corresponding period of July, 1950. Interchange figures for St. Louis for the nine-day period and the remainder of July may vary considerably from normal, however, because of flood conditions which impeded rail traffic in Kansas, the two Kansas Cities, central Missouri, and parts of the St. Louis area.

Inspected meat slaughter in the St. Louis area in June totaled 390 thousand head, about the same as in June 1950, but 8 per cent less than in May of this year. The total slaughter this June was 10 per cent less than the average slaughter in that month for the past five years. Cattle slaughter, a subject of much attention since the imposition of the beef price control order, was 31 per cent smaller in June than in May, and was 42 per cent less than in June, 1950. June cattle slaughter this year was 46 per cent less than slaughter in that month on a five-year average basis. June slaughter of calves was off 17 per cent but the hog kill was up 4 per cent, compared with the five-year average.

The St. Louis shoe industry continued to operate at seasonally low levels in May and June. In June and early July shoe manufacturers' prices were placed under the same type of "pre-Korea plus" price regulation previously given other manufacturers. This regulation had little immediate effect, however, for shoes were then selling at less than ceiling prices and by mid-July some producers had announced price reductions.

The index of average production per mill of Southern pine for June was 204, compared with 216 for May and 206 in June, 1950. Southern hardwood production was scheduled at 107 per cent of capacity in June, compared with 102 in May, and 93 in June, 1950.

### PRODUCTION INDEXES

| COAL PRODUCTION INDEX<br>1935-39=100 |         |          |          |         |          |
|--------------------------------------|---------|----------|----------|---------|----------|
| Unadjusted                           |         |          | Adjusted |         |          |
| June,'51                             | May,'51 | June,'50 | June,'51 | May,'51 | June,'50 |
| 140*                                 | 131*    | 136      | 149*     | 127*    | 145      |

| SHOE PRODUCTION INDEX<br>1935-39=100 |          |          |          |          |          |
|--------------------------------------|----------|----------|----------|----------|----------|
| Unadjusted                           |          |          | Adjusted |          |          |
| Apr.,'51                             | Mar.,'51 | Apr.,'50 | Apr.,'51 | Mar.,'51 | Apr.,'50 |
| 137                                  | 154      | 141      | 134      | 151      | 138      |

\*—Preliminary.

Recent price trends in the lumber industry have been downward. This price movement reflects sizable inventories resulting from continued volume production of pine and hardwood in the first six months of 1951, a period in which shipments and orders decreased. Some firming of pine board prices in late June and early July was reported, due to general rains in the South which hampered production and slowed drying time enough to cause some shortages.

At the end of June, there were 27 Kentucky distilleries in operation, 15 less than at the end of May and 2 less than in June, 1950. This sharp curtailment of operations reflected high inventories and the low level of bulk sales. It is reported that some distilleries now in operation may curtail operations or close down in the near future.

Total coal production in the district increased about 2 per cent in June, compared with May, but was 17 per cent less than in June, 1950. Output in June was somewhat greater than in May in all district states except Missouri, where production decreased.

District crude oil production in June on a daily average basis was one per cent greater than in May, but one per cent less than in June, 1950. Daily average output decreased slightly in Arkansas in June compared with May, but the three other oil producing states of the district reported increased production.

### CONSTRUCTION

Expenditures for new construction put in place in the nation totaled \$2.7 billion in June, an all-time high for that month, as a result of the substantial increase in construction projects begun last year and earlier this year. It should be noted, however, that expenditures this June gained less than the usual amount over those for May and the seasonally adjusted rate of new construction spending for June declined, extending the downward movement from the March, 1951 peak.

