



Monthly Review

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IN LOUISIANA

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As the Nation Goes, So Goes the South?

The Southerner who forecasts that his state's income will change in response to income changes throughout the country may be right. His chances of error may be large, however, if he estimates the change will be exactly like a national one. In support of his projection, our Southern forecaster could rightly argue that the virtually uninterrupted income growth in the Southeastern states since 1950 has been closely linked to the overall economic expansion. Warning him of the pitfalls of generalizations, we would point out the degree to which income changes in specific areas of the South responded to national changes and how these changes varied widely among states. Moreover, in any specific year, state income changes might be much less closely tied to national changes than over a period of several years.

Measuring the relationship between year-to-year national and regional income changes provides some insight into the relative influences of local and national factors causing a change in a state's income. Also, the expected effects on per capita income in this part of the Southeast associated with a change in overall per capita income sheds some light on the seeming paradox of this area's faster-than-national rate of income growth and the widening dollar gap between U.S. and Southeastern per capita incomes.

Growing Faster, but Still Lagging

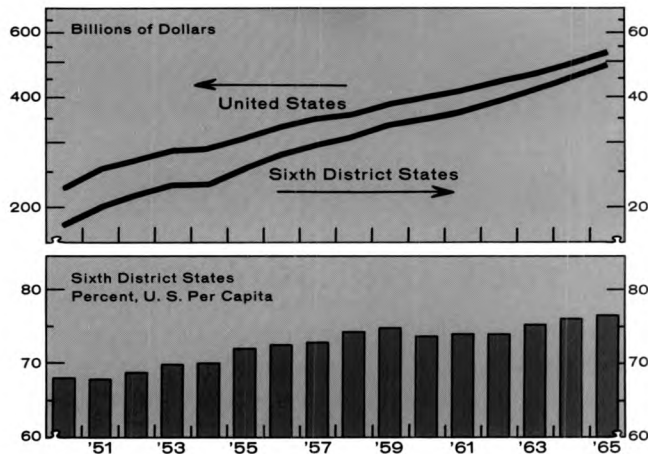
Probably the most meaningful measure of income change in terms of the economic well-being of the people in Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee—the states wholly or partly in the Sixth Federal Reserve District—is the growth in per capita income. In 1965, per capita income in the District was 77 percent as high as in the nation, compared with 68 percent in 1950.

With the area's population increasing at about the same rate as that of the U.S., the gain on the nation in the level of per capita income was the result of the faster growth rate of the District states' total personal income. The annual average rate of increase in the District states' personal income between 1950 and 1965 was 10.8 percent, compared with 8.3 percent nationally. This relationship has continued in 1966, with District personal income in the first half of 1966 up 10.4 percent from a year ago compared with 9.0 percent for the entire nation.

The degree of association between District and national income changes is found in the answers to two questions: "At what rate does per capita income in this area change when per capita income for the entire U.S. changes one percent?" For convenience, we shall call this the "income flexibility" effect. It combines the influences of income change, population change, and the absolute level of per capita income in the District and its states. The second measure considers the question: "What is the expected actual change, expressed in dollar terms, in District per capita income associated with a one dollar change at the national level?" This is termed the "income change" effect. Answers to these questions were determined mathematically by using simple linear regressions.

Results of the regression analysis show that for the 1950-1965 period

Chart I: Personal Income
Sixth District and United States
1950-65



Expected Changes in Per Capita Personal Incomes Associated with National Changes

Area	Change expected when U.S. per capita income changes by	
	1 percent	\$1.00
Alabama	1.3	\$0.84
Florida	1.1	.93
Georgia	1.3	.92
Louisiana	1.1	.77
Mississippi	1.2	.66
Tennessee	1.2	.81
Sixth District	1.2	.87

an annual rate of change of 1 percent in national per capita income was associated with a 1.2-percent change in the District's per capita income. In other words, the District's rate of change was greater than the nation's. Responses varied somewhat among the District states. In Alabama, for example, a 1.3-percent change in per capita income was associated with a change of 1 percent in national per capita income, whereas the figure for Louisiana and Florida was 1.1 percent. In each of the District states, however, the rate of change was greater than the corresponding national rate.

On the other hand, computations show that the actual change, expressed in dollar terms, in national per capita income was accompanied, on average, by a smaller dollar change in the District states. When the nation's per capita income changed by one dollar, the expected change in the District's per capita income was 87 cents. The expected changes varied among District states, ranging from a high of 93 cents in Florida to a low of 66 cents in Mississippi. In all the states, however, the expected "income change" effect was less than one dollar.

The reason for the contrast between the relative position of the changes in the District, measured by the "income flexibility" and the "income change" effects, is caused by the lower levels of per capita income in the District states. Although per capita income in this region has advanced relative to the nation, a gap of over \$600 still remains. Thus, by starting at a lower level, a given dollar change has more impact, expressed as a percentage change, in this region than nationally. Nevertheless, the

District's greater-than-national rate of change was not large enough to narrow the dollar gap.

For an actual change ("income change" effect) in the District's per capita income to equal a national per capita income change would require, on average, an "income flexibility" effect of about 1.4 percent, instead of the 1.2 percent found from the 1950-1965 relationship. Thus, with an "income flexibility" effect of 1.4 percent, the dollar gap between District and national per capita incomes would have remained approximately the same over this period. With a value less than 1.4 percent, the gap could be expected to widen, as it did from 1950 to 1965. To narrow or eliminate the gap already existing would require a still larger "income flexibility" value.

