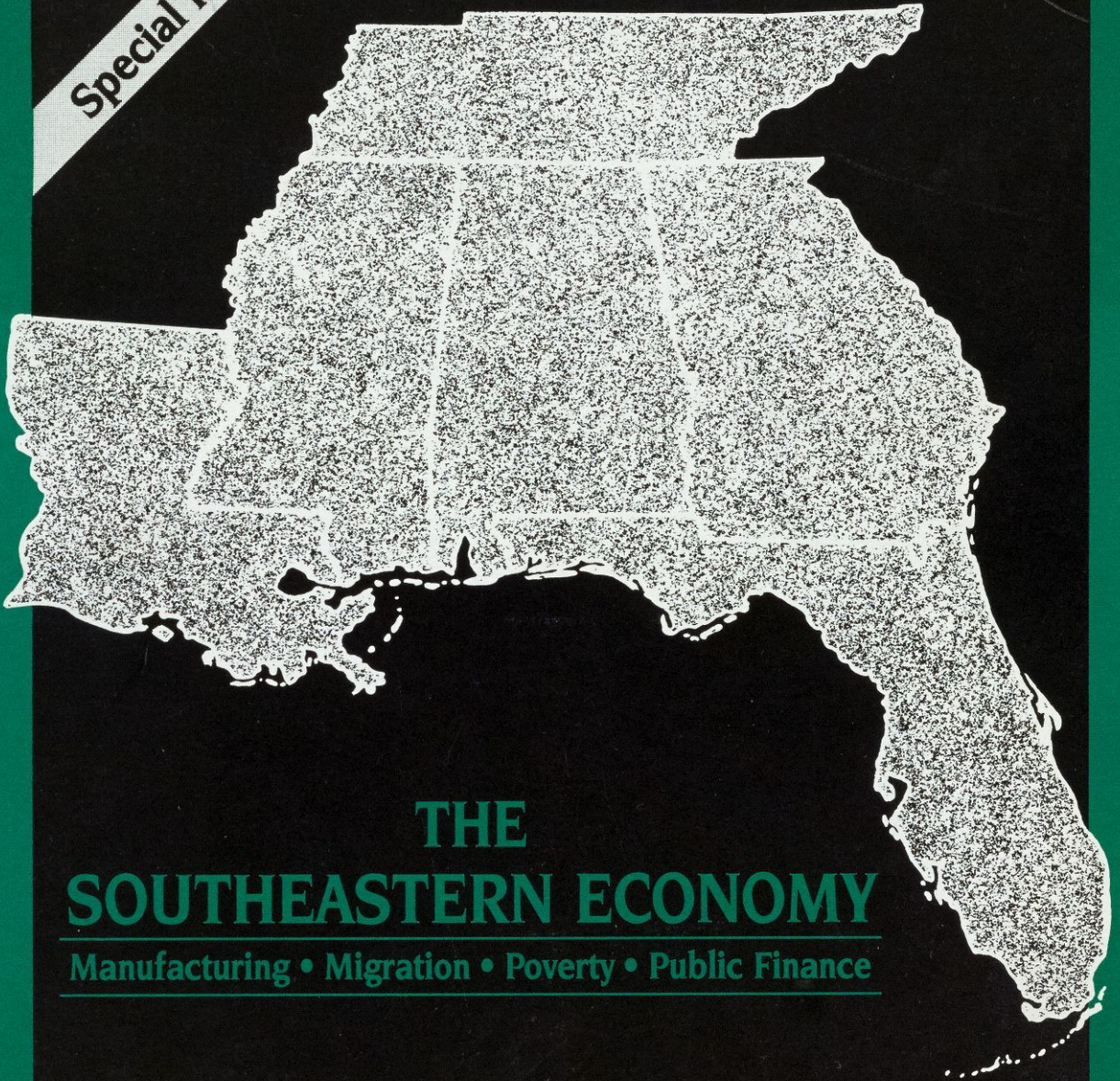


Economic Review

FEDERAL RESERVE BANK OF ATLANTA

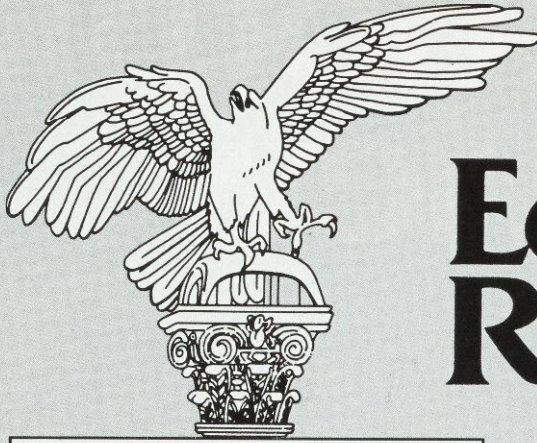
JANUARY/FEBRUARY 1989

Special Issue



THE SOUTHEASTERN ECONOMY

Manufacturing • Migration • Poverty • Public Finance



Economic Review

President

Robert P. Forrestal

**Senior Vice President and
Director of Research**

Sheila L. Tschinkel

**Vice President and
Associate Director of Research**

B. Frank King

Research Officers

William Curt Hunter

Financial

David D. Whitehead

Macropolicy

Mary Susan Rosenbaum

Regional

Gene D. Sullivan

Public Information Officer

Bobbie H. McCrackin

Publications

Robert D. Land, Editor

Lynn H. Foley, Editorial Assistant

J. Edward Rooks, Graphics

Jodie B. Trail, Typesetting

The **Economic Review** seeks to inform the public about Federal Reserve policies and the economic environment and, in particular, to narrow the gap between specialists and concerned laypersons.

Views expressed in the **Economic Review** are not necessarily those of this Bank or of the Federal Reserve System.

Material may be reprinted or abstracted if the **Review** and author are credited. Please provide the Bank's Public Information Department with a copy of any publication containing reprinted material.

Free subscriptions and limited additional copies are available from the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta Street, N.W., Atlanta, Georgia 30303-2713 (404/521-8788). **Change-of-address notices and subscription cancellations should be sent directly to the Public Information Department. Please include the current mailing label as well as any new information.**

ISSN 0732-1813

As part of the 75th anniversary (1914-1989) of the Federal Reserve Bank of Atlanta, the Economic Review takes on a slightly different look for this and the next five issues. This year we will display a design that commemorates the Bank's 75 years of service to the region. By keeping this logo in view, we hope to remind our readers of the Atlanta Fed's ongoing role in the financial and payments systems of the southeastern economy and in the conduct of U.S. monetary policy.

VOLUME LXXIV, NO. 1, JANUARY/FEBRUARY 1989, ECONOMIC REVIEW

2 **Southeastern Manufacturing:
Recent Changes and Prospects**
Gene D. Sullivan and David Avery

Rapid technological advances, here and abroad, and the dollar's fluctuations have combined to change the region's manufacturing industries. What is the pattern of this change, and has it affected rural and urban parts of the Southeast differently?

