

TRENDS AFFECTING THE FUTURE OF MISSISSIPPI

Speech by Darryl R. Francis, President,  
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I have looked forward to this opportunity to again visit Jackson and renew acquaintances with numerous bankers and other friends in the state. It is an added pleasure to discuss with you the topic which I have been assigned, namely, "Trends Affecting the Future of Mississippi."

Many of you can recall the early post-World War II years when the Federal Reserve Bank of St. Louis, under the leadership of Chester Davis, cooperated with the Federal Reserve Bank of Atlanta, the Mississippi Bankers Association, Mississippi State University and others in several series of meetings across the state. These meetings were designed to promote greater efficiency in the use of agricultural resources. Evidence indicates that this objective has been achieved. The growing efficiency of agriculture in the state is shown by numerous measures including output per farm, number of workers in agriculture, and net income per farm.

Following this success in one segment of the state's economy it thus seems appropriate that the economic leadership, represented by you people, take on and pursue the task of analyzing other sectors of the state's economy and adopting programs which will contribute to greater efficiency in resource use and production on a broad front. It is this task

of formulating more effective economic development programs that I shall comment upon in this discussion. I can assure you that the Federal Reserve Bank of St. Louis remains vitally interested in such programs along with its major Federal Reserve System responsibilities of achieving reasonable price stability and high employment in the nation.

Three steps are involved in my analysis of economic activity in the state. The first section consists of some general indicators of the current level of activity in the state compared to the national average. The second section provides some perspective by indicating trends in broad measures of activity, and the third section will include a more detailed analysis of specific growth areas. From these analyses I have developed a concluding statement outlining the weak and strong features of the state's growth pattern.

At the outset I might state, not as an apology, but simply a statement of fact, that two analysts could readily draw quite different and conflicting conclusions in regard to economic conditions in Mississippi. Most direct comparisons of the broad measures of activity with the national average show the state coming in a poor second. On the other hand, a comparison of recent growth trends, as I have made in the second stage of this report, shows the state making great strides relative to the nation. Furthermore, some of the

specific analyses in the third portion of this discussion reveal a very promising outlook for growth.

A look at the state's current situation reveals that a sizeable gap remains to be closed if the state is to reach the average for the nation in most areas of activity. In 1965 per capita income in Mississippi averaged \$1,559 compared to \$2,781 in the nation. Such income in the state was only 56 per cent of the national average. Similarly, average hourly earnings of production workers in manufacturing were well below the national level, averaging only \$1.69, or 69 per cent of the national average. Value added per man-hour in manufacturing of \$4.78 was only 62 per cent of the national level.

Numerous other broad measures of economic activity similarly show the state lagging the nation. In 1965 only 32 per cent of the state's population was employed, compared to 38 per cent in the nation. A smaller per cent of the workers in the state were employed in the relatively high income occupations. Conversely, a larger per cent were employed in the relatively low income occupations. For example, in manufacturing, where wages generally average higher than other occupations, employment in Mississippi in 1965 was only 20 per cent of total employment. In comparison, 25 per cent of the nation's work force was employed in manufacturing. On the other hand, employees in the relatively

low-paying occupations such as agriculture, self-employed groups, domestic workers and unpaid family workers, account for 36 per cent of the total in Mississippi compared to 16 per cent in the nation.

These indicators, as per capita incomes and average hourly earnings of production workers in manufacturing, should not be interpreted as precise measures of levels of living in the state and nation. I am sure that Mississippi dollars purchase a greater volume of goods and services used by families than the average dollars earned throughout the nation. Unfortunately, we have no cost of living comparisons between the state and the national average. The lower charges here for housing and services, primarily because of lower prices for labor and some important raw materials, however, will have an important impact on total family budget requirements. Also, numerous factors enter into day-to-day living which are difficult to measure in monetary terms but are nevertheless important in determining one's residence. Included among such factors are the numerous free outdoor recreation opportunities in Mississippi, the desirable climatic conditions, and favorable social and family ties. When both monetary and non-monetary cost of living factors are accounted for, Mississippi living standards probably approach the national average much closer than is indicated by the per capita income data.

Some other measures of economic activity and resource use in Mississippi compare quite favorably with the national average. The unemployment rate for the state in early 1966 was about the same as the national average. Net income per farm last year totaled \$3,446, or 99 per cent of that for the nation. Crop yields indicate that farm production capacity in Mississippi is better than average for cotton but below average for corn. In 1965 cotton yields per acre were 28 per cent above those of the nation, while corn yields were 45 per cent less.

Despite some favorable comparisons, an over-all view of these data reveals the substantial lag in the state's economic situation as it currently stands. Recent trends in many of the broad measures of activity, however, reveal a basis for optimism concerning the future course of activity in the state.

Since 1957 population has increased at the national rate after declining in relation to the national total for a number of years (Chart 1). The state's population rose from 2,072,000 in 1957 to 2,322,000 in 1965, an increase of 12 per cent. The United States population rose at about the same rate during the period. Total employment in the state has moved up 7 per cent since 1960, almost as great as the 8 per cent gain nationally (Chart 2).

Payroll employment in the state has made outstanding gains since 1957, increasing from 367 thousand to 481 thousand, a gain of more than 30 per cent (Chart 3). In comparison, payroll employment in the nation rose only 14 per cent. The diverse trends in total and payroll employment are explained by a major shift in employees in Mississippi from non-payroll groups, particularly farming, into the payroll classification.