Thus, while the District's rate of per capita income growth has generally exceeded the nation's, it has not been great enough to narrow the dollar gap between District and national per capita incomes.

Responding to Local and National Changes

The "income flexibility" and "income change" effects help explain the reaction of District per capita income normally expected from a change in national per capita income. However, despite the very definite and obvious "tie-in" between changes in District and national incomes, there are reasons why an income change for some specific year may not resemble past ones. A difference in the industrial-mix of the District's economy, which could result in a differential impact from a shift in the national demand for various products or specific local developments, could cause a more divergent swing in income than would normally be expected.

The sources of total personal income in the District have become increasingly more similar to the national pattern. Agricultural income, once a more important source of District income, now accounts for the same proportion as in the nation. But important differences still remain. Manufacturing income makes up 22 percent of the nation's income, but only 17 percent of the District's. On the other hand, governmental sources contribute a larger proportion of the District's income.

Since various types of activity respond differently to general economic changes, we would not expect two areas with dissimilar industry mixes to always behave alike. The larger the area, the more likely will its economy be diversified and resemble the national economy. Thus, income changes for the entire Sixth District more nearly resemble national changes that do most of the states considered separately.

What specific local factors cause the District states to respond differently to changes in national personal income than would normally be expected? The answer to this question, along with the overall national income picture, has an important bearing on the change in District incomes in specific years. The use of linear regressions also helps in answering this question. Specifically, the regression technique seeks to determine the year-to-year change in the District states' total personal income associated with a corresponding change at the national level. Total personal income is used since it is necessary to look at the influences of the various sources of income for specific years in explaining why deviations from the national trend occur.

Using data for the 1950-1965 period, we determined the historical relation between U.S. and District income changes. About four-fifths of the yearly swings in District income could be explained directly by changes in the level of national personal income. Such a relation represents an average association between yearly income changes in District states and the entire nation. Deviations in specific years from this average relation reflect the influence of certain local factors. Thus, a comparison of the actual yearly changes in a state's income, with the changes computed from this historical relation, help pinpoint the years in which these local factors were particularly important. The most notable deviations occurred during the Korean War buildup of 1950-1951, the recession years of 1957-1958 and 1960-1961, and recently in 1963 (see charts).

In 1951, the change in District income calculated from this historical relation was about 24 percent higher than that actually realized. Most of this deviation came from Florida's actual change in personal income falling considerably short of her predicted change. Closer examination reveals that income from Federal military expenditures in Florida did not expand as rapidly as in other regions of the nation during the Korean War buildup. Income derived from this source advanced about 55 percent in Florida in 1951, compared with 72 percent in the nation. Other District states' income changes were about in line with their expected value.

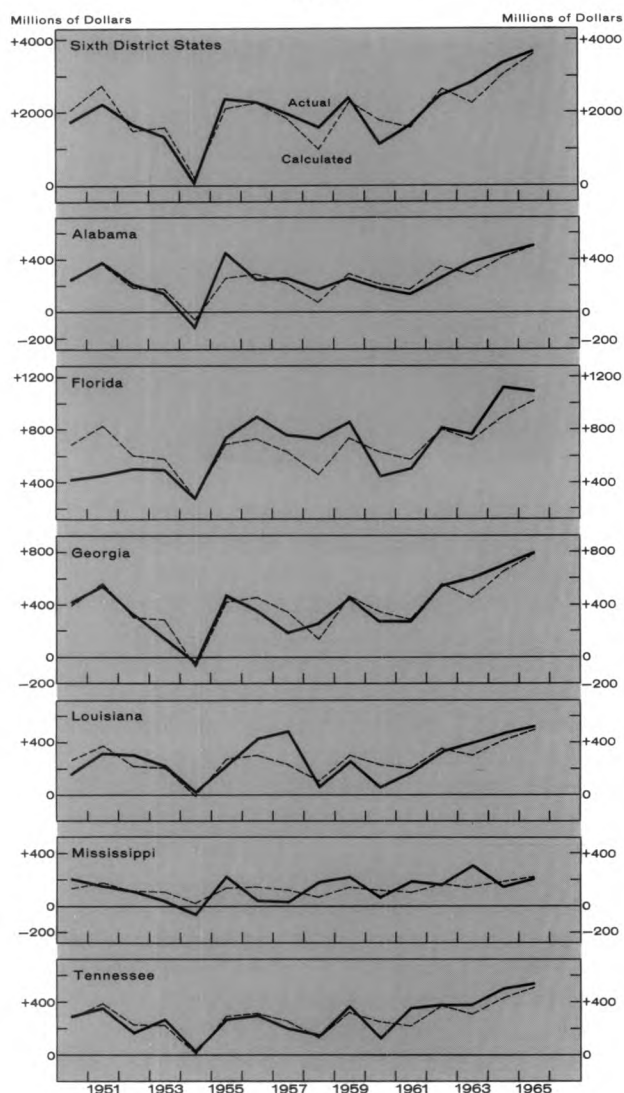
A movement in the opposite direction occurred in the 1957-1958 period, as the actual change in District income was considerably above the calculated value. Deviating from the 1950-1961 period, most of the District states experienced the same trend. During 1957-1958, incomes rose only moderately. The slower rate of advance at the national level, however, was more severe than in the District, as income from mining, construction, and manufacturing in the nation fell sharply. The District fared much better than did most other areas, as personal income rose by 5.1 percent, compared with only a 2.5-percent rise for the nation.