18 **Interregional Migration:
Boon or Bane for the South?**
William J. Kahley

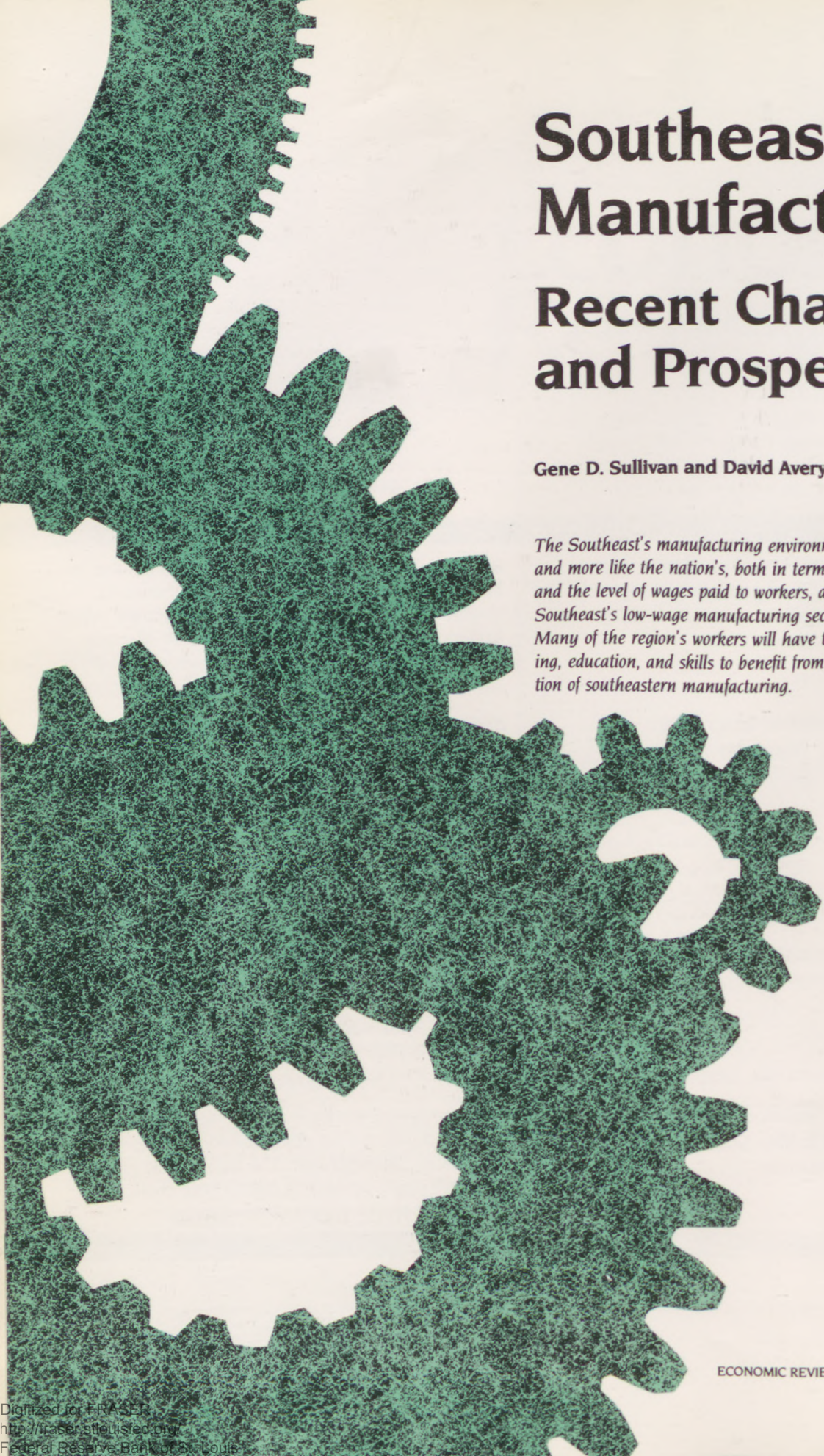
Shifting American migration patterns have been closely linked to each region's economic environment, as well as the unprecedented willingness of older people to move. Addressing these and other causes for increased migration to the South, the author considers the positive and negative effects of population movements and their likely future patterns.

36 **Poverty in the South**
Jon R. Moen

Poverty persists throughout America, especially in the South. The distribution of southern poverty resembles the nation's, but more of the South's poor live in rural areas, which makes designing antipoverty policy more difficult.

48 **Public Finance and Economic
Growth in the Southeast**
Aruna Srinivasan

In-migrants and the poor are two sources of the increased demand for state and local government services in the Southeast. The region's tax jurisdictions are devising ways to meet these challenges in the face of shrinking federal support.



Southeastern Manufacturing: Recent Changes and Prospects

Gene D. Sullivan and David Avery

The Southeast's manufacturing environment is becoming more and more like the nation's, both in terms of dominant industries and the level of wages paid to workers, as the importance of the Southeast's low-wage manufacturing sector has decreased. Many of the region's workers will have to improve their training, education, and skills to benefit from the changing composition of southeastern manufacturing.

U.S. manufacturing has undergone wrenching changes during the 1980s. With the improved competitive position of foreign producers—a result of outmoded American technology and the dollar's shifting exchange value—many domestic industries have had to innovate quickly or halt operations.

The forces of change appear to have affected traditional southeastern manufacturing industries more seriously than the nation's, prompting questions about the differences between southeastern and U.S. manufacturing. Have recent adjustments caused this region's factory sector to resemble the nation's more closely? Have the impacts been different for urban and rural areas? What do recent developments suggest for future manufacturing trends in general and, more specifically, for the future incomes of southeastern workers? This article addresses these and other timely questions.

A Comparison of Southeastern and U.S. Manufacturing

Throughout the twentieth century, manufacturing has been a significant component in the southeastern economy. Its early importance was based on timber-related production and on the southward movement of the textile and apparel industries. The proportion of the Southeast's population engaged in manufacturing was about the same as the nation's through the 1930s, 1940s, and 1950s, but the region was unlike the nation in that its workers were predominantly engaged in the low-skilled jobs of lumbering, weaving, and sewing.

Table 1 shows that in 1985 these industries still held the highest concentrations of the Southeast's manufacturing employment despite recent declines in the number of low-skilled jobs this type of industry typically generates.¹ Even with this contraction, however, other types of manufacturing made enough gains that total manufacturing employment in the Southeast

reached its highest point ever during 1987. Nonetheless, manufacturing's share of total employment has fallen from 21 percent in 1970 to about 16 percent in 1987, lower than the nation's 17 percent average share, which has also dropped since 1970. In the Southeast, the shrinking percentage of manufacturing employment reflects primarily the rapid growth of non-manufacturing sectors such as trade and other service-producing industries. Nationally, the number of manufacturing employees has actually declined since the late 1970s, when technological inefficiencies and the dollar's rise against other currencies reduced the competitiveness of domestic plants. At the same time, the nation's nonmanufacturing industries were also growing rapidly.