### CONSTRUCTION

| BUILDING PERMITS<br>Month of June |                  |       |          |          |               |       |          |          |      |
|-----------------------------------|------------------|-------|----------|----------|---------------|-------|----------|----------|------|
| (Cost in thousands)               | New Construction |       |          |          | Repairs, etc. |       |          |          |      |
|                                   | Number           |       | Cost     |          | Number        |       | Cost     |          |      |
|                                   | 1951             | 1950  | 1951     | 1950     | 1951          | 1950  | 1951     | 1950     | 1950 |
| Evansville.....                   | 178              | 64    | \$ 680   | \$ 223   | 127           | 82    | \$ 78    | \$ 188   |      |
| Little Rock.....                  | 51               | 135   | 392      | 1,211    | 205           | 273   | 98       | 437      |      |
| Louisville.....                   | 217              | 215   | 1,256    | 1,611    | 90            | 90    | 98       | 76       |      |
| Memphis.....                      | 1,721            | 2,429 | 2,815    | 5,170    | 226           | 219   | 252      | 128      |      |
| St. Louis.....                    | 281              | 391   | 2,122    | 3,050    | 276           | 348   | 430      | 831      |      |
| June Totals.....                  | 2,448            | 3,234 | \$ 7,265 | \$11,265 | 924           | 1,012 | \$ 956   | \$ 1,666 |      |
| May Totals.....                   | 2,414            | 3,767 | \$17,443 | \$18,587 | 1,056         | 1,008 | \$ 1,693 | \$ 1,553 |      |

Compared with a year ago, the amount of public construction during June has increased but private construction has decreased. Largely as a result of the mobilization program the chief gains have been in public construction of military, naval, and industrial facilities and in private industrial, commercial and public utility construction. Private residential construction outlays, on the other hand, have fallen to 23 per cent below those of June, 1950.

F. W. Dodge reports of contracts awarded for 37 states were up 5 per cent over June, 1950, but were only about one-half of the May, 1951, total, which included the Atomic Energy Commission's projects valued at \$980 million. Excluding the AEC projects from the May total, June was off 12 per cent. New private housing units started in June were off 7 per cent from May and were about 40 per cent less than June, 1950. Due to the rush by public housing authorities to get projects under way before the end of the fiscal year, 42,000 new public dwellings were authorized in June. Residential contracts awarded in June, both public and private, were off 14 per cent from last year, while nonresidential contracts were up 25 per cent over June, 1950.

In the Eighth District \$95 million in contracts were let in June as compared with \$122 million in May (excluding the Paducah AEC project) and \$80 million last June. Nonresidential contracts in June were less than in May by 17 per cent but exceeded the June, 1950 level by 44 per cent. Residential awards were off 23 per cent from May and 9 per cent lower than June, 1950.

In the St. Louis territory, as defined by the F. W. Dodge Corporation, including most but not all of the Eighth District, the number of dwelling units included in contract awards in June was 2,113 as compared with 2,747 in June, 1950, a decline of 23 per cent. However, over the first half of this year, awards were made for approximately as many dwelling units as in the first half of 1950. About 14,000 units were begun in each period.

### TRADE

Retail sales in the district during June generally failed to top those in either the previous month or the same month of 1950. Over most of the district, unseasonably cool and wet weather cut sharply into the sale of seasonal merchandise. Uncertainty as to developments, both in Korea and on the home front, plus heavy consumer buying earlier this year were among other reasons advanced by store executives for the decline.

At reporting district retail outlets June sales were down, more than seasonally in some lines, from those in May. The decline in sales in June com-

## TRADE

### DEPARTMENT STORES

|                                    | Net Sales                        |          |                              | Stocks on Hand                     | Stock Turnover                |
|------------------------------------|----------------------------------|----------|------------------------------|------------------------------------|-------------------------------|
|                                    | June, 1951 compared with May,'51 | June,'50 | 6 mos.'51 to same period '50 | June 30,'51 comp. with June 30,'50 | Jan. 1, to June 30, 1951 1950 |
| 8th F. R. District...              | -11%                             | -2%      | +6%                          | +30%                               | 1.57 1.91                     |
| Ft. Smith, Ark. <sup>1</sup> ..... | -15                              | +2       | +13                          | +34                                | 1.59 1.83                     |
| Little Rock, Ark.....              | -22                              | -7       | +2                           | +19                                | 1.52 1.86                     |
| Quincy, Ill.....                   | -6                               | +7       | +12                          | +19                                | 1.55 1.58                     |
| Evansville, Ind.....               | -7                               | +3       | +13                          | +39                                | 1.46 1.74                     |
| Louisville, Ky.....                | -10                              | +1       | +7                           | +16                                | 1.83 2.07                     |
| St. Louis Area <sup>2</sup> .....  | -7                               | -3       | +6                           | +40                                | 1.50 1.92                     |
| St. Louis, Mo.....                 | -8                               | -3       | +5                           | +40                                | 1.45 1.87                     |
| Springfield, Mo.....               | -0-                              | +4       | +5                           | +29                                | 1.39 1.67                     |
| Memphis, Tenn.....                 | -22                              | -4       | +5                           | +21                                | 1.78 1.93                     |
| All Other Cities*.....             | -4                               | +3       | +11                          | +10                                | 1.33 1.50                     |