It is tempting to conclude that the District's economy is more stable than the nation's during recessions. But let us first look at the District's performance during the 1960-1961 recession, when realized income changes in each of the six states, fell short of the changes expected from the national trend.

District income from agricultural sources fell by 2 percent in 1960, while the nation experienced a 2-percent advance. Prices received for cotton, a major cash crop in the District, were down considerably. Since a large proportion of the nation's cotton is produced in the Southeast, a drop in the price of this commodity adversely affected District farm incomes. In addition, farm income in Louisiana dropped sharply because of poor weather and generally falling prices for most commodities. Total farm cash receipts in that state declined nearly 5 percent during the year.

Construction activity in the nation also weakened, but moderate gains in incomes from this source were still maintained. The construction industry's contribution to District income declined in 1960, mainly in Louisiana where a 6.5-percent drop was experienced. The closing of certain military bases in southwest Louisiana augmented

Chart II: Actual and Calculated Changes in Personal Income
Sixth District States
1950-65



declines in this industry. In New Orleans alone, the value of residential construction dropped nearly 30 percent. Declines were also recorded in Baton Rouge and Lake Charles.

Thus, deviations from actual and expected changes in District income during the recession year of 1960 were centered largely in only two industries. These special and occasional factors are mainly responsible for causing District income to fluctuate more or less than the national trend in certain years.

Since the recession of 1960-1961, gains in District income each year have moved steadily upward. The same pattern emerges for the nation, except in 1963 when income growth was not as rapid as the year before. Income from agriculture actually declined in 1963 in the nation, while large gains were sustained in the District. In fact, each of the major sources of income grew more rapidly in the District. Particularly noteworthy was the 7.1-percent increase in Federal military income, compared with only a 1.6-percent rise for the nation.

Within certain states, other factors occasionally cause
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Louisiana rides an economic roller coaster. Whether the economy swings up or down, it moves relatively more in the Pelican state than in the nation. Swings in economic activity follow swings in investment. An upswing in investment, be it in the nation or Louisiana, typically brings about a prodigious growth of income. Downswings dampen income growth. Because of her industry mix, Louisiana feels both more intensively than does the nation.

Today this Sixth District state is enjoying the upward ride. Wallets are fatter and payrolls longer than they have ever been. Today's boom rivals that of the mid-1950's. Like the earlier boom, this one is based on an upswing in investment activity centered in the petrochemical industries. Further accentuating the sharpness of the state's rapid, investment-fueled climb out of the recession was the placement of contracts for assembly of Saturn booster rockets at the Michoud facility (pictured above) and a construction boom in New Orleans. The addition of one new manufacturing facility does not normally affect an entire state's economy so significantly, but the Michoud facility is no normal installation. At its peak, it employed 12,000 persons. In contrast, the state's entire petroleum refining and related products industry employed less than 11,000.

Income Follows Investment

Between 1955 and 1957, plant and equipment expenditures increased tremendously in Louisiana and the nation. Paralleling this increase was a 30-percent rise in Louisiana's personal income from 1954 to 1957. Today the nation is again experiencing a boom in new plant and equipment expenditures which seems to be outdistancing the 1950's boom. But, during the last three-year period for which we have figures (1963-1966), personal income in Louisiana rose 28 percent, a bit less than the increase during the earlier period.

The greater impact on Louisiana of upswings and downswings in investment expenditures can be seen in personal income figures. Investment reached a peak in the state and the nation in 1957 and fell violently from 1958 to 1960. An uptrend was noticeable by 1963. Personal income in the state and the nation reflects this fluctuation

vividly. Personal income rose 18.7 percent in the nation from prosperous 1957 to recessive 1961. In Louisiana, however, personal income rose only 10.5 percent over the same period. But after the current investment boom got underway, the picture changed radically: While personal income in the nation rose only 7.9 percent from 1964 to 1965, it rose 11.9 percent in the Bayou state. Employment figures, of course, show a similar pattern. According to the United States Department of Labor, the nation gained in nonagricultural employment between the 1957-1958 and 1960-1961 recessions, but Louisiana actually suffered a slight decline in average employment.

Like the rest of the South, Louisiana is attracting a sizable chunk of the current "investment pie" because of her typically Southern nexus of natural resources, labor, and balmy climate. Unlike other District states, however, Louisiana's greatest magnet for capital is the oil beneath her soil and coastal waters. Of course, her timber, sulphur, major crops, and the extensive waterways which provide cheap transportation and meet the needs of industries requiring large quantities of water, also draw a great deal of investment. Current investment, however, is dominated by the petrochemical industries.

The Role of Petrochemicals

Both the importance of and the growth of petrochemical industries can be seen in employment figures. Employment in crude petroleum and natural gas production, expanding rapidly since 1963, currently exceeds 48,000, which is significantly higher than the figure of the earlier boom period. Another unusually large industry in Louisiana, due to her stature as a pipeline employer, is transportation and public utilities. Nearly 10 percent of non-agricultural employment (over 89,000)—more than is employed in all durable goods manufacturing—is in the transportation and public utilities sector. While employment in crude petroleum and natural gas producing industries exceeded 1957 employment last year, employment in transportation and public utilities did not do so until this year. Employment in the heavily automated petroleum refining and related products industry, a relatively small employer, has declined since 1957.