Well-paid jobs have not historically accompanied the Southeast's predominant types of manufacturing activities. Thus, regional wages lagged well behind the U.S. average. For example, the average pay of manufacturing workers in Georgia, a state that is fairly typical of the Southeast, was \$1.00 per hour in 1949 compared with an average of \$1.38 per hour for the United States. The gap between Georgia's average wage and the U.S. mean hourly rate narrowed only slightly through the mid-1960s. By 1970, Georgia's norm of \$2.67 per hour was 80 percent of the U.S. average, a difference that continued to hold through the middle of the present decade. When the recovery from the early 1980's recessions eventually began reaching the manufacturing sector, the wage gap closed further. By 1986, Georgia's average wage had advanced to 86 percent of the nation's level. Among the other southeastern states, Alabama, Florida, and Tennessee were near Georgia's level. Louisiana's wages, pushed up by the lucrative petroleum sector, were 109 percent of the nation's average, but Mississippi's workers, on average, made only 77 cents for every dollar paid in the country as a whole.

The prevalence of low-wage industries arrested the diversification of southeastern manufacturing. Not surprisingly, lower wages throughout most of this century have translated to lower household incomes in the Southeast than in the rest of the country. Because of the region's lower relative income levels, many manufacturers of high-cost consumer goods shunned the Southeast when locating new manufacturing facilities;

The authors are, respectively, research officer in charge of the regional section of the Atlanta Fed's Research Department and an economic analyst in that section.

Table 1.
Concentration Ratios of Southeastern Manufacturing Industries, 1985

Industry	Southeast	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
Apparel	2.0	2.8	1.2	2.1	0.8	2.7	2.1
Men's-Boy's Furnishings	3.1	4.7	0.6	3.4	1.4	4.8	3.8
Textiles	2.0	2.4	0.2	4.7	0.3	0.8	1.3
Weaving Mills, Cotton	1.8	3.2	0.2	4.2	0.0	0.7	0.7
Weaving Mills, Synthetics	1.6	3.4	0.0	4.2	0.0	0.4	0.4
Floor Covering Mills	5.0	0.7	0.0	18.3	0.0	1.3	0.7
Lumber	1.7	2.2	1.5	1.6	1.8	2.9	0.9
Furniture	1.3	1.0	1.2	0.8	0.2	3.1	2.0
Paper	1.3	1.6	1.0	1.5	1.7	1.0	1.0
Chemicals	1.1	0.6	0.9	0.7	2.9	0.5	1.8
Food and Kindred Products	1.1	0.9	1.2	1.1	1.3	1.1	0.9
Meat	1.3	1.7	0.6	1.8	0.8	2.4	0.7
Tobacco	1.0	0.0	1.3	1.0	0.0	0.0	1.7
Stone, Clay, and Glass	1.1	0.8	1.6	1.0	1.3	0.9	0.9
Petroleum	1.0	0.6	0.3	0.2	7.1	1.1	0.3
Printing and Publishing	0.9	0.5	1.6	0.8	0.8	0.4	0.9
Commercial Printing	0.9	0.5	1.4	0.9	0.8	0.6	0.9
Rubber and Plastics	0.9	1.2	0.9	0.7	0.3	0.8	1.1
Leather	0.9	0.0	0.9	0.3	0.1	0.4	2.4
Miscellaneous Manufacturing	0.9	0.9	1.1	0.7	0.6	0.9	1.1
Transportation Equipment	0.8	0.6	1.1	0.8	1.3	0.9	0.7
Motor Vehicles	0.6	0.7	0.2	0.6	0.5	0.4	0.9
Aircraft	0.8	0.7	1.1	1.3	0.0	0.0	0.5
Fabricated Metals	0.8	0.9	1.0	0.5	0.9	0.8	0.9
Electrical/Electronic Equip.	0.8	0.6	1.5	0.4	0.6	0.8	0.7
Primary Metals	0.7	1.6	0.3	0.5	0.5	0.5	0.7
Nonelectrical Machinery	0.6	0.5	0.8	0.4	0.5	0.6	0.7
Instruments	0.4	0.3	0.8	0.3	0.2	0.2	0.3

A ratio of 1.0 indicates that the proportion of manufacturing workers engaged in that industry in the Southeast is the same as the proportion for the nation. A ratio greater than 1.0 signifies that southeastern employment is more concentrated in that activity than in the nation, while a ratio of less than 1.0 signifies the opposite. For example, in Mississippi furniture's share of employment is three times as big as it is in the nation, whereas primary metals' share is half that of the nation.

Source: Computed by the Federal Reserve Bank of Atlanta from data supplied by the U.S. Department of Commerce, Bureau of the Census, *County Business Patterns—Alabama; Florida; Georgia; Louisiana; Mississippi; and Tennessee, 1985.*

the expected spending levels were not high enough to yield cost advantages associated with building plants near major consumption points.

Native workers' low skills are also a partial explanation of industries' eschewing the South, though probably not the sole determining factor. After all, skilled labor from other regions can be transferred to new work sites when firms

change locations. In fact, companies imported large numbers of workers into the Southeast when opportunities became sufficiently attractive in locations such as metropolitan Atlanta and certain Florida cities. Even more workers moved on their own from other regions as employment opportunities grew. (The article by William J. Kahley on page 18 discusses further

the relationship between interregional migration and economic opportunities.)

As the mix of people and business activities has changed in the Southeast, the composition of manufacturing has also undergone a substantial transition. Rather than merely diminishing in importance as traditional low-skilled industries either closed or modernized to use fewer but higher-skilled workers, manufacturing in the Southeast has become more like that in the United States. A look at the relative composition of U.S. and southeastern manufacturing in 1970 and 1985 helps demonstrate this evolution (see Charts 1 and 2). In 1970 the Southeast's dominant industries were apparel, textiles, food, and fabricated metals, which together accounted for more than 40 percent of manufacturing employment. At the same time the top four industries in the United States were nonelectrical machinery, electrical and electronic equipment, transportation equipment, and food manufacturing, which as a group represented slightly less than 40 percent of factory jobs. Only one industry, food, ranked in the top four of both the Southeast and the nation as a whole. Apparel and textiles were only about half as important in U.S. manufacturing as they were in the Southeast.

The composition of manufacturing employment had changed by 1985. Although the same four industries ranked at the top of U.S. manufacturing, the relative importance of machinery, electrical equipment, and transportation equipment manufacturing had increased while food manufacturing had declined, reflecting a national shift toward more technologically advanced production techniques.

The Southeast's leading industries showed more significant change during this 15-year period. Apparel and food manufacturing were still at the top, although the relative importance of each had declined from 1970's level. Two industries requiring more skilled labor—electrical equipment and transportation equipment—greatly increased in importance and displaced textiles and fabricated metals in the top four ranking. With those changes, three of the Southeast's four top industries are now the same as the nation's. In addition, employment distribution regionally has grown more similar to the nation's in industries such as printing and publishing as well as nonelectrical machinery manu-

facturing. Without question, the Southeast's manufacturing sector became more like the nation's between 1970 and 1985. The continuing importance of apparel in the Southeast is the main feature that distinguishes the region's manufacturing from the rest of the country.