\* Fayetteville, Arkansas; Harrisburg, Mt. Vernon, Illinois; Vincennes, Indiana; Danville, Hopkinsville, Mayfield, Paducah, Kentucky; Chillicothe, Missouri; Greenville, Mississippi; and Jackson, Tennessee.

<sup>1</sup> In order to permit publication of figures for this city, a special sample has been constructed which is not confined exclusively to department stores. Figures for any such nondepartment stores, however, are not used in computing the district percentage changes or in computing department store indexes.

<sup>2</sup> Includes St. Louis, Clayton, Maplewood, Missouri; Alton and Belleville, Illinois.

Outstanding orders of reporting stores at the end of June, 1951, were 1 per cent greater than on the corresponding date a year ago.

Percentage of accounts and notes receivable outstanding June 1, 1951, collected during June, by cities:

|                  | Instalment Accounts |     | Excl. Instal. Accounts |     |
|------------------|---------------------|-----|------------------------|-----|
|                  | .....%              | 48% | 23%                    | 64% |
| Fort Smith.....  | 17                  | 49  | 20                     | 52  |
| Little Rock..... | 20                  | 47  | 13                     | 51  |
| Louisville.....  | 18                  | 40  | 19                     | 48  |

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

|   | June, 1951 | May, 1951 | Apr., 1951 | June, 1950 |
|---|------------|-----------|------------|------------|
| Sales (daily average), unadjusted <sup>3</sup> .....          | 282        | 323       | 304        | 293        |
| Sales (daily average), seasonally adjusted <sup>4</sup> ..... | 313        | 330       | 320        | 326        |
| Stocks, unadjusted <sup>4</sup> .....                         | 389        | 403       | 437        | 299        |
| Stocks, seasonally adjusted <sup>4</sup> .....                | 389        | 403       | 437        | 299        |

<sup>3</sup> Daily average 1935-39=100.

<sup>4</sup> End of Month Average 1935-39=100.

### SPECIALTY STORES

|                        | Net Sales                        |          |                              | Stocks on Hand                     | Stock Turnover               |
|------------------------|----------------------------------|----------|------------------------------|------------------------------------|------------------------------|
|                        | June, 1951 compared with May,'51 | June,'50 | 6 mos.'51 to same period '50 | June 30,'51 comp. with June 30,'50 | Jan. 1 to June 30, 1951 1950 |
| Men's Furnishings..... | -16%                             | -0%      | +4%                          | +49%                               | .96 1.28                     |
| Boots and Shoes.....   | -8                               | +12      | +8                           | -20                                | 2.07 2.18                    |

Percentage of accounts and notes receivable outstanding June 1, 1951, collected during June:

|                        |     |                      |     |
|------------------------|-----|----------------------|-----|
| Men's Furnishings..... | 45% | Boots and Shoes..... | 43% |
|------------------------|-----|----------------------|-----|

Trading days: June, 1951—26; May, 1951—26; June, 1950—26.

### RETAIL FURNITURE STORES

|                                    | Net Sales                        |          | Inventories                            |             | Ratio of Collections |          |
|------------------------------------|----------------------------------|----------|--|-------------|----------------------|----------|
|                                    | June, 1951 compared with May,'51 | June,'50 | June 30, 1951 compared with May 31,'51 | June 30,'50 | June,'51             | June,'50 |
| 8th Dist. Total <sup>1</sup> ..... | -8%                              | -15%     | -3%                                    | +22%        | 23%                  | 20%      |
| St. Louis Area <sup>2</sup> .....  | -14                              | -18      | -4                                     | +15         | 30                   | 26       |
| St. Louis.....                     | -13                              | -18      | -4                                     | +15         | 30                   | 26       |
| Louisville Area <sup>3</sup> ..... | +1                               | -5       | -7                                     | +37         | 15                   | 15       |
| Louisville.....                    | -4                               | -3       | -7                                     | +36         | 14                   | 14       |
| Memphis.....                       | +2                               | -5       | -12                                    | -8          | 15                   | 13       |
| Little Rock.....                   | +8                               | -16      | -5                                     | +16         | 21                   | 16       |
| Springfield.....                   | -12                              | -13      | -4                                     | +57         | 15                   | 17       |
| Fort Smith.....                    | -13                              | -16      | *                                      | *           | *                    | *        |

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

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

<sup>2</sup> Includes St. Louis, Missouri; and Alton, Illinois.