The billions invested in U. S. offshore petroleum operations (pictured on opposite page) are paying off handsomely for Louisiana. Tidelands oil has catapulted the Pelican state from its third-place ranking behind California a few years ago to its current second-place position as an oil producer. Bolstered by the output of oil wells lying beneath Gulf waves, crude petroleum began the year running well ahead of last year. Led by Louisiana and Texas, oil and natural gas production has been expanding throughout the nation this year.

The chemicals and allied products industry has been the real spark plug for recent employment growth in manufacturing, a particularly important sector of the economy because of the spill-over into construction, wholesale trade, real estate, and other nonmanufacturing trades. Chemical employment, ahead of the 1957 level since

Effect in Louisiana

1964, grew by more than 4 percent from June 1965 to June 1966. The importance of the chemical industry is indicated by the sizable part of value added by manufacture in Louisiana in 1963 when the last Census of Manufacturers was taken. While petroleum and coal products took a 14-plus-percent bite of the total, chemicals' 22-plus percent far outshadowed this showing. It even outdistanced the share contributed by the much larger, but contrastingly labor-intensive, food and kindred products industry, which accounted for nearly 20 percent.

Structure Fosters Extreme Response

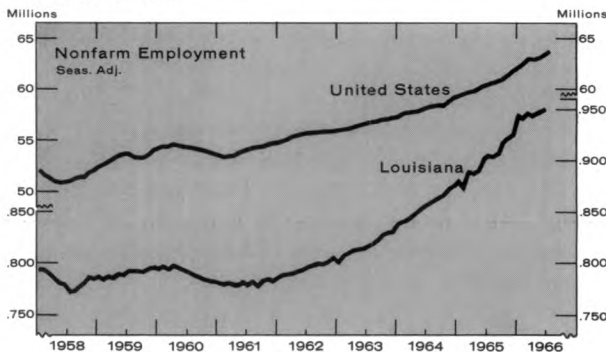
In conjunction with petrochemicals, construction employment, another significant employer, plays a key role in accentuating the response of the state to investment changes. Construction employment expands enormously as investment increases, but it falls just as rapidly when investment declines. Construction jobs lost due to a fall in investment are often not offset by employment in the facilities built by construction workers. This is because so much investment is in the petrochemical plants where the employment-to-investment ratio is very low. In recent years growth in construction employment has been a real "speed merchant," expanding, as of June, nearly 65 percent since 1960. Average employment through June was 13 percent above the average for the entire year of 1965. Employment today stands well over 90,000. National employment in this volatile industry rose a much lower, but still respectable, 15.2 percent from 1960, and average employment through June was nearly 5 percent higher than during 1965—well below Louisiana's gain. Expansion in construction employment has been extremely rapid in petrochemical-rich Lake Charles and Baton Rouge, northern terminus of the "chemical corridor" beginning at New Orleans. Absolute gains are largest, however, in the Crescent City, New Orleans.

Construction employment is closely tied to residential building and investment expenditures. In Louisiana construction employment currently exceeds total employment in durable goods industries by 18,000. In the recession year of 1961, construction employment led by more than 4,000; in the high-tide year of 1957, it was ahead by well over 11,000.

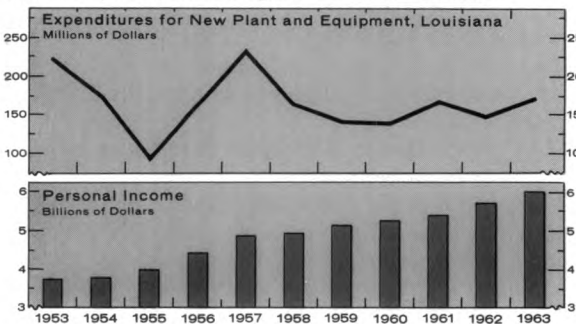
The unusual importance of manufacturing industries such as food and kindred products and lumber and wood products also has a bearing on Louisiana's greater reaction to fluctuations in investment. Both are relatively low-paying employment because of the low value added per worker. They have traditionally been labor-intensive. But, in recent years, the chain saw and the rise of large managed forests, owned or leased by timber-using companies, has drastically reduced employment in lumber and wood products. Nevertheless, lumber and wood products retains its long-time hold on the first-place position as a durable goods employer. Though its relative size has decreased, it still remains more important in Louisiana than in the nation. In nondurable goods the same relationship holds for food and kindred products, but its relative importance



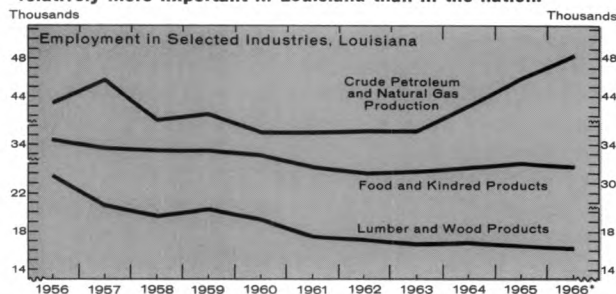
After showing comparatively little change between 1958 and 1961, Louisiana's employment has since grown more rapidly than in the nation.