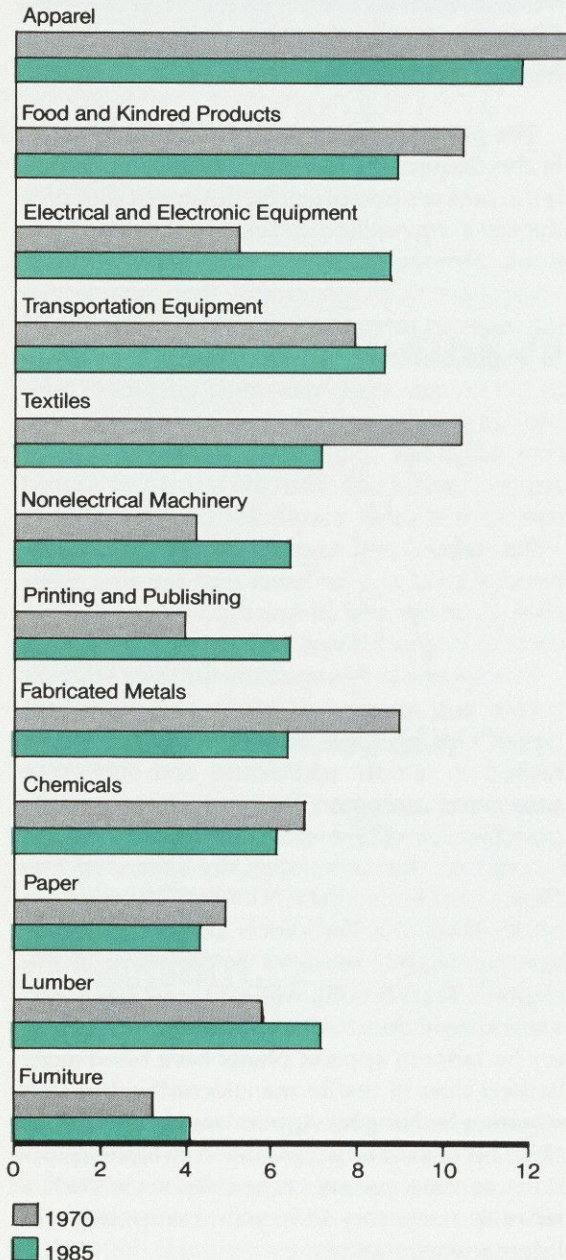
Changes in the Southeast's Manufacturing Sector

The principal factor responsible for the shift in the Southeast's manufacturing composition is the region's loss of competitiveness with producers in low-skilled industries in other locations. Although textile and apparel workers' wages have risen less rapidly than manufacturing wages in general, they had climbed to the \$5 to \$6 per hour range by 1982. Wages at or below \$1 per hour in some Asian and Caribbean countries gave manufacturers in those areas a large cost advantage, particularly in labor-intensive apparel production. With the U.S. dollar's rapid rise against other currencies during the early 1980s, fabrics and apparel products manufactured abroad at a far lower cost became available at prices well below the unit production costs of U.S. industries.

In response to this situation the least efficient textile and apparel plants in the Southeast began closing their doors. Other producers rushed to update techniques and substitute automated machinery for hand labor wherever possible; low-skilled workers who were unsuited to operate the technologically advanced machines were subsequently laid off. This process of increased mechanization and computerization has sharply reduced employment in the region's textile mills while output has been expanding. Opportunities to substitute machinery for labor in apparel plants have been more limited than in textile manufacturing, but that situation is changing. Apparel makers will probably find ways to effect greater work force reductions as time passes, especially since such a move is necessary to remain competitive in international markets.

While employment in traditional southeastern industries has flagged, more technologically advanced industries have been expanding their job rolls rapidly. Changing markets within the

**Chart 1.
Percentage of Total Southeastern
Manufacturing Employment
in Major Industries,
1970 vs. 1985**



Southeast are partly responsible for the area's growth in more technically sophisticated types of manufacturing. With the recent significant inflow of residents from other regions, the population's purchasing potential has risen and product preferences have changed, enhancing marketing opportunities for consumer goods. For example, one reason that automobile manufacturers have established and enlarged auto assembly plants in the region is to take advantage of fast-growing southeastern markets. Partially because of the perception of growing market opportunities here, foreign manufacturers are also setting up operations within the region.

With massive in-migration and the upgrading of the population's education and skills, the region's work force has also been changing (see Kahley, page 18). Although a substantial group of poorly educated unskilled workers remains, an increasing proportion is able to perform high-skilled tasks. About 75 percent of the adult population in 1980 had nine or more years of education, up from nearly 65 percent in 1970. Persons with fewer than five years of elementary school are highly concentrated in the age group of 40 years and above. In the Atlanta area, less than 10 percent of the population above age 16 falls within this minimally educated category. Since most younger entrants into the work force are no longer limited to unskilled tasks, though, the potential labor pool is reduced for manufacturers who are dependent upon low-cost human capital.

Other workers are leaving low-wage manufacturing jobs for better alternatives in the non-manufacturing sector. In Atlanta, for example, some low-skilled workers have left less remunerative manufacturing jobs to accept employment in the burgeoning hospitality industries.

Charts 1 and 2 portray generally declining employment in traditional rural southeastern industries, such as apparel, textiles, and food, and generally increasing employment in typically urban industries, such as electrical and electronic machinery and printing and publishing. These trends augur well for the economies of states with more urban manufacturing—Florida and Georgia in particular.

Source: See Table 1. Data were also drawn from *County Business Patterns—Alabama; Florida; Georgia; Louisiana; Mississippi; and Tennessee, 1970.*