<sup>3</sup> Includes Louisville, Kentucky; and New Albany, Indiana.

### PERCENTAGE DISTRIBUTION OF FURNITURE SALES

|                   | June,'51 | May,'51 | June,'50 |
|-------------------|----------|---------|----------|
| Cash Sales.....   | 17%      | 16%     | 14%      |
| Credit Sales..... | 83       | 84      | 86       |
| Total Sales.....  | 100%     | 100%    | 100%     |

pared with last year was smallest in the soft goods lines. At department stores and apparel stores, sales were slightly less than last year. Furniture store sales were about one-eighth under those in 1950 and appliance sales were even more disappointing. Dealers in both new and used automobiles reported sales drops in a period that normally shows high activity.

Inventories showed some decline from those at the end of the previous month but remained at a level substantially higher than last year, except at women's specialty stores. Despite a level of inventory considerably larger than a year ago, the value of department store outstanding orders was slightly larger than last year. In most hard goods lines, commitments for future deliveries were very small.

**Department Stores**—Nationally, June sales volume dropped slightly below that in May but was about equal to that during June, 1950. In contrast, June sales throughout the district, down more than seasonally, totaled about one-tenth less than in May and were 2 per cent below those in June, 1950. On a seasonally adjusted basis, daily average sales, in June, were 313 per cent of the 1935-1939 average. They were 330 per cent in May and 326 per cent in June, 1950. For the first half of the year, district sales were 6 per cent larger than in the same period of 1950.

With the exception of Springfield, major cities reported sales declines from May. In Springfield sales were about the same as in May. Declines in other cities ranged from 4 per cent in several small district cities to 22 per cent in Little Rock and Memphis. Compared with last year sales declined in June in the St. Louis area, Memphis and Little Rock. Elsewhere in the district sales gains ranged from 2 per cent in Fort Smith to 7 per cent in Quincy.

The retail value of inventories held by district department stores on June 30 dropped 7 per cent from that on May 31, but remained more than one-fourth larger than on June 30, 1950. Although inventories were large, the value of outstanding orders on June 30, advancing seasonally, were about one-half larger than on May 31 and were slightly larger than last year. Part of the gain in both the value of inventory held and orders placed compared with last year is the result of the currently higher price level.

**Apparel Stores**—St. Louis women's specialty store sales during June were about one-fourth less than in May and were 3 per cent less than in June, 1950. The retail value of inventory held on June 30 was slightly above that on June 30, 1950.

At district men's wear stores, June sales volume was 16 per cent less than in May and was equal to that in June, 1950. Inventories on June 30, down 10 per cent from a month previous, were 49 per cent larger than a year ago.

**Furniture Stores**—District furniture store sales in June totaled 8 per cent less than in May and 15 per cent less than in June, 1950. In some major district cities, sales gained slightly from those in the previous month. Compared to June, 1950, however, the decline in furniture store sales was general throughout the district. The retail value of inventories held by district stores on June 30 was slightly less than on May 31 but was about one-fifth larger than a year ago. Of the major district cities only Memphis stores reported inventory under that on June 30, 1950.

### AGRICULTURE

Weather in most of the Eighth District was too dry in May, but too wet in June and the first two weeks of July. In contrast to relatively favorable conditions nationally, crop prospects on July 1 were not bright in several important district farming areas and weather during the first two weeks of July gave little cause for optimism.