Periods of significant increase in plant and equipment expenditures are characterized by larger increases in personal income than are periods of mild growth or actual decline.



Contrasting trends in employment are evidenced by industries relatively more important in Louisiana than in the nation.



*First six months of year.

has declined much less. In 1950 lumber and wood products accounted for only 10 percent of the nation's employment in durable goods, whereas it accounted for 59 percent of Louisiana's. Today the state's percentage has fallen to 22 percent. In 1950, food and kindred products made up 25 percent of the nation's nondurable goods employment; in Louisiana it accounted for 40 percent. Today the Louisiana percentage is down to 36 percent.

When investment is up, the relative importance of these comparatively low-paying industries becomes less. With investment high in recent years, the reduction in the importance of food and kindred products has continued unabated, although there has been a slight rise in the actual employment level in this industry since 1963.

Economic Outlook

Despite some weaknesses in Louisiana's economy, prospects for the continuation of the current level of activity in the Bayou state for the rest of the year seem likely. But whatever happens, it seems reasonable to expect that, because the state's industrial structure remains rather fluctuation prone, Louisiana will continue to experience the "roller coaster effect."

CAROLE E. SCOTT

This is one of a series in which economic developments in each of the Sixth District states are discussed. Developments in Alabama's economy were analyzed in the July 1966 REVIEW, and a discussion of Mississippi's economy is scheduled for a forthcoming issue. • Copies of the revised editions of A REVIEW OF GEORGIA'S ECONOMY, 1960-66, and A REVIEW OF TENNESSEE'S ECONOMY, 1960-66, are now available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303.

Bank Announcements

On July 11, THE BEACH BANK OF VERO BEACH, Vero Beach, Florida, opened as a nonmember bank and began to remit at par for checks drawn on it when received from the Federal Reserve Bank. Officers include L. S. Tiller, President, and W. H. Hicks, Vice President and Cashier. Capital totals \$300,000, and surplus and other capital funds, \$105,000.

The CITIZENS BANK, Warrenton, Georgia, a nonmember bank, began to remit at par on August 1.

A newly organized nonmember bank, the SPRINGFIELD COMMERCIAL BANK, Springfield, Florida, opened on August 3 and began to remit at par. Officers are M. G. Nelson, President; Hugh A. Nelson, Vice President; and Bobby M. Pitts, Cashier. Capital amounts to \$200,000, and surplus and other capital funds, \$60,000.

On August 15, THE BANK OF COMMERCE AND TRUST COMPANY, St. Francisville, Louisiana, a nonmember bank, began to remit at par.

The FIRST NATIONAL BANK OF WAYNESBORO, Waynesboro, Mississippi, opened on August 23 as a member bank and began to remit at par. O. D. Mason, Jr., is President, and Mrs. Opal Givens is Cashier. Capital is \$200,000, and surplus and other capital funds, \$300,000.

The MID-WAY BANK, Opelika, Alabama, a newly organized nonmember bank, opened on August 30 and began to remit at par. The officers are Sam Morgan, Jr., President, and Jack Anderson, Vice President. Capital totals \$175,000, and surplus and other capital funds, \$175,000.

As the Nation Goes...

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large deviations between the actual and calculated changes in income. Generally, however, changes in Alabama, Georgia, and Tennessee closely parallel those of the entire nation. Florida, with about one-fourth of her income coming from the trade and service sector, is very vulnerable to sudden changes in income. The accompanying charts also show that, of any District states, Mississippi is probably the least tied to national developments in specific years.

Future Income Changes

Based on historical relations, the best indicator of the likely change in the District's income is what happens at the national level. But in appraising the likely income change in the District for some specific year, we are also reminded that "as the nation goes, the South does not always follow." Certain local factors, such as a drought or a storm, may cause the agricultural sector's contribution to District income to move differently from that of other areas. The impact of government spending, especially for defense, may affect District income differently than in the nation. Other factors, such as the development of local natural resources or shifting national demands, may result in a differential impact on District income. It would be rare if local income changes behaved exactly like a change at the national level.

The task of forecasting a state's income would be considerably easier if it were only necessary to look at the national trend. In addition to the underlying national influences, a multitude of local factors must also be considered. In an effort to improve his estimates, the Southerner who forecasts his state's income must be familiar with the separate influences of these local developments and incorporate them into his predictions.

JOE W. MCLEARY

Notes on Regression

Simple regression analysis measures the relationship between two variables. For our purposes, the relationship was assumed to be linear, i.e., one represented by a straight line of the form $Y = a + bX$, where (X) and (Y) are the related variables and (a) and (b) are the coefficients to be determined. The (b) coefficient determined from the analysis represents an estimate of the average amount by which the two variables are related; the (a) coefficient is a constant and serves to adjust the line up or down according to the initial level of the two variables.

First of all, we computed the relationship of changes in per capita income between the U.S. and the District and between the U.S. and individual District states for the years 1950-1965. In this case, (Y) represents the change from the previous year in the District states' per capita income and (X) the change from the previous year in U.S. per capita income. Both of the variables are expressed in actual dollar changes. The results of the analysis were:

nicantly larger than the standard error, meaning that the estimated coefficients are reliable estimates for this sample data.