Total and per capita personal incomes have likewise made major gains in Mississippi since 1957 (Charts 4 and 5). Total personal income increased from \$2.1 billion to \$3.6 billion, a gain of about 71 per cent. This compares with a 53 per cent gain for the nation. Per capita personal income in the state rose from \$1,013 to \$1,559, a gain of 54 per cent. In comparison, per capita income rose only about 36 per cent in the nation. These impressive growth trends demonstrate the dynamic nature of economic activity in the state.

In the third phase of this discussion I would like to direct your attention to some specific characteristics of growth patterns in Mississippi. First, let's examine manufacturing employment that has grown so rapidly in Mississippi in recent years. Production workers in manufacturing rose from 113 thousand in 1958 to 152 thousand in 1965, a gain of 34 per cent. Production workers in manufacturing in the

U. S. gained only 13 per cent during this period. Average value added per man-hour in manufacturing in Mississippi rose 33 per cent compared to 23 per cent in the U. S. However, average hourly earnings per production worker in manufacturing in the state rose 12 per cent compared to 17 per cent in the nation.

Just as important as the total gains, from the view of economic development, are the types of manufacturing industries which have developed in the state. Most of the state's manufacturing workers are employed in 12 of the major SIC manufacturing groups which I shall not list to you in detail. I have, however, consolidated the 12 groups into two major groups which, for want of a better term, shall be called the "low earnings" group and the "high earnings" group. As the name implies, the "low earnings" group consists of those industries such as food processing, textiles, apparel, lumber and furniture manufacturing in which the average hourly earnings are relatively low. In contrast, the "high earnings" group consists of such manufacturers as paper firms, chemicals, stone, clay, metals, electrical machinery and transportation equipment which require more capital per worker, higher skills, and the average hourly earnings are substantially greater.

Manufacturing in Mississippi still consists predominantly of the "low earnings" type industries. Of the 141 thousand employees in the 12 major manufacturing groups in Mississippi in 1965, 63 per cent were employed in the five

"low earnings" groups. In comparison, only 32 per cent of the manufacturing workers in the United States were employed in the five "low earnings" groups. Conversely, only 37 per cent of the manufacturing employees in Mississippi were employed in the "high earnings" groups, whereas 68 per cent of the U. S. manufacturing employees were working in the "high earnings" groups.

Other characteristics of manufacturing in Mississippi similarly show the unfavorable balance of the industry in the state. Value added per man-hour of production work in 1963 totaled only \$4.78, or about two-thirds of the \$7.78 per man-hour in the nation. Value added per man-hour in the state was below the national average in each of the 12 major manufacturing groups. However, in the "high earnings" groups of chemicals and allied products, and stone, clay, and glass products, the value added per man-hour in Mississippi more nearly approached the national average. Average hourly earnings of production workers in manufacturing in Mississippi of \$1.69 were likewise only about two-thirds the national average. Again the difference between the state and national average was less percentage-wise in some of the "high earnings" groups. For example, in paper and allied products, average wages in the state of \$2.64 per hour exceeded the national average by about 5 per cent.

These data do not mean that labor in Mississippi is less industrious than in other parts of the nation. The value added per man-hour reflects both the skill of labor, the labor-capital mix, and other factors such as plant organization which contribute to labor efficiency. The lower average value added per man-hour for all manufacturing groups in Mississippi probably reflects the type of manufacturing most predominant in the state - namely, apparel and related products which employ large numbers of relatively unskilled workers in low capital per worker plants. Thus the low average value added per man-hour in the state probably reflects both the relatively low skills required and the low capital to labor mix in the types of industries predominant in the state.

When broken down by industry groups, the average value added per man-hour in each of the 12 major groups is somewhat less in Mississippi than the national average. Again, however, the data are subject to misinterpretation, since the products of manufacturing can vary substantially within each of the major groups. For example, apparel mills in Mississippi may be geared primarily for producing overalls in a highly competitive market where value added averaged \$2.93 per man-hour in 1963. On the other hand, the national average value added by apparel workers is more influenced by highly specialized firms such as fur goods plants where value added averaged \$7.20 per man-hour.

Although these data point up weak points in the state's manufacturing industry, some of the emerging trends give reason for optimism. The trend in value added per man-hour in Mississippi has been sharply upward during recent years. Average value added per man-hour for all manufacturing in the state rose 33 per cent from 1958 to 1965. In comparison, the increase for the nation averaged 23 per cent. A breakdown of manufacturing in the state into three digit SIC groups shows that value added per man-hour in Mississippi rose faster than the national average in 12 out of 18 groups where comparable data are available. Some significant gainers in value added per man-hour in Mississippi compared to the U. S. average were:

	<u>Mississippi</u>	<u>United States</u>
Dairies	+ 60.7 %	+ 37.5 %
Miscellaneous Foods	+ 58.4	+ 32.1
Sawmills and Planing Mills	+ 55.2	n.a.
Miscellaneous Wood Products	+ 109.6	+ 23.9
Basic Chemicals	+ 43.9	+ 42.9
Agricultural Chemicals	+ 175.1	+ 24.4
Structural Metals	+ 37.5	+ 9.5
Toys and Sporting Goods	+ 37.0	+ 17.3

Also, an analysis of growth rates in the major types of manufacturing indicates a strong trend toward improved balance between the "low earnings" and "high earnings" groups in recent years. Employment in the "high earnings" group in the state rose from 39 thousand to 52 thousand during the period 1958-1965. Percentagewise, state employment in these groups rose 34 per cent compared to a 15 per cent gain nationally

in the same groups. Primarily responsible for gains in the "high earnings" industries were the great employment increases in machinery and fabricated metals. Employment in both of these industries almost tripled during the seven year period.