Floods have caused major damage to property and crops in the Missouri River lowlands and several tributary streams. Some areas along the Mississippi River also were flooded. Accurate data on areas flooded are not available, but estimates indicate nearly one-half million acres were flooded in Missouri with a crop loss valued at a minimum of \$25 million. Although this amount alone is a relatively small part of Missouri or district farm income, the loss is severe in the affected counties. Not only were spring-sown crops lost, but in many

### AGRICULTURE

| (In thousands of dollars) | CASH FARM INCOME |                                     |                                   | 5 month total Jan. to May, 1951 |                         |      |
|---------------------------|------------------|-------------------------------------|-----------------------------------|---------------------------------|-------------------------|------|
|                           | May, 1951        | May, 1951 compared with April, 1951 | May, 1951 compared with May, 1950 | 1951                            | 1951 compared with 1950 | 1949 |
| Arkansas.....             | \$ 26,547        | + 5%                                | +16%                              | \$ 140,811                      | +31%                    | -10% |
| Illinois.....             | 155,781          | - 1                                 | +18                               | 753,083                         | + 9                     | +18  |
| Indiana.....              | 86,900           | - 2                                 | +17                               | 415,314                         | +16                     | +21  |
| Kentucky.....             | 33,432           | +19                                 | +21                               | 214,661                         | + 3                     | + 6  |
| Mississippi.....          | 18,151           | +22                                 | +36                               | 124,262                         | +67                     | -27  |
| Missouri.....             | 88,091           | + 6                                 | +24                               | 407,231                         | +26                     | +19  |
| Tennessee.....            | 31,271           | +22                                 | +23                               | 159,093                         | +20                     | +11  |
| Totals.....               | \$440,173        | + 4%                                | +20%                              | \$2,214,455                     | +17%                    | +11% |

|                       | RECEIPTS AND SHIPMENTS AT NATIONAL STOCK YARDS |                                  |                                   |            |                                  |                                   |
|-----------------------|--|----------------------------------|-----------------------------------|------------|----------------------------------|-----------------------------------|
|                       | Receipts                                       |                                  |                                   | Shipments  |                                  |                                   |
|                       | June, 1951                                     | June, '51 compared with May, '51 | June, '51 compared with June, '50 | June, 1951 | June, '51 compared with May, '51 | June, '51 compared with June, '50 |
| Cattle and calves.... | 78,067   | - 7%                             | -24%                              | 34,999     | +41%                             | -0-%                              |
| Hogs.....             | 288,787  | -13                              | +21                               | 101,575    | - 3                              | + 4                               |
| Sheep.....            | 56,286   | - 1                              | -29                               | 37,571     | -20                              | -16                               |
| Totals.....           | 423,140  | -11%                             | -0-%                              | 174,145    | - 2%                             | - 2%                              |

areas the wheat crop had not been harvested before the fields were flooded. Farmers in these areas will have little chance of realizing any income from crops for the entire year.

Some other district areas, although not flooded, were too wet up to mid-July. Wet and cool weather had been unfavorable for tobacco growth in Kentucky, although weather in the main burley producing area in the Bluegrass was more favorable than in outlying areas. Similarly, weather had been unfavorable for cotton. Dry weather earlier had prevented germination or had produced poor stands. Wet weather in June and July caused many late-planted fields to become grassy, and kept them too wet for chopping. Considerable abandonment had taken place before July 1 and was taken into account in the July 1 acreage report. Some abandonment has occurred since then. Scarce chopping labor, rapid grass growth, boll weevil and thrips were making an expensive crop.

Generally, cotton fields in hill country and in the lighter soils of the Delta by mid-July were clean, however, and the crop was making fair to good progress. In the heavier soils, conditions were less favorable.

Nationally, a cotton crop of 29.5 million acres was in cultivation July 1, exceeding the announced goal by one million acres. Acreage planted in district states is about one-third more than was planted in 1950, compared with a 59 per cent increase nationally. Largest increases in acreage occurred in Texas where 13.1 million acres were planted in cotton, an 86 per cent increase. California acreage is 1.3 million, an increase of 129 per cent. Acreage in Arizona doubled and equals the Missouri cotton acreage. In the Southwest, there are 17 million acres of cotton (8 million more than in 1950) and the weather has been relatively favorable.