The (b) coefficients shown in the above equations relate to how much (Y) should change with a given change in (X), expressed in dollar terms. These actual changes are converted to an expected percentage change by multiplying each of the coefficients by the ratio of the average level of U.S. per capita income to the average level of each of the various states' per capita income for the 1950-1965 period. These percentage changes are shown in an accompanying table of the text.

A second set of regressions was determined for each of the states using changes in total personal income (expressed in millions of dollars) instead of per capita personal income. The results of the analysis were:

	Coefficient of Determination R^2	Standard Error of Estimate	Standard Error of b Coefficient
Alabama: $Y = -2.00 + 0.84X$	.87	18.2	.042
Florida: $Y = -1.12 + 0.93X$	.82	29.2	.055
Georgia: $Y = -1.10 + 0.92X$	.87	20.6	.045
Louisiana: $Y = -3.51 + 0.77X$	.72	32.0	.048
Mississippi: $Y = -1.00 + 0.66X$	.64	26.6	.041
Tennessee: $Y = -1.73 + 0.81X$	.84	17.4	.046
District: $Y = -1.86 + 0.87X$	.90	16.9	.038

	Coefficient of Determination R^2	Standard Error of Estimate	Standard Error of b Coefficient
Alabama: $Y = -90.75 + .017X$	.79	68.7	.002
Florida: $Y = 237.23 + .022X$	.49	170.3	.007
Georgia: $Y = -123.35 + .026X$	.85	79.9	.005
Louisiana: $Y = -33.92 + .015X$	.59	98.1	.002
Mississippi: $Y = 10.50 + .006X$	.26	80.0	.001
Tennessee: $Y = -18.67 + .015X$	.79	59.4	.002
District: $Y = -19.17 + .012X$	.84	336.2	.009

The coefficient of determination, which measures the percentage of the total variation in (Y) explained by the corresponding variation in (X), indicates a high degree of association between the two variables in each state. The standard error of estimate shows the average amount by which the actual (Y) value deviated from the regression line. With the exception of Mississippi, the standard errors of estimate were considerably smaller than the mean of their respective (Y) values. The mean value of Mississippi's per capita income changes was only about twice as large as her standard error. Each of the (b) coefficients was sig-

The coefficients of determination for the equations for Alabama, Georgia, Tennessee, and the District were fairly high. Lower values for the remaining states indicate their lower degree of association with U.S. income changes. The (b) coefficients, judging by the small size of their standard errors, were highly significant. Standard errors of estimate for each equation were considerably smaller than the mean of the associated (Y) value.

Using these equations, the year-to-year change in each state's income was calculated from the change occurring in U.S. income. These calculated values are plotted in the accompanying charts, along with the actual changes which occurred.

Sixth District Statistics

Seasonally Adjusted

(All data are indexes, 1957-59 = 100, unless indicated otherwise.)