Although still at a relatively low level in total employment this beginning of highly-skilled and highly-capitalized types of industries in the state provides an opportunity for upgrading labor skills through on-the-job training. Thus, these developments will aid in alleviating the dearth of locally trained manpower. Also, along with existing wage differentials, some upgrading of labor skills will provide additional incentive for other higher-capitalized industries to locate in the state.

Agriculture in Mississippi has also moved sharply ahead in recent years, paralleling developments in the manufacturing sector. Realized gross farm income in the state rose \$200 million, or 30 per cent from 1958 to 1964. This compares with an 11 per cent gain for the nation. Net farm income rose 64 per cent compared with a 10 per cent decline nationally. Primarily as a result of greater efficiency in the farm labor force and a reduction in the number of farms, net income per farm in the state more than doubled during the period, rising from \$1,462 to \$3,446, or 136 per cent compared with a 9 per cent gain nationally. These major gains in agricultural efficiency have released numerous

workers to other sectors of the state's economy, permitting more rapid development there than could have otherwise occurred. Since 1961 agricultural employment in the state has dropped from 175 thousand to 147 thousand, a decline of almost 16 per cent.

Another facet of the state's economic pulse beat which is very difficult to measure, but nevertheless should not be ignored, is the quality of the labor force. One indication of such quality is the type of industry prevailing. Using this as a measure, the state would have to be classified substandard despite some very promising gains in recent years. Another measure which I prefer to use, however, is the level of education achieved. In applying this measure to the state I find that Mississippi not only lags the national average but fell somewhat further behind during the decade ending in 1960. At that time the median years of school completed by the population over 25 years of age in Mississippi was 8.9 years. The comparable schooling completed by the nation's population was 10.6 years. The median school years completed in Mississippi in 1960 was 84 per cent of the U. S. median compared to 87 per cent a decade earlier.

In summary I shall briefly reiterate some of the strong and weak points in the state's recent and potential economic development as they appear to me. On the negative side I would list the following:

1. Despite the recent growth of some high-earning types of manufacturing industries, manufacturing in the state consists predominantly of the "low earnings" type.

2. Per capita incomes are still relatively low despite substantial improvement in recent years. This to a great extent reflects the type of labor force and employment opportunities in the state. The low incomes also result partially from the relatively high per cent of employment in agriculture where incomes nationally remain below averages in other sectors of the economy.

3. The quality of the state's labor force is apparently well below the national average, and this may be an important factor inhibiting growth in the area. Opportunities for industrial training are relatively scarce because of a shortage of highly-capitalized industries in the state in which on-the-job training can be obtained. The median level of education is well below the national average, and the situation has apparently not improved in recent years. My guess is that those "high earning" industries which have moved to the state have imported a large share of their highly-skilled workers. This places a heavy cost burden on industrial expansion and limits growth of firms requiring highly-skilled help in locations where it is in short supply.

On the positive side, the state's economic achievements are outstanding.

1. Personal, total, and per capita income has made above-average gains in recent years.

2. Employment in manufacturing has grown at a greater than national rate, providing balance in the state's economy. Also, the state is beginning to attract some of the more highly capitalized, better-paying industries.

3. Hourly earnings of production workers in manufacturing in Mississippi continue to lag the national average, providing great incentive for further plant expansion in the state.

4. Value added per man-hour of production work in the state's manufacturing industries has increased sharply in recent years. Although still somewhat below the national average, value added has moved upward at a substantially faster rate in the state than in the nation.

5. Agriculture is making rapid strides. Farm organization is improving. Mechanization is providing greater efficiency, and labor is being released to non-farm uses. This dynamic nature of the state's agriculture is a boon to growth in other sectors of the state's economy.

In summation, Mississippi has made major gains on a wide economic front. Total personal income, payroll and manufacturing employment, and output per worker in manufacturing, have increased sharply in recent years. The farming community has likewise moved forward with great vigor.

On the other hand, the state still lags the nation in most measures of economic progress. Low per capita incomes, a lack of balance in manufacturing industries, a relatively untrained labor force, and a continuing lag in educational accomplishment are major problem areas. In my judgment, stepped up emphasis on upgrading education and training of the state's young people offers the greatest opportunity for the solution of all these problems.

I believe that the state has the know-how and the will to come to grips with these problems. Frequently local communities may fail to recognize the importance of education and training. Investments in these areas may offer the highest rate of return of any investment that Mississippi can make. This is where the people in this room, who represent the economic leadership of the state, have an important part to play in its progress. As recognized business leaders your voice often carries greater weight than professional educators and others in stressing the need for education and improving the quality of the labor force. By pointing out that high wage paying industries and high quality labor move together, you can be a potent force not only in raising your own incomes but also in improving the living levels of all Mississippians.