#### COTTON ACREAGE IN EIGHTH DISTRICT STATES

| (In thousands)      | Acreage in cultivation July 1 |        | Per cent change<br>from 1950 |
|---------------------|-------------------------------|--------|------------------------------|
|                     | 1951                          | 1950   |                              |
| Arkansas .....      | 2,350                         | 1,728  | + 36%                        |
| Mississippi .....   | 2,625                         | 2,084  | + 26                         |
| Tennessee .....     | 835                           | 629    | + 33                         |
| Missouri .....      | 560                           | 438    | + 28                         |
| United States ..... | 29,510                        | 18,613 | + 59                         |

Source: USDA

Despite unfavorable crop conditions in Missouri and Iowa, the first estimate of the corn crop was 3.3 billion bushels, a near record, and more than the 1950 crop of 3.1 billion bushels. Yield prospects in uplands and in the southern part of the Corn Belt generally were good.

Prices received by farmers declined for the fourth

consecutive month during the month ending June 15. On that date farm prices were 1 per cent below a month earlier, but 22 per cent above a year earlier. Prices of cotton, truck crops, oil bearing crops, feed and food grains all declined and were only partially offset by higher prices for hogs, veal calves, butterfat, and turkeys.

Prices paid by farmers remained unchanged. As a result of lower prices received, the parity ratio declined to 106 compared with 108 in May and 111 in March.

#### BANKING AND FINANCE

In the period from mid-June to mid-July of this year, Eighth District bankers continued to exercise caution and restraint in their lending operations. Business loans at the weekly reporting banks declined, investments showed virtually no change and deposits were down. Tight bank reserve positions the last two weeks of the period and the Voluntary Credit Restraint Program were major factors in the shrinkage in business loans. At the same time, cautious inventory policies and some price declines may have eased the demand for bank credit. Rate of use of bank funds, although high, is down considerably from the peak last January.

**District Banking Developments**—According to weekly condition reports from the larger banks in the Eighth District, commercial loans declined \$14 million from mid-June to mid-July with each reporting center showing a drop. In comparable periods of the five preceding postwar years, commercial loans averaged no change. In the current four-week period, net repayments came principally from commodity dealers, sales finance companies and food manufacturers. On the other hand, new loans to finance construction exceeded repayments. Loans outstanding to finance defense contracts rose over \$1 million in the period. Loans to finance both defense and defense-supporting activities amounted to 8 per cent of total new loans made by reporting banks in the four weeks.

Despite the decline in commercial loans, total loans rose \$15 million in the four-week period. Loans to banks which increased \$25 million in the period were primarily responsible for the rise. Loans secured by real estate and securities expanded slightly in the four weeks while consumer loans showed little change.

Investments rose only slightly from mid-June to mid-July at the larger district banks. A decrease of \$5.1 million in Government securities was more than offset by a \$5.6 million increase in "other" securities.

From June 13 to July 11 total deposits fell \$38 million at the city banks in the Eighth District. A large decline in deposits of individuals and businesses was partly offset by an increase in deposits of the U. S. Government and banks. To meet the outflow of funds, these banks drew on their reserves at the Federal Reserve.

**SELECTED ITEMS OF ASSETS AND LIABILITIES**  
Eighth District Weekly Reporting Member Banks  
(Millions of Dollars)

|                                      | July 11, 1951  | 4 Weeks       | Dollar Change in Year |
|--------------------------------------|----------------|---------------|-----------------------|
| Business and Agricultural Loans..... | 619.4          | - 14.0        | + 147.5               |
| Real Estate Loans.....               | 248.9          | + 2.6         | + 37.5                |
| Loans on Securities.....             | 31.2           | + 1.0         | - 0 -                 |
| Loans to Banks.....                  | 27.7           | + 25.1        | + 26.2                |
| Other (largely consumer) Loans.....  | 262.7          | - 0.2         | + 24.8                |
| <b>TOTAL LOANS (Gross).....</b>      | <b>1,189.9</b> | <b>+ 14.5</b> | <b>+ 236.0</b>        |
| Total Investments.....               | 1,130.9        | + 0.5         | - 167.7               |
| Time Deposits.....                   | 486.3          | + 0.3         | - 7.7                 |
| Total Demand Deposits.....           | 2,480.8        | - 38.5        | + 151.6               |
| Demand Deposits Adjusted.....        | 1,524.9        | - 27.1        | + 88.3                |

**Banking Developments Nationally**—Weekly reporting member banks in leading cities in the country expanded earning assets and deposits in June and early July. Total earning assets rose \$800 million in the period. Nearly half of the rise was in loans. Both Government and "other" security holdings were increased. In the comparable periods of 1948-50 the growth in earning assets averaged only \$250 million.