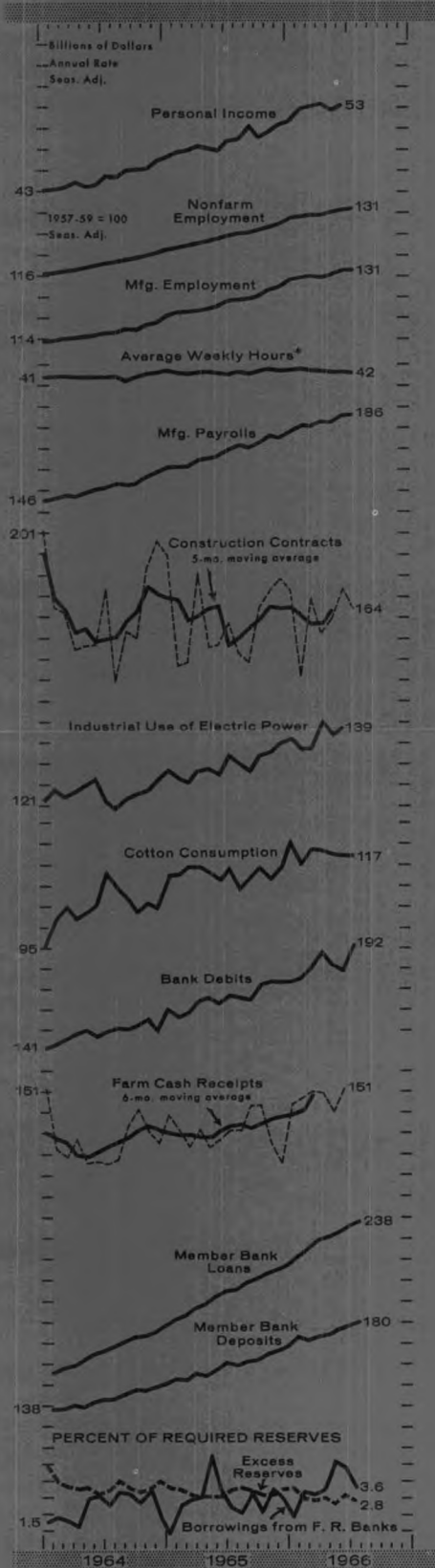
	Latest Month (1966)	One Month Ago	Two Months Ago	One Year Ago		Latest Month (1966)	One Month Ago	Two Months Ago	One Year Ago
SIXTH DISTRICT					GEORGIA				
INCOME AND SPENDING					INCOME AND SPENDING				
Personal Income, (Mil. \$, Annual Rate)	June 52,862	52,460r	52,988r	47,442	Personal Income, (Mil. \$, Annual Rate)	June 10,142	9,888r	10,101r	9,043
Manufacturing Payrolls	July 186	186	183	169	Manufacturing Payrolls	July 187	188r	183r	171
Farm Cash Receipts	June 151	140	149	127	Farm Cash Receipts	June 156	136	150	140
Crops	June 134	141	146	120	PRODUCTION AND EMPLOYMENT				
Livestock	June 160	144	153	131	Nonfarm Employment	July 131	131	130	124
Instalment Credit at Banks, *(Mil. \$)					Manufacturing	July 128	129	128	121
New Loans	July 270	277r	284	258	Nonmanufacturing	July 132	133r	132	126
Repayments	July 270	247	259	229	Construction	July 129	142r	141	138
PRODUCTION AND EMPLOYMENT					Farm Employment	July 65	59	54	83
Nonfarm Employment	July 131	131	130	125	Insured Unemployment,				
Manufacturing	July 131	131	130	124	(Percent of Cov. Emp.)	July 1.4	1.2	1.1	1.8
Apparel	July 162	162	160	152	Avg. Weekly Hrs. in Mfg., (Hrs.)	July 41.0	41.0r	41.1	41.1
Chemicals	July 127	125r	124	120	FINANCE AND BANKING				
Fabricated Metals	July 145	146	142	133	Member Bank Loans	July 250	255	247	214
Food	July 111	110r	111	109	Member Bank Deposits	July 198	193	197	173
Lbr., Wood Prod., Furn. & Fix.	July 105	104	103	101	Bank Debits**	July 206	195	194	178
Paper	July 115	115	113	110	LOUISIANA				
Primary Metals	July 117	116r	114	112	INCOME AND SPENDING				
Textiles	July 105	104	104	100	Personal Income, (Mil. \$, Annual Rate)	June 8,050	7,942r	8,069r	7,304
Transportation Equipment	July 167	168r	168	154	Manufacturing Payrolls	July 167	164r	163	157
Nonmanufacturing	July 131	131	130	125	Farm Cash Receipts	June 147	129	151	126
Construction	July 126	128	127	122	PRODUCTION AND EMPLOYMENT				
Farm Employment	July 69	69	69	78	Nonfarm Employment	July 120	120	120	114
Insured Unemployment,					Manufacturing	July 113	112	111	108
(Percent of Cov. Emp.)	July 1.8	1.6	1.6	2.4	Nonmanufacturing	July 123	122	122	116
Avg. Weekly Hrs. in Mfg., (Hrs.)	July 41.5	41.6r	41.6	41.3	Construction	July 137	136	138r	122
Construction Contracts*	July 164	174	159	157	Farm Employment	July 67	74	80	80
Residential	July 151	161	163	170	Insured Unemployment,				
All Other	July 175	185	156	147	(Percent of Cov. Emp.)	July 1.9	2.0	2.2	3.0
Electric Power Production**	June 139	137	140	128	Avg. Weekly Hrs. in Mfg., (Hrs.)	July 42.7	42.4r	42.8	42.6
Cotton Consumption**	July 117	117	118	114	FINANCE AND BANKING				
Petrol. Prod. in Coastal La. and Miss.**	Aug. 205	204	203	183	Member Bank Loans*	July 221	212	214	192
FINANCE AND BANKING					Member Bank Deposits*	July 158	154	154	141
Member Bank Loans*					Bank Debits*/**	July 185	168	168	154
All Banks	July 238	236	232	206	MISSISSIPPI				
Leading Cities	Aug. 221	222	216	192	INCOME AND SPENDING				
Member Bank Deposits*					Personal Income, (Mil. \$, Annual Rate)	June 4,031	4,098r	4,118r	3,663
All Banks	July 180	179	177	160	Manufacturing Payrolls	July 202	203r	203	182
Leading Cities	Aug. 168	166	161	151	Farm Cash Receipts	June 180	144	150	138
Bank Debits*/**	July 192	179	182	167	PRODUCTION AND EMPLOYMENT				
ALABAMA					Nonfarm Employment	July 132	131	131	126
INCOME AND SPENDING					Manufacturing	July 142	143r	143	135
Personal Income, (Mil. \$, Annual Rate)	June 7,165	7,080r	7,145r	6,544	Nonmanufacturing	July 127	127	127r	122
Manufacturing Payrolls	July 172	172r	169	164	Construction	July 133	133	132	128
Farm Cash Receipts	June 158	142	150	139	Farm Employment	July 68	62	59	70
PRODUCTION AND EMPLOYMENT					Insured Unemployment,				
Nonfarm Employment	July 121	121	121	118	(Percent of Cov. Emp.)	July 1.7	1.6	1.7	2.4
Manufacturing	July 121	120	120	117	Avg. Weekly Hrs. in Mfg., (Hrs.)	July 41.6	41.6r	41.5	41.0
Nonmanufacturing	July 123	122	121	118	FINANCE AND BANKING				
Construction	July 129	130r	130	121	Member Bank Loans*	July 284	277	272	220
Farm Employment	July 84	73	67	84	Member Bank Deposits*	July 214	210	210	169
Insured Unemployment,					Bank Debits*/**	July 193	183	186	164
(Percent of Cov. Emp.)	July 2.1	2.0	1.9	2.6	TENNESSEE				
Avg. Weekly Hrs. in Mfg., (Hrs.)	July 41.7	41.9r	41.6	41.7	INCOME AND SPENDING				
FINANCE AND BANKING					Personal Income, (Mil. \$, Annual Rate)	June 8,497	8,377r	8,473	7,535
Member Bank Loans	July 220	218	216	197	Manufacturing Payrolls	July 186	187r	182	163
Member Bank Deposits	July 177	177	174	160	Farm Cash Receipts	June 148	130	127	127
Bank Debits**	July 176	171	164	160	PRODUCTION AND EMPLOYMENT				
FLORIDA					Nonfarm Employment	July 134	133	132	125
INCOME AND SPENDING					Manufacturing	July 141	141	139	130
Personal Income, (Mil. \$, Annual Rate)	June 14,977	15,075r	15,082r	13,353	Nonmanufacturing	July 130	129	128	123
Manufacturing Payrolls	July 216	212r	209	190	Construction	July 154	154r	153	142
Farm Cash Receipts	June 124	152	160	99	Farm Employment	July 76	80	74	76
PRODUCTION AND EMPLOYMENT					Insured Unemployment,				
Nonfarm Employment	July 142	142	141	136	(Percent of Cov. Emp.)	July 1.9	1.7r	1.7	2.5
Manufacturing	July 145	143	141	136	Avg. Weekly Hrs. in Mfg., (Hrs.)	July 40.7	41.5r	41.2	40.4
Nonmanufacturing	July 142	142	141	136	FINANCE AND BANKING				
Construction	July 111	111r	108	109	Member Bank Loans*	July 235	235	231	203
Farm Employment	July 50	65	96	83	Member Bank Deposits*	July 173	177	172	158
Insured Unemployment,					Bank Debits*/**	July 207	188	197	178
(Percent of Cov. Emp.)	July 1.9	1.5	1.4	2.2					
Avg. Weekly Hrs. in Mfg., (Hrs.)	July 42.4	42.0r	42.3	41.9					
FINANCE AND BANKING									
Member Bank Loans	July 241	239	234	211					
Member Bank Deposits	July 182	180	176	162					
Bank Debits**	July 184	173	181	163					