**TABLE I**  
**Some Measures of Mississippi's Economy**

<u>Economic Indicator</u>	<u>Mississippi</u>	<u>U. S.</u>	<u>Mississippi as Per Cent of U. S.</u>
Per capita income (1965)	\$ 1,559	\$ 2,781	56
Average hourly earnings (1963)	1.69	2.46	69
Per Cent of population employed (1965)	32.2	37.6	86
Per Cent of total employment:			
in manufacturing (1965)	20.3	24.9	82
in nonmanufacturing (1965)	44.1	58.8	75
in agriculture (1965)	19.6	6.4	306
in other employment (1965) <sup>1/</sup>	16.0	9.9	162
Unemployment rate (1965)	4.7 <sup>2/</sup>	4.6	-
Value added per manhour in manufacturing (1963)	\$ 4.78	\$ 7.67	62
Net income per farm (1964)	\$ 3,446	\$ 3,486	99

<sup>1/</sup> Nonagricultural self-employed, domestic, and unpaid family workers.

<sup>2/</sup> Revised 1-66.

TABLE II

Employment, Value Added per Man-hour, and Hourly Earnings  
Mississippi and United States Manufacturing Industries

	1965		1963		1963	
	Employment		Value Added <sup>1/</sup>		Average	
	(Thousands of Persons)		(Dollars)		(Dollars)	
	U. S.	Miss.	U. S.	Miss.	U. S.	Miss.
Food and kindred products	1,737.7	16.9	9.58	6.51	2.30	1.53
Textile mill products	919.3	5.4	3.92	3.71	1.71	1.54
Apparel and related products	1,350.8	34.2	3.74	2.41	1.73	1.34
Lumber and wood products	605.8	23.5	3.99	3.57	2.04	1.58
Furniture and fixtures	429.1	9.2	4.78	4.00	2.00	1.55
Paper and allied products	637.5	5.3	7.35	6.49	2.48	2.64
Printing and publishing	977.3	2.4	9.63	6.50	2.89	1.99
Chemicals and allied products	902.7	4.9	17.89	16.43	2.72	2.03
Stone, clay, and glass products	620.9	5.4	7.56	6.66	2.47	1.80
Primary and fabricated metals	2,553.3	7.7	7.44	6.65	2.83	1.91
Electrical and non-electrical machinery	3,385.0	15.5	7.89	5.89	2.62	1.76
Transportation equipment <sup>2/</sup>	1,739.3	10.8	9.24	4.71	3.01	n.a.
Total Manufacturing <sup>2/</sup>	17,984.0	151.7	7.67	4.78	2.46	1.69
First 5 groups	5,042.7	89.2	5.62	3.60	1.96 <sup>3/</sup>	1.51 <sup>3/</sup>
Remaining groups	10,816.0	52.0	8.77	6.89	2.72	2.02
Low earnings group as per cent of total	31.8	63.2				
High earnings group as per cent of total	68.2	36.8				

<sup>1/</sup> Production workers only.

<sup>2/</sup> Industry groups do not add to total because smaller industries have been omitted.

<sup>3/</sup> Arithmetic mean of group averages, i.e., not weighted.

TABLE III

Growth Rates in Major Manufacturing Industries  
Mississippi and United States

	<u>Employment</u>		<u>Value Added Per Man-hour</u>		<u>Average Hourly Earnings</u>	
	Per Cent Change 1958-1965		Per Cent Change 1958-1963		Per Cent Change 1958-1963	
	<u>Miss.</u>	<u>U. S.</u>	<u>Miss.</u>	<u>U. S.</u>	<u>Miss.</u>	<u>U. S.</u>
Food and kindred products	13.4	- 2.0	20.3	24.7	11.7	23.0
Textile mill products	22.7	0.1	62.0	26.5	12.4	17.1
Apparel and related products	40.7	15.3	27.5	14.4	16.5	13.8
Lumber and wood products	10.8	- 1.5	77.6	20.5	35.0	17.2
Furniture and fixtures	76.9	18.9	24.2	14.9	n.a.	14.9
Paper and allied products	37.0	13.0	15.1	20.3	22.2	23.4
Printing and publishing	0	12.0	16.3	21.0	9.9	n.a.
Chemicals and allied products	32.4	13.7	68.2	32.4	20.1	21.4
Stone, clay, and glass products	31.7	10.4	25.0	20.8	16.1	20.5
Primary and fabricated metals	165.5	14.5	72.3	15.9	21.7	17.9
Electrical and non- electrical machinery	146.0	29.6	5.9	19.2	8.6	19.1
Transportation equipment	- 1.8	8.2	38.1	37.1	n.a.	23.4
<b>Total Manufacturing</b>	<b>34.2</b>	<b>12.8</b>	<b>33.1</b>	<b>22.9</b>	<b>11.9</b>	<b>17.1</b>

n.a. - not available.

TABLE IV

Employment in Nonmanufacturing in Mississippi

	Thousands of Persons Mississippi 1/		Per Cent Change 1958-1965	
	<u>1958</u>	<u>1965</u>	<u>Miss.</u>	<u>U. S.</u>
Transportation, communications, public utilities	25.3	26.4	4.3	1.4
Wholesale and retail trade	79.5	92.4	16.2	17.1
Finance, insurance, real estate	11.9	16.7	40.3	20.8
Service and miscellaneous	40.7	55.5	36.4	30.7
Government	82.3	104.8	27.3	28.2
Contract construction	22.9	27.8	21.4	15.6
Mining	5.6	5.9	5.4	- 16.4
<b>Total Nonmanufacturing</b>	<b>268.3</b>	<b>329.5</b>	<b>22.8</b>	<b>19.8</b>

1/ Industry groups do not add to total because small industries have been omitted.

**TABLE V**

**Growth Rates in Agriculture, Mississippi and U. S.**

	<u>U. S.</u>	<u>Mississippi</u>
Gross farm income	+ 11.3	+ 30.2
Net farm income	- 10.4	+ 63.9
Net income per farm	+ 9.3	+ 135.7
Cotton yield per acre	+ 10.9	+ 79.0
Corn yield per acre	+ 21.1	+ 34.4
Soybean yield per acre	- 5.8	- 17.4

TABLE VI

Median Years of School Completed  
Mississippi and U. S. 1/

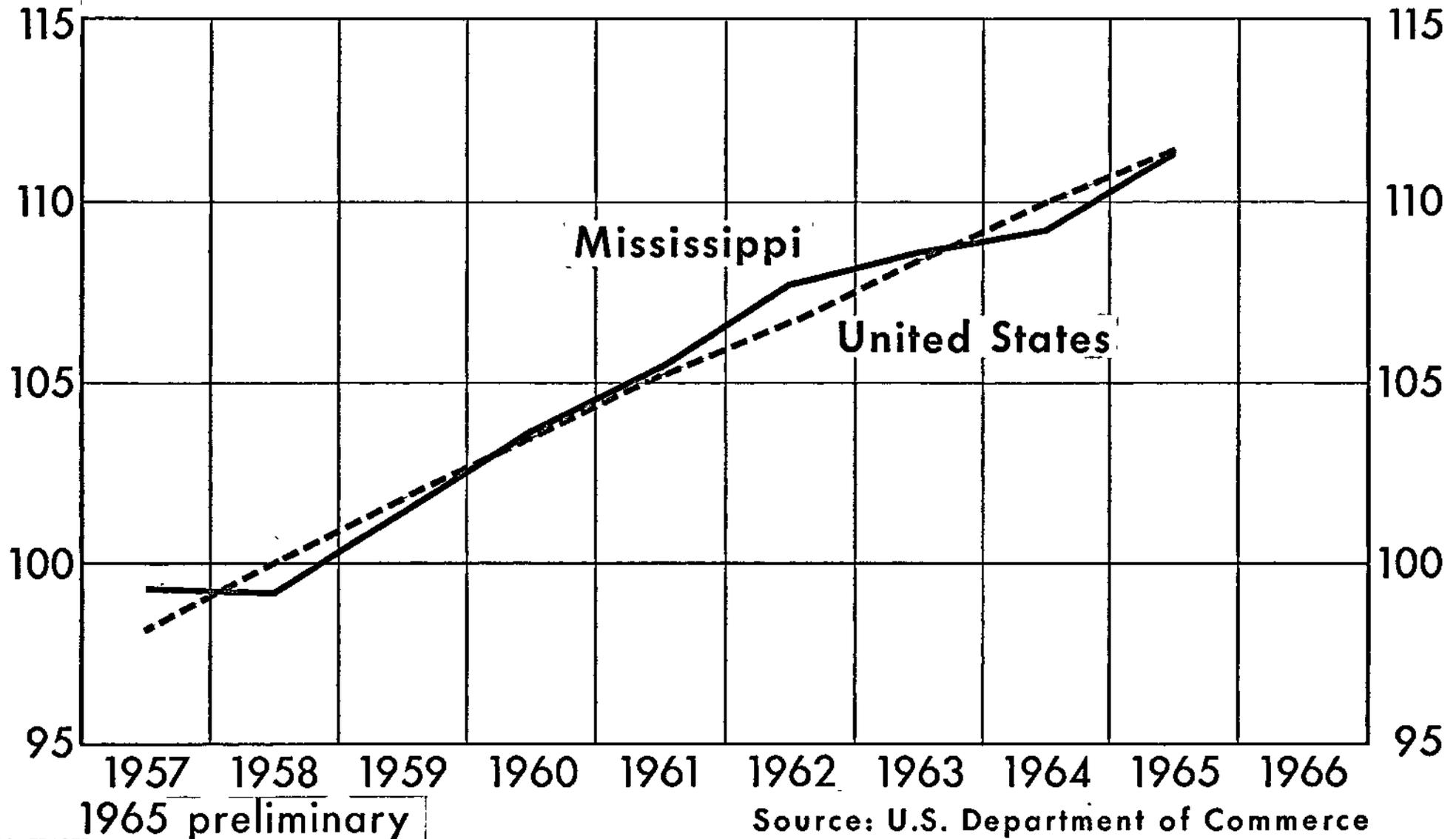
	<u>1950</u>	<u>1960</u>
Mississippi	8.1	8.9
United States	9.3	10.6
Mississippi as Per Cent of U. S.	87.1	84.0

1/ Population, age 25 and over.

# POPULATION MISSISSIPPI AND UNITED STATES

1957-59=100

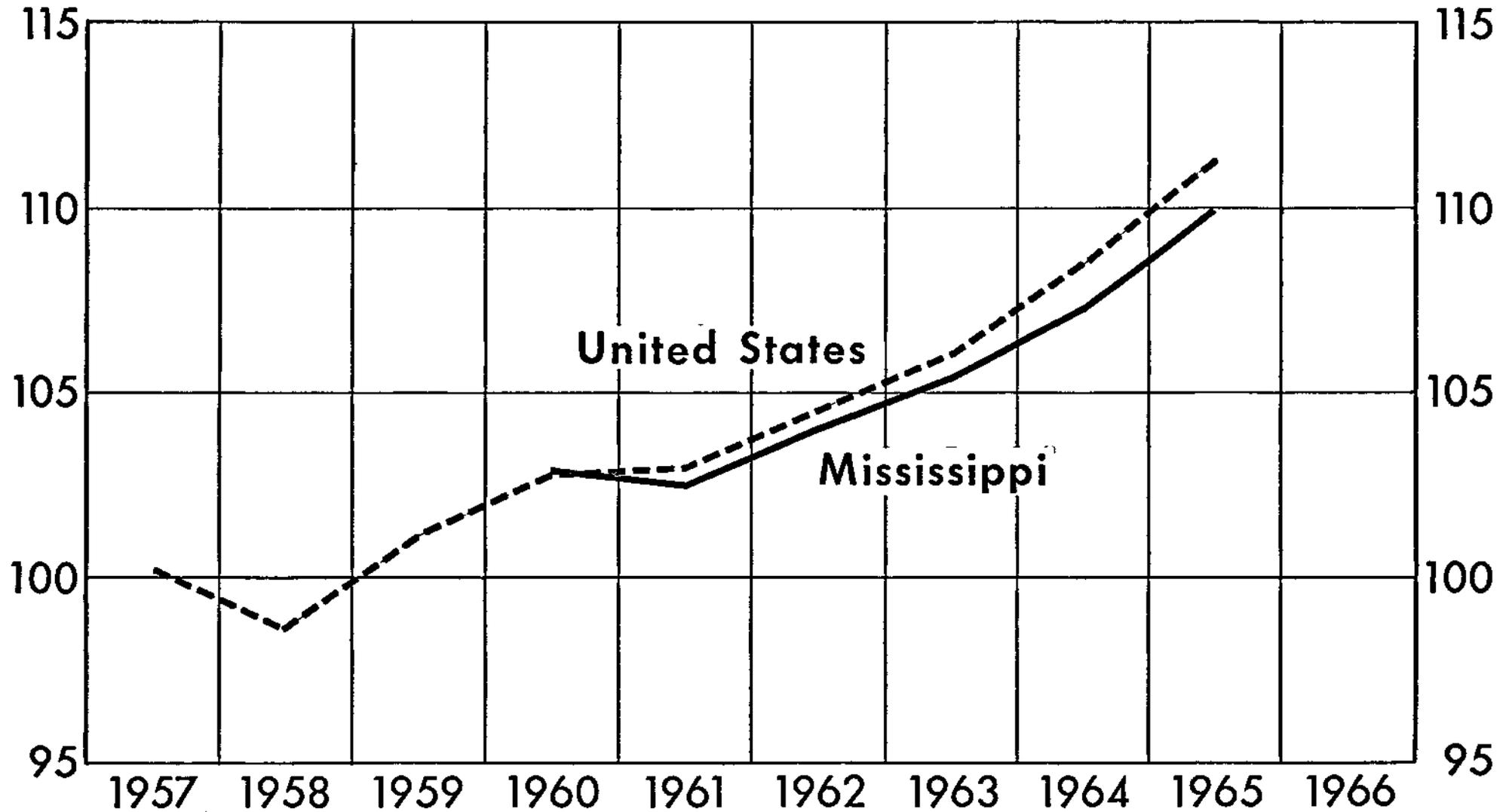
1957-59=100



# TOTAL EMPLOYMENT MISSISSIPPI AND UNITED STATES

1957-59=100

1957-59=100

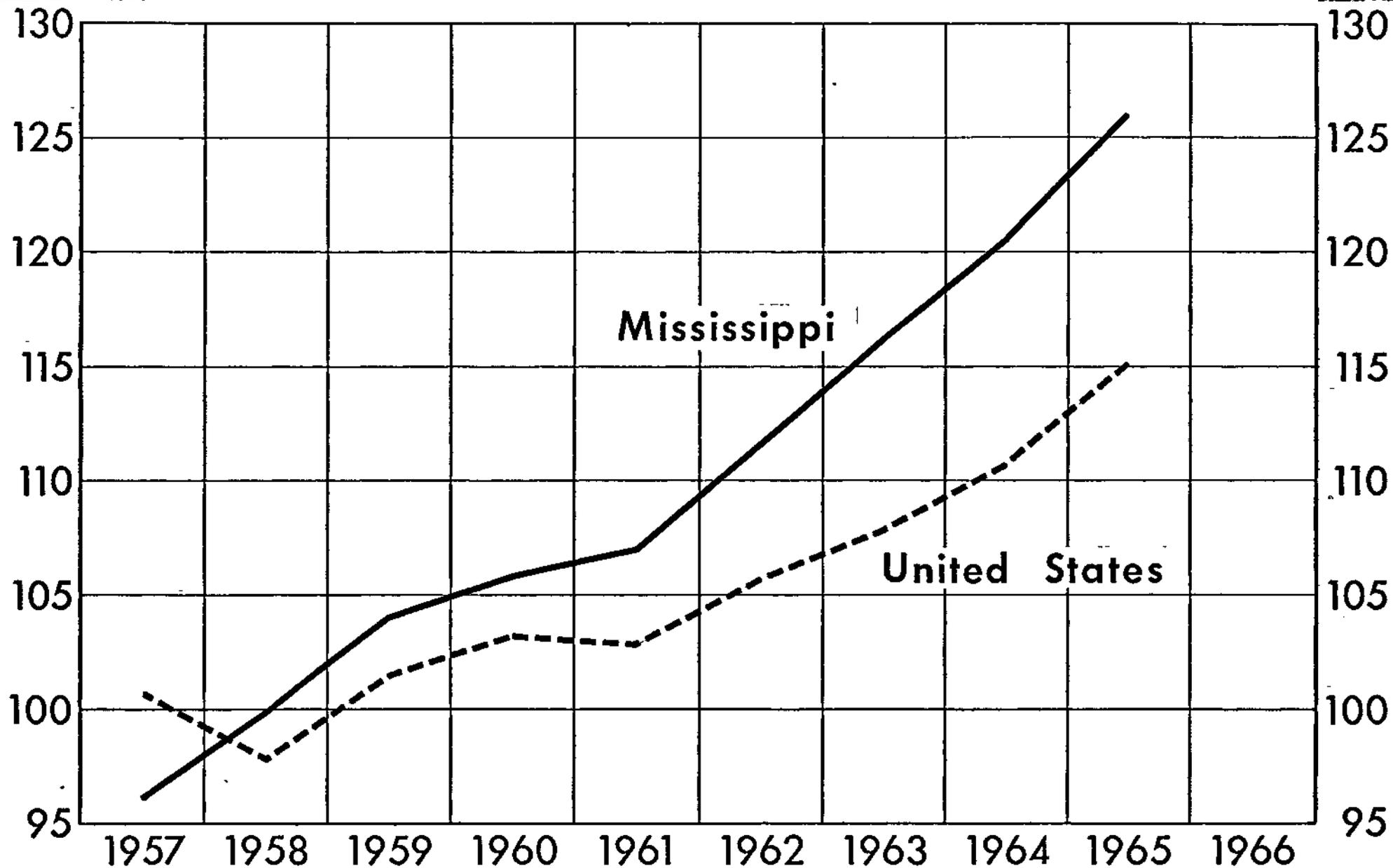


Source: Mississippi Employment Security Commission  
and U.S. Department of Commerce

# PAYROLL EMPLOYMENT MISSISSIPPI AND UNITED STATES

1957-59=100

1957-59=100

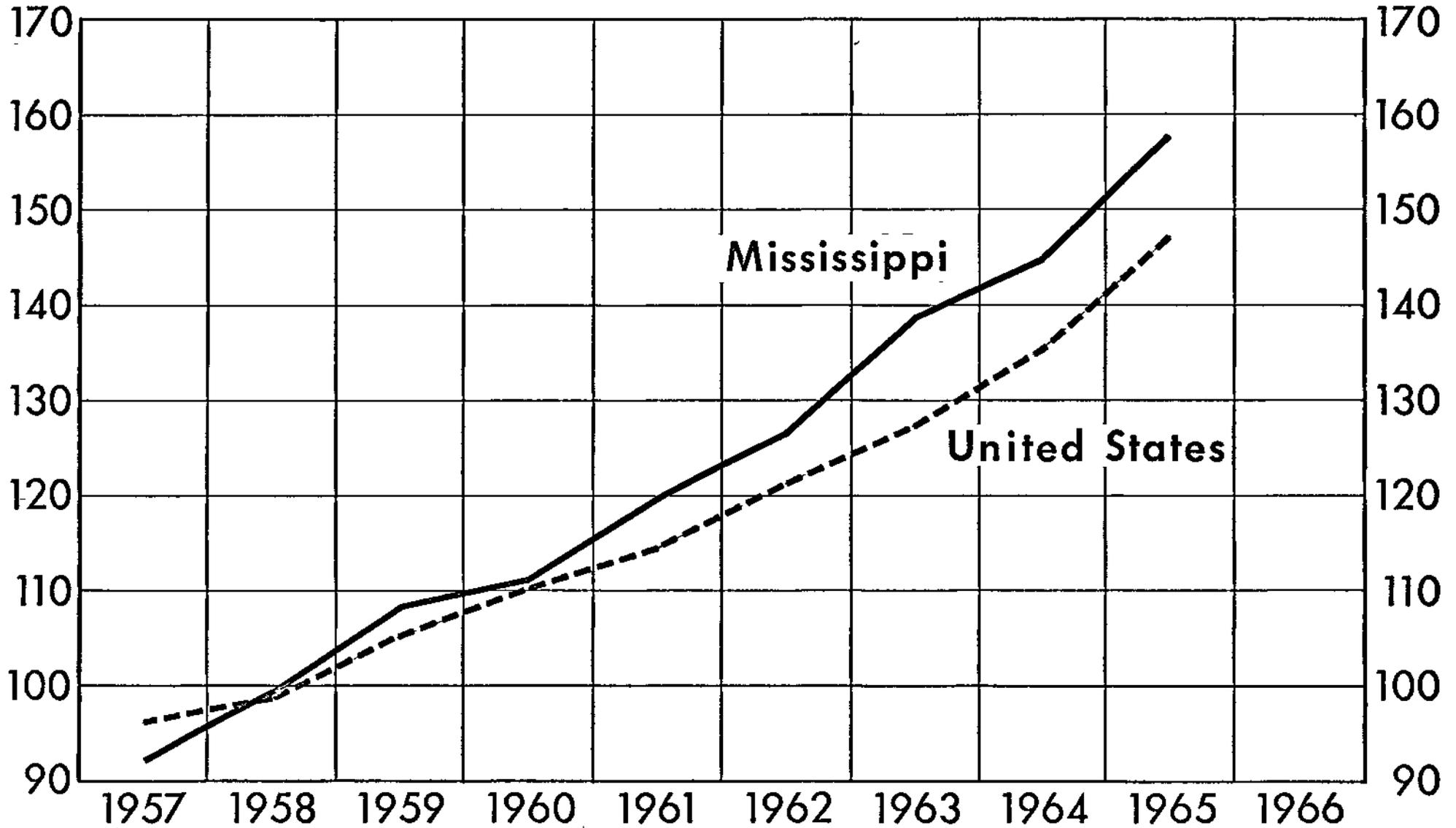


Source: Mississippi Employment Security Commission  
and U.S. Department of Labor

# TOTAL PERSONAL INCOME MISSISSIPPI AND UNITED STATES

1957-59=100

1957-59=100

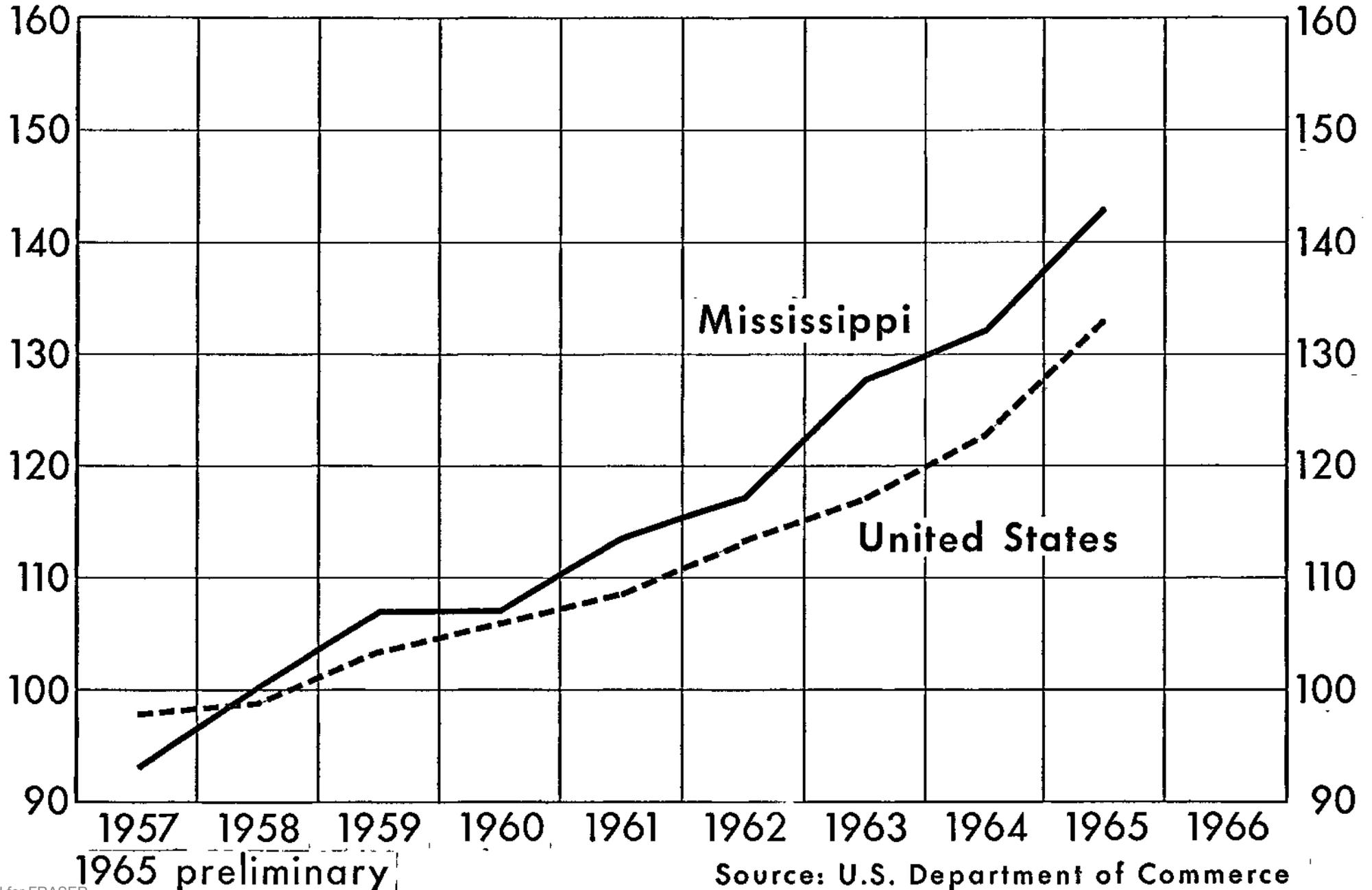


1965 preliminary Source: U.S. Department of Commerce and Business Week

# PER CAPITA PERSONAL INCOME MISSISSIPPI AND UNITED STATES

1957-59=100

1957-59=100



1965 preliminary

Source: U.S. Department of Commerce