Total deposits increased \$1.5 billion at the large city banks in June and early July. The increase was the result of expansion in United States Government deposits, interbank deposits and time deposits, partly offset by \$800 million decrease in collected deposits of individuals and businesses. As funds flowed into these banks during the period,

**DEBITS TO DEPOSIT ACCOUNTS**

| (In thousands of dollars)      | June, 1951         | May, 1951          | June, 1950         | June, 1951 compared with |              |
|--------------------------------|--------------------|--------------------|--------------------|--------------------------|--------------|
|                                |                    |                    |                    | May, '51                 | June, '50    |
| El Dorado, Ark.....            | \$ 25,519          | \$ 26,450          | \$ 25,728          | - 4%                     | - 1%         |
| Fort Smith, Ark.....           | 44,736             | 44,382             | 39,383             | + 1                      | + 14         |
| Helena, Ark.....               | 6,827              | 7,346              | 6,122              | - 7                      | + 12         |
| Little Rock, Ark.....          | 143,997            | 138,676            | 130,005            | + 4                      | + 11         |
| Pine Bluff, Ark.....           | 28,205             | 27,681             | 24,430             | + 2                      | + 15         |
| Texarkana, Ark.*.....          | 12,811             | 12,043             | 10,447             | + 6                      | + 23         |
| Alton, Ill.....                | 30,115             | 28,291             | 26,750             | + 6                      | + 13         |
| E. St. L.-Nat. S. Y., Ill..... | 121,041            | 131,407            | 112,995            | - 8                      | + 7          |
| Quincy, Ill.....               | 35,512             | 35,274             | 31,547             | + 1                      | + 13         |
| Evansville, Ind.....           | 141,007            | 138,141            | 136,187            | + 2                      | + 4          |
| Louisville, Ky.....            | 644,293            | 617,398            | 563,995            | + 4                      | + 14         |
| Owensboro, Ky.....             | 43,327             | 41,028             | 31,856             | + 6                      | + 36         |
| Paducah, Ky.....               | 25,520             | 22,705             | 16,566             | + 12                     | + 54         |
| Greenville, Miss.....          | 18,233             | 23,217             | 18,474             | - 22                     | - 1          |
| Cape Girardeau, Mo.....        | 13,632             | 13,037             | 12,201             | + 5                      | + 12         |
| Hannibal, Mo.....              | 9,859              | 9,141              | 8,758              | + 8                      | + 13         |
| Jefferson City, Mo.....        | 40,338             | 49,785             | 39,368             | - 19                     | + 2          |
| St. Louis, Mo.....             | 1,904,851          | 1,800,110          | 1,704,070          | + 6                      | + 12         |
| Sedalia, Mo.....               | 10,430             | 10,596             | 10,148             | - 2                      | + 3          |
| Springfield, Mo.....           | 71,462             | 68,877             | 61,641             | + 4                      | + 16         |
| Jackson, Tenn.....             | 19,259             | 20,876             | 18,305             | - 8                      | + 5          |
| Memphis, Tenn.....             | 530,559            | 609,163            | 524,088            | - 13                     | + 1          |
| <b>Totals.....</b>             | <b>\$3,921,533</b> | <b>\$3,875,624</b> | <b>\$3,553,064</b> | <b>+ 1%</b>              | <b>+ 10%</b> |

\* These figures are for Texarkana, Arkansas, only. Total debits for banks in Texarkana, Texas-Arkansas, including banks in the Eleventh District, amounted to \$30,526.

they were used to reduce borrowings and build up cash assets.

**Debits**—The rate at which bank funds were used was high in June. Debits to deposit accounts at 22 cities in the Eighth District were \$3.9 billion in the month, 18 per cent above the 1948-50 average for the month of June. However, debits were down considerably from January, the peak, when debits were 34 per cent above the 1948-50 average for that month. By comparison, May debits were 25 per cent above the May, 1948-50 average.

Nationally, the rate of use of bank funds in leading cities remained high in June, but like the district was down somewhat from the peak.