*For Sixth District area only. Other totals for entire six states. **Daily average basis. r-Revised.

Sources: Personal income estimated by this Bank; nonfarm, mfg. and nonmfg. emp., mfg. payrolls and hours, and unemp., U. S. Dept. of Labor and cooperating state agencies; cotton consumption, U. S. Bureau of Census; construction contracts, F. W. Dodge Corp.; petrol. prod., U. S. Bureau of Mines; industrial use of elec. power, Fed. Power Comm.; farm cash receipts and farm emp., U.S.D.A. Other indexes based on data collected by this Bank. All indexes calculated by this Bank.

NOTE: Debits to Demand Deposit Accounts for July available upon request to the Research Department, Federal Reserve Bank of Atlanta, Atlanta, Georgia 30303.

DISTRICT BUSINESS CONDITIONS



*Seas. adj. figure; not an index.

In the midst of the summer vacation season, the District's economy also took a breather. The growth in nonfarm jobs slowed, pushing the July insured unemployment rate above the year's previous low. Consumer spending slackened. Reduced availability of mortgage credit and sharply rising interest rates continued to depress housing. Loans and investments at District banks declined in August. Adverse growing conditions have affected some crops, but the overall agricultural picture looks bright.



Strikes in nonmanufacturing and contrasting changes in manufacturing slowed growth in nonfarm jobs in July. Offsetting gains and losses left manufacturing jobs unchanged. Chemicals, food, and primary metals registered sizable increases, while transportation equipment jobs shrank as a result of early auto model changes. Although strikes occurred in airlines and construction industries, nonmanufacturing jobs, spurred by notable gains in government payrolls, advanced smartly.



Sharply declining automobile sales in July resulted in a slowdown in gains of total retail sales and instalment credit. Loans for purchases of automobiles and other consumer goods dropped significantly from the previous month and year-earlier levels. Advances in repair and modernization and personal loans were not large enough to offset declines in other categories. Extensions of all types of loans were only slightly higher than repayments. Thus, total instalment credit continued its slower growth rate.



Leading indicators suggest that the reduction in residential building is now becoming more acute. In recent months interest rates have risen sharply, and marked declines in the availability of mortgage credit have occurred. Contract volume in construction other than housing continues buoyant, however, so that the total still exceeds that of last year. Construction employment is also holding up well in all District states except Georgia, where labor disputes have contributed to a significant slowdown.



District banks were pressured to limit credit expansion in August by sharply lower rates of increase in time deposits and greater-than-seasonal reductions in demand deposits. Both loans and investments declined. Large weekly reporting banks showed small decreases in business loans even though demand for such loans appears very high. Bank borrowings continued to advance.



Good yields for most crops are expected this harvest season. The peanut crop will be large, but heavy insect infestations are reducing cotton prospects. The outlook for citrus and sugarcane crops is good. Record prices were received at all 28 Florida and Georgia flue-cured tobacco markets even though sales were near the 1965 level. Broiler production continues well above last year as prices remain strong. Egg production is also advancing. Retail fluid milk prices have advanced in several District states, as milk production has declined.

NOTE: Data on which statements are based have been adjusted whenever possible to eliminate seasonal influences.