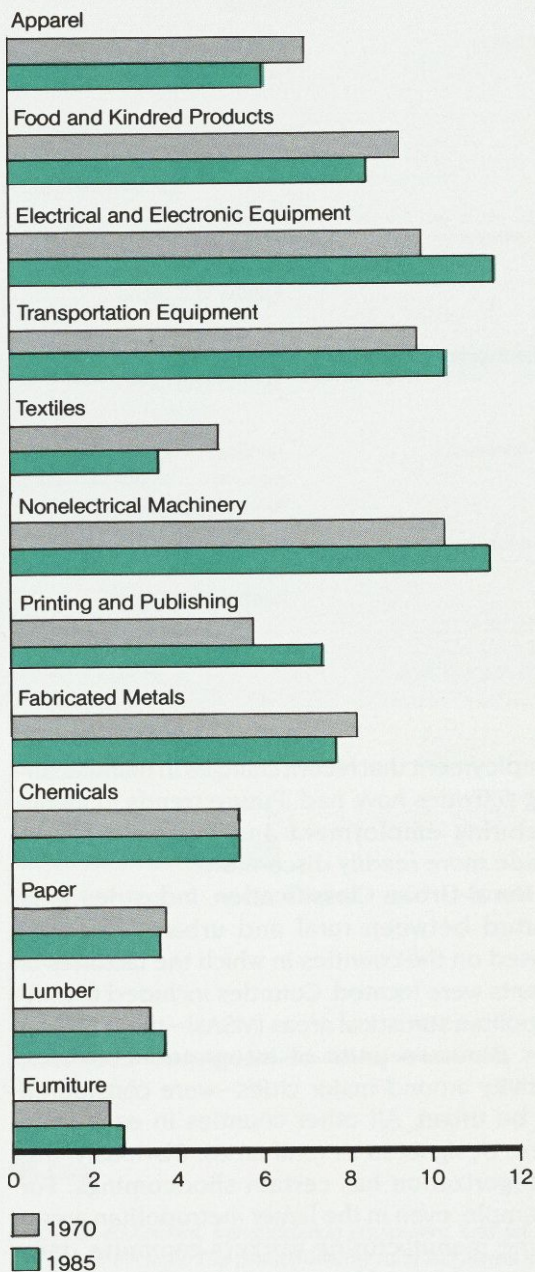
For increasing numbers of workers who can and will move to urban areas, enough good employment opportunities have been available to reduce the labor pool for traditional low-wage manufacturing jobs. Without a doubt, the diminished supply of low-skilled workers discourages the startup of new industries that would be attracted to locations offering such labor in abundance. In the current environment, the low-skilled portion of the manufacturing sector is likely to continue to shrink as existing industries pare back operations or shut down altogether while new employers of low-skilled labor seek offshore sources, leaving the void unfilled.

Urban and Rural Differences in Southeastern Manufacturing

Nonmetropolitan areas in the South suffer substantially lower per capita income than the metropolitan areas. This problem has persisted for a long time with only small declines in the income difference. Recent changes in the structure of manufacturing could further exacerbate the urban-rural income gap. In theory, one would expect growth in the technologically advanced industries to be concentrated in urban areas since the high-skilled employees necessary for such operations are more easily found close to the educational opportunities and cultural amenities offered by most cities. The demise of low-skilled industries would probably have a greater negative impact on rural areas if such employers are in fact more concentrated in nonurban locations. Urban industries have in reality fared much better than rural ones during the recent changes in manufacturing. Furthermore, prospects for rural improvement hinge heavily on the ability to make difficult structural changes, albeit ones that would elevate incomes and opportunities.

To gain a better understanding of the urban-rural dichotomy, the geographical locations of the Southeast's manufacturing activities were examined to determine the dispersion of manufacturing within the region. Industries were identified as predominantly urban or predominantly rural. This categorization also allows a look at the relative geographic impacts on

Chart 2.
Percentage of Total U.S.
Manufacturing Employment
in Major Industries,
1970 vs. 1985



Source: See Chart 1.

Table 2.
Distribution of Industries across the Rural and Urban Southeast, 1985

State	Predominantly Rural Industries	Predominantly Urban Industries
Alabama	textiles apparel lumber and wood metals	metals electrical and electronic equipment transportation equipment
Florida	textiles lumber and wood	food and kindred products stone, clay, and glass electrical and electronic equipment transportation equipment printing and publishing instruments (including medical and optical goods)
Georgia	carpet manufacturing apparel lumber and wood	food and kindred products stone, clay, and glass transportation equipment printing and publishing
Louisiana	apparel lumber and wood	chemicals petroleum rubber and plastics
Mississippi	textiles apparel lumber and wood	transportation equipment petroleum
Tennessee	textiles apparel lumber and wood	printing and publishing chemicals stone, clay, and glass

Source: See Table 1.

employment that recent changes in manufacturing activities have had. Future trends in manufacturing employment and income are thus made more readily discernible.

Rural-Urban Classification. Industries were sorted between rural and urban categories based on the counties in which the factories or plants were located. Counties included in metropolitan statistical areas (MSAs)—the U.S. Census Bureau's units of integrated economic activity around major cities—were considered to be urban. All other counties in each state were designated as rural areas. Obviously, this categorization has certain shortcomings. For example, even in the larger metropolitan areas, some manufacturing workers commute daily from rural areas. Moreover, it classifies manufacturing in the region's numerous smaller cities and towns as rural when the actual plant facilities may be within the city limits of popula-

tion centers approaching 50,000 people in size. Nevertheless, a large proportion of the employees of such plants probably reside in rural areas.

County-level manufacturing information makes it possible to identify the industrial activities located within MSA counties and relegate the balance of the state's manufacturing activities to rural areas. From this data, one can determine that the primarily urban industries include food; printing; chemicals; stone, clay, and glass; fabricated metals; machinery; electrical equipment; transportation equipment; and instruments manufacturing. The predominantly rural industries include meat, textiles, apparel, lumber, leather, and miscellaneous manufacturing, which comprises jewelry, toys, brooms, caskets, sporting goods, pens, pencils, and musical instruments. Paper is a significant industry in both urban and rural locales. Table 2 shows the dis-

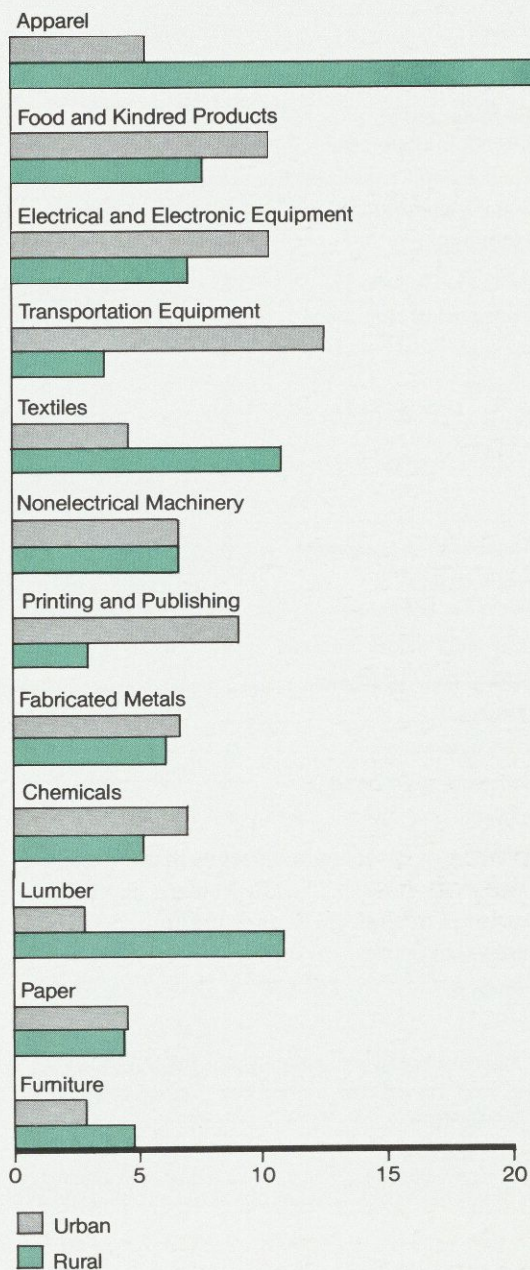
tribution of urban and rural industries throughout the southeastern states.

Transportation equipment was the most important urban manufacturing activity in 1985. In order of importance the next industries were electrical equipment, food, printing, chemicals, fabricated metals, machinery, apparel, textiles, and paper (see Chart 3). The rural manufacturing sectors in order of importance were apparel, lumber, textiles, food, electrical equipment, machinery, fabricated metals, chemicals, furniture, and paper. Confirming the expectation that low-skilled industries would predominate in rural areas, traditional fields such as apparel, lumber, and textiles rank at the top of the rural list. Similarly, the newly important industries such as electrical and electronic equipment or transportation equipment, which includes some space-related products as well as aircraft and automobile assembly, head the urban employment list.

Just as the regional importance of various industries has shifted since 1970, the rankings of rural and urban industries have also changed from 1970 to 1985 (see Table 3). For instance, of the predominantly urban industries, employment in transportation equipment has moved from second to first in importance, and electrical equipment has jumped from seventh to second. Another change highlighting the increased prominence of more technologically advanced manufacturing is the rise in rank of the printing and machinery industries. Primarily urban activities that declined in importance were food, chemicals, and paper manufacturing. In rural areas, textiles and apparel retained their high rank even though apparel manufacturing declined sharply in urban areas during the same time. (The loss of apparel manufacturing in urban areas undoubtedly reflects the continuing movement of the industry away from high-wage locales.) Both lumber and food became more important components of the rural economy, and electrical equipment manufacturing—a predominantly urban industry—also made significant gains (from ninth to fifth position). Rural industries fading or declining in importance were primary and fabricated metals as well as paper and chemicals manufacturing.

Although the region registered rather strong overall growth in manufacturing employment from 1970 to 1985, rural and urban industries did

Chart 3.
Urban vs. Rural Percentages
of Southeastern Manufacturing
Employment, 1985



Electrical equipment, transportation equipment, and printing prevail in cities. The predominantly rural industries are apparel, textiles, and lumber.

Source: See Table 1.

Table 3.
Rural vs. Urban Rank of
Key Southeastern Industries
in Terms of Employment, 1970-85

Industry	Urban			
	1970	1980	1982	1985
Transportation Equipment	2	1	1	1
Electrical and Electronic Equipment	7	3	3	2
Food and Kindred Products	1	2	2	3
Printing and Publishing	6	6	5	4
Chemicals	3	4	4	5
Fabricated Metals	5	5	6	6
Nonelectrical Machinery	10	8	7	7
Apparel	4	7	8	8
Textiles	9	9	9	9
Paper	8	10	10	10

Industry	Rural			
	1970	1980	1982	1985
Transportation Equipment	6	8	*	*
Electrical and Electronic Equipment	9	5	6	5
Food and Kindred Products	5	4	4	4
Printing and Publishing	*	10	*	*
Chemicals	8	7	9	8
Fabricated Metals	3	6	7	7
Nonelectrical Machinery	*	9	5	6
Apparel	1	1	1	1
Textiles	2	2	2	3
Paper	7	*	8	10
Lumber	4	3	3	2
Primary Metals	10	*	*	*
Furniture	*	*	10	9

* Asterisks indicate that the industry listed did not rank among the top ten in terms of rural southeastern employment.

Source: See Table 1.

not share equally in that expansion (see Table 4). The disparities are particularly notable during three subperiods since 1970. First, manufacturing expanded rapidly. Then it entered into and began to emerge from the two back-to-back recessions that coincided with the fluctuation of

the dollar's value against other major currencies. In the ten-year period from 1970 to 1980, rural manufacturing growth expanded at a robust 33 percent compared to a 14 percent gain for urban manufacturing. In turn, employment declined with the arrival of the recessions, and the rural areas' drop of 5.8 percent from 1980 to 1982 was greater than the 4.2 percent decline for urban manufacturing. Furthermore, from 1982 to 1985 rural manufacturing posted another decline while urban manufacturing reversed its fall and rose by 2.5 percent. As expected, low-skilled manufacturing industries in rural areas were hit harder by competitive pressures from foreign producers from 1980 to 1982. Those rural industries have been largely unable to regain their lost positions during the subsequent recovery that has propelled technologically advanced manufacturing in urban areas. (See the article by Jon R. Moen on page 36 for a discussion of the concentrations of rural and urban poverty in the Southeast.)

A Comparison of Earnings. The urban-rural disparity can be further illustrated by comparing earnings in the top five employment sectors of each region (see Table 5). Rural factory employment dominated by low-skilled jobs clearly brings less pay to workers than urban factory jobs. For example, in the Southeast the top urban manufacturing employer, transportation equipment, pays more than two times the average weekly wage of the number-one rural manufacturing employer, apparel. The second largest employer for the region's urban area, electrical equipment, paid an average of \$392 per week while the rural sector's lumber workers, second in importance, collected \$266. In fact, weekly earnings in each of the top five urban employment categories are substantially higher than those with the same rank in rural areas. The fact that recent employment growth has largely occurred in these higher-income, urban industries helps explain the rising income levels in southeastern manufacturing and the narrowing of the earnings gap between the Southeast and the nation. However, this growth also implies an increasing urban-rural income gap.

These comparisons use regional average data, yet the divergence is even greater when looking at particular states that specialize in certain sectors. For example, regional average earnings for transportation equipment workers

Table 4.
Southeastern Manufacturing Employment in Urban and Rural Areas, 1970-85

	1970		1980		1982		1985	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
TOTAL EMPLOYMENT (000s)	1,115	783	1,275	1,040	1,221	980	1,251	976
INDUSTRIES (% of Total)								
Transportation Equipment	9	7	11	4	12	4	13	4
Electrical/Electronic Equip.	5	5	9	6	10	5	10	7
Food and Kindred Products	12	8	11	7	11	7	10	7
Printing and Publishing	6	2	7	2	8	3	9	3
Chemicals	8	5	8	4	9	4	7	5
Fabricated Metals	6	13	7	5	7	5	7	6
Nonelectrical Machinery	4	4	6	6	7	6	7	6
Apparel	7	22	6	20	6	20	5	20
Textiles	6	17	6	12	5	11	5	10
Paper	5	6	5	4	5	4	5	4
Lumber	3	10	3	10	2	9	3	10
Primary Metals	4	5	4	4	3	4	3	3
Furniture	3	4	3	4	3	4	3	4
Stone, Clay, and Glass	4	3	4	3	4	2	4	3
Leather	1	3	1	2	1	2	1	1
Instruments	1	1	1	1	2	1	2	1
Miscellaneous Manufacturing	1	2	1	2	2	2	1	2

Percent Change for Periods Shown

	1970-1980		1980-1982		1982-1985		1970-1985	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
TOTAL EMPLOYMENT	14.3	32.8	-4.2	-5.8	2.5	-0.4	12.2	24.6
Transportation Equipment	49.1	-33.1	-0.7	-8.2	10.9	4.4	64.2	-35.9
Electrical/Electronic Equip.	101.5	44.5	5.8	-13.1	3.6	25.8	120.8	57.9
Food and Kindred Products	-0.3	17.9	-3.2	-3.0	-1.3	-1.7	-4.7	12.4
Printing and Publishing	43.6	73.5	8.6	9.1	16.9	16.2	82.3	119.9
Chemicals	23.0	-4.9	-3.4	5.6	-15.2	11.8	0.7	12.3
Fabricated Metals	33.7	-50.7	-9.5	0.6	-1.1	13.9	19.7	-43.5
Nonelectrical Machinery	70.9	68.5	6.9	4.9	-1.6	1.8	79.7	79.9
Apparel	11.9	20.1	-12.3	-4.7	-4.8	-1.3	-6.5	13.1
Textiles	6.3	-6.4	-15.5	-13.4	-1.9	-5.7	-11.8	-23.5
Paper	16.8	-12.0	-8.5	11.2	3.4	-4.0	10.5	-6.1
Lumber	13.5	31.4	-22.0	-17.2	24.8	17.3	10.5	27.7
Primary Metals	9.8	6.1	-24.9	-9.0	-22.1	-7.2	-35.8	-10.5
Furniture	6.5	32.8	-10.0	16.4	12.1	-1.0	7.4	53.1
Stone, Clay, and Glass	15.7	23.9	-9.8	-14.3	7.3	20.8	12.0	28.3
Leather	6.8	-14.2	-0.2	-10.7	-31.2	-29.3	-26.7	-45.8
Instruments	249.2	23.1	10.2	15.8	9.8	19.4	322.8	70.2
Miscellaneous Manufacturing	37.7	44.2	9.3	-4.7	-2.3	2.5	47.1	40.8

Sources: See Table 1. See also comparable issues for 1970, 1980, and 1982.

Table 5.
Average Weekly Earnings for Labor in Manufacturing Industries, 1985
(in dollars)

Industry	Southeast	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	United States	Importance Ranking in Urban/Rural Areas*
Total Manufacturing	344.54	345.98	324.62	328.86	434.93	293.13	339.72	385.56	
Petroleum	714.91	—	—	—	714.91	—	—	603.72	
Transportation Equipment	461.89	539.30	355.89	564.63	444.40	405.21	—	542.72	1-U
Chemicals	475.85	512.02	427.06	425.00	641.09	417.08	432.84	484.78	5-U
Primary Metals	396.68	467.16	386.01	359.38	—	325.73	445.14	484.72	
Paper	530.93	608.30	535.25	526.39	573.27	499.53	442.83	466.34	
Nonelectrical Machinery	359.29	353.12	349.03	381.78	407.12	324.84	339.82	427.04	
Stone, Clay, and Glass	387.42	392.04	403.32	349.02	360.10	324.12	495.91	411.88	
Fabricated Metals	355.46	330.48	325.75	346.15	423.76	325.73	380.89	398.96	
Electrical and Electronic Equipment	391.52	324.39	372.47	465.26	437.38	358.11	—	384.48	2-U/5-R
Instruments	327.09	—	313.29	—	—	—	340.88	376.79	
Printing and Publishing	348.31	375.83	319.52	—	374.53	323.36	—	365.31	4-U
Rubber and Plastics	381.62	488.87	246.38	—	—	—	409.60	350.58	
Food and Kindred Products	281.35	244.90	298.45	296.46	305.63	216.39	326.30	341.60	3-U/4-R
Lumber	265.84	275.88	266.37	246.60	304.00	279.69	222.47	326.36	2-R
Furniture	254.35	—	248.27	229.61	—	261.10	278.43	283.29	
Textiles	260.53	268.40	—	265.44	—	256.22	252.06	266.39	3-R
Leather	199.43	—	—	158.98	—	—	239.87	217.09	
Apparel	190.75	198.15	188.78	183.32	201.25	180.48	192.54	208.00	1-R

* The top five ranking industries in urban and rural areas are designated as 1-U, 1-R, etc. For example, the food industry ranks third in urban areas and fourth in rural areas.

Source: U.S. Department of Labor, Bureau of Labor Statistics. *Employment, Hours, and Earnings: States and Areas* (1985).

are \$462 per week, but Georgia—with urban auto assembly plants and military aircraft production facilities—posts average weekly wages of \$565. In contrast, the highest average weekly earnings in any state's apparel sector was \$201. Apparel manufacturing is the single most important provider of factory employment in Alabama, Mississippi, and Tennessee, states where personal income ranks among the lowest in the region.

The post-1970 declining employment in low-wage industries such as apparel, textiles, and food manufacturing and the significant employment gains in higher earnings industries like electrical equipment, machinery, and printing help explain the upward trend in personal income in the region. Other relatively high-income industries such as chemicals and paper manufacturing, though somewhat below 1970's employment levels, continue to be significant employers of high-wage workers and providers of strong boosts to average income levels within the region.

How are these urban and rural industries distributed among the states in the region? Food processing employment is greatest in the states with the largest population centers. The stone, clay, and glass sector, including largely the brick, concrete, and glass materials used in construction, is concentrated likewise around the large urban centers of the region's most populous states, Florida, Georgia, and Tennessee. Transportation equipment production is located in Florida's and Georgia's urban centers.

Given the advantages of proximity to raw materials, it is not surprising that lumber is primarily rural. In the case of apparel, industry structure—the prominence of small plants—helps explain why the apparel industry alone accounts for over 20 percent of total rural employment in the region.

State-by-State Manufacturing Forecasts

Comparisons of the urban-rural manufacturing mix within the states reveal differences that are likely to affect the future course of each state's economic activity. For example, the number of people employed in rural manufacturing

is more than twice that working for urban factories in Mississippi. Apparel and lumber account for a leading share of the state's rural employment, but these industries have grown very little in the state in the last decade and will probably not add significant numbers of workers in the near future. As a result of projected slow growth at best for these major industries, Mississippi should expect lackluster overall employment activity for some time unless it can attract more rapidly growing, higher technology industries. Unfortunately, even if such employers came to Mississippi the large unskilled component of the labor force there is not well prepared for transfers to jobs in the more highly skilled industries.

Following Mississippi, the state with the largest portion of rural manufacturing jobs is Georgia. In contrast to Mississippi, though, Georgia's rural manufacturing employment accounts for only 5 percent more workers than its urban counterpart, and a large portion of the state's rural jobs are in textiles. Although this industry's employment has been shrinking over the years, many textile mills have modernized and upgraded production techniques so that more highly skilled labor is used. Because of this updating, textile production is likely to remain healthy into the future. Georgia's chief urban employment sectors—transportation equipment and printing and publishing—have paced the state's manufacturing employment expansion until recently. The slowdown in transportation equipment manufacturing should be only a temporary adjustment that is unlikely to alter its positive prospects for long-term growth.

Manufacturing employment in both Alabama and Tennessee is about evenly divided between urban and rural industries, but both states rely heavily on cyclical industries such as apparel, metals, and chemicals, which slow appreciably in a business slump. Louisiana's economy is also cyclical with nearly 60 percent of total manufacturing employment in the urban-dominated transportation equipment and chemical industries. Lumber and apparel are the leading industries in Louisiana's rural areas, though chemicals make a strong showing as well. Strengthening domestic and foreign markets for chemicals and metals will provide some impetus to the manufacturing sectors of Ala-

bama, Tennessee, and Louisiana in 1989. Although apparel was weak in 1988, recent evidence of improved retail demand could lift that industry in the coming year as well. However, slow construction activity will keep a damper on lumber markets. On balance, manufacturing activity is likely to provide some increasing support to the economies of these three states in the coming year.

Florida's manufacturing employment, in contrast to the other states in the region, is dominated by industries in urban areas. In fact, over 90 percent of Florida's manufacturing jobs are located in the denser population centers. Printing, electrical equipment, and transportation equipment—typical fast-growth sectors that are likely to continue to contribute to Florida's expansion—are the largest employment categories in that state's urban areas.

Southeastern Manufacturing: A Look Ahead

In light of changes over the last 15 years, what are the prospects for the future? Obviously, competitive forces will continue to change the composition of manufacturing. Many companies relying on low-skilled labor will either reshape their structure and become more technologically advanced or cease to exist. In the process, manufacturing in the region will lose more of its dependence on cheap, low-skilled labor and will become more like the nation's industrial sector.

The changes ahead will be inextricably connected to shifts in the Southeast's labor supply. The demise of rural industries will result in increased unemployment among the unskilled. These workers will need to transfer to other locations, usually urban areas, to find work that suits their capabilities. Fortunately, many lodging, food service, and other jobs in urban areas can use this type of labor. On the other hand, the educational skills of younger people entering the work force should help them find higher paying jobs than can be provided by the traditional factory. The resulting decline in the low-skilled labor pool will force even more industries to shut down as time passes.

Although the share of manufacturing employment will probably fall in the years ahead as automated production techniques replace more and more workers, the value of manufacturing output and the sector's contribution to regional economic activity are likely to increase. For instance, textile output has grown rapidly during the same time that job rolls have diminished sharply.

A more highly trained work pool, resulting from both the migration of skilled workers from other regions and the improvements in education of the resident population, should attract increasing numbers of technologically advanced manufacturers to the Southeast. Urban areas are likely to be the recipients of much of this future manufacturing growth. Companies will want to gain access to skilled personnel who typically prefer the amenities of urban living to the accommodations in rural areas, and these employees will subsequently benefit from advances in earnings and personal income.

In short, the southeastern manufacturing sector of the future will reflect the culmination of trends that have been well underway since the onset of the business downturns in the early 1980s. The prospect for rural regions is somewhat gloomy, but the living standards of workers who become retrained and gain employment in urban areas will be considerably brighter. Their contributions to the region's economy will also be vastly enhanced.

In conclusion, the ongoing changes in the region's manufacturing sector are moving the mix of industrial activity closer to the nation's. With a good deal more progress still to be made, the shrinking of low-skilled manufacturing, principally in rural areas, and the growth of high-skilled and high-wage industries are raising income levels and helping close the Southeast's income gap with the nation. Rural economies are bearing the brunt of this shift because of the preponderance of low-skilled, undereducated workers who lose jobs with the demise of low-wage manufacturing industries. Hopes of altering or capitalizing on this trend lie largely with the possibilities for improving the training and skills of rural area residents. Unfortunately, though, this is not a short-term process. Quick but sustained remedial action is all the more important if economic prospects for rural areas are to be brightened within the next decade.

Note

¹Concentration ratios for employment in various manufacturing industries within each state are shown in Table 1. These ratios measure the importance of employment in various industries in the Southeast as compared with the United States. A ratio of 1.0 indicates that the proportion of manufacturing workers engaged in that industry in the Southeast is the same as the proportion for the nation. A ratio greater than 1.0 signifies that southeastern employment is more concentrated in that activity than in the nation, while a ratio less than 1.0 signifies the opposite. For example, Georgia's concentration of employment in floor

covering mills (carpet manufacturing) is over 18 times higher than the nation's. Florida's employment concentration in meat manufacturing is only six-tenths as high as the nation's.

A relatively high concentration ratio does not necessarily signify an industry is unusually important to an area's total economy. Although Florida's concentration in lumber and wood manufacturing employment is well above the nation's, such workers make up less than one percent of the state's total employment.

EDUCATIONAL CASSETTES

\$8.00 per cassette
(some sessions are
presented on 2 cassettes)

ACCOUNT NO.
88382

___ **011 Challenges The Banking Industry Must Face**
012 (This session presented on 2 cassettes - \$16.00)

- Welcome — Bradley Currey, Jr.
- Perspectives on Banking's Changing Environment — Joel R. Wells, Jr.; Kenneth Guenther; Anthony Santomero

___ **020 Discussion Session**

___ **030 The Future of the Deposit Insurance System** — Bennett A. Brown; William M. Issac

___ **040 New Powers and Products at Large and Small Banks**

- Internal Issues in New Powers and Products — Sam Chase
- Deciding on Which Powers To Use — David Partridge
- Profitability and Risk Effects of Mergers of Bank Holding Companies and Other Financial Firms — John H. Boyd

___ **050 Business Strategies for a Changing Environment**

- Business Strategies in an International Arena — George Vojta
- Strategies for Prosperity for Smaller Banks — Bemell Stone
- Marketing New, and Old, Bank Products in the 1990's — Thomas Cooper

___ **060 Problems of Risk in the Financial System**

- Institutional Solvency and Systemic Risk — Paul Horvitz
- Systemic Risk and New Powers: How Do They Interact? — Robert Litan
- Improving the Deposit Insurance System — George J. Benston

___ **071 The Payments System: Dealing with Risk**
072 (This session presented on 2 cassettes - \$16.00)

- The Federal Reserve's Stake in Payments System Risk — Richard Oliver
- Dealing with Payments System Risk: A Banker's Perspective — David O. Nordby
- Dealing with Payments System Risk: A Business Perspective — Richard R. Richardson

___ **080 Challenges for Public Policy in the Financial System** — Larry L. Prince; John P. LaWare

___ **090 What Does the Next Congressional Session Promise** — Doug Barnard

___ **101 Developments in Consumer and Community**
102 Regulations
(This session presented on 2 cassettes - \$16.00)

- Consumer and Community Regulation: A Crowded Overview — Janice M. Smith
- Reforming Consumer and Community Protection — George J. Benston
- Directions for Consumer and Community Law and Regulation — Winnie F. Taylor
- Banks' Stake in Consumer and Community Protection — Joe Belew

___ **199 Complete Set of Cassettes from the Federal Reserve Bank of Atlanta — \$96.00**

(Offer includes 1 FREE cassette & 1 FREE custom storage album!)

___ Total Individual Cassettes at \$8.00 each = \$ ___

___ Total 8-Cassette Specials at \