**EIGHTH DISTRICT  
MEMBER BANK ASSETS AND LIABILITIES  
BY SELECTED GROUPS**

| (In Millions of Dollars)                       | All Member     |               |                | Large City Banks <sup>1</sup> |              |                | Smaller Banks <sup>2</sup> |               |               |
|--|----------------|---------------|----------------|-------------------------------|--------------|----------------|----------------------------|---------------|---------------|
|  | Change from:   |               |                | Change from:                  |              |                | Change from:               |               |               |
|  | June, 1951     | June, 1951    | June, 1951     | June, 1951                    | June, 1951   | June, 1951     | June, 1951                 | June, 1951    | June, 1951    |
| <b>Assets</b>                                  |                |               |                |                               |              |                |                            |               |               |
| 1. Loans and Investments.....                  | \$4,000        | \$+ 12        | \$+ 134        | \$2,341                       | \$+ 17       | \$+ 109        | \$1,659                    | \$- 5         | \$+ 25        |
| a. Loans.....                                  | 1,813          | - 21          | + 315          | 1,195                         | - 22         | + 241          | 618                        | + 1           | + 74          |
| b. U. S. Government Obligations.....           | 1,823          | + 22          | - 175          | 972                           | + 32         | - 117          | 851                        | - 10          | - 58          |
| c. Other Securities.....                       | 364            | + 11          | - 6            | 174                           | + 7          | - 15           | 190                        | + 4           | + 9           |
| 2. Reserves and Other Cash Balances.....       | 1,288          | - 18          | + 137          | 812                           | - 17         | + 100          | 476                        | - 1           | + 37          |
| a. Reserves with the F.R. bank.....            | 671            | + 6           | + 108          | 434                           | - 5          | + 68           | 237                        | + 11          | + 40          |
| b. Other Cash Balances <sup>3</sup> .....      | 617            | - 24          | + 29           | 378                           | - 12         | + 32           | 239                        | - 12          | - 3           |
| 3. Other Assets.....                           | 47             | - 11          | + 5            | 29                            | - 2          | + 3            | 18                         | - 9           | + 2           |
| 4. Total Assets.....                           | <u>\$5,335</u> | <u>\$- 17</u> | <u>\$+ 276</u> | <u>\$3,182</u>                | <u>\$- 2</u> | <u>\$+ 212</u> | <u>\$2,153</u>             | <u>\$- 15</u> | <u>\$+ 64</u> |
| <b>Liabilities and Capital</b>                 |                |               |                |                               |              |                |                            |               |               |
| 5. Gross Demand Deposits.....                  | \$3,967        | \$- 8         | \$+ 254        | \$2,458                       | \$+ 10       | \$+ 197        | \$1,509                    | \$- 18        | \$+ 57        |
| a. Deposits of Banks.....                      | 590            | - 2           | + 27           | 557                           | - 3          | + 27           | 33                         | + 1           | - 0-          |
| b. Other Demand Deposits.....                  | 3,377          | - 6           | + 227          | 1,901                         | + 13         | + 170          | 1,476                      | - 19          | + 57          |
| 6. Time Deposits.....                          | 981            | + 1           | - 9            | 491                           | - 0-         | - 9            | 490                        | + 1           | - 0-          |
| 7. Borrowings and Other Liabilities.....       | 45             | - 9           | + 17           | 34                            | - 11         | + 13           | 11                         | + 2           | + 4           |
| 8. Total Capital Accounts.....                 | 342            | - 1           | + 14           | 199                           | - 1          | + 11           | 143                        | - 0-          | + 3           |
| 9. Total Liabilities and Capital Accounts..... | <u>\$5,335</u> | <u>\$- 17</u> | <u>\$+ 276</u> | <u>\$3,182</u>                | <u>\$- 2</u> | <u>\$+ 212</u> | <u>\$2,153</u>             | <u>\$- 15</u> | <u>\$+ 64</u> |

<sup>1</sup>Includes 15 St. Louis, 6 Louisville, 3 Memphis, 3 Evansville, 4 Little Rock and 4 East St. Louis-National Stock Yards, Illinois, banks.

<sup>2</sup>Includes all other Eighth District member banks. Some of these banks are located in smaller urban centers, but the majority are rural area banks.

<sup>3</sup>Includes vault cash, balances with other banks in the United States, and cash items reported in process of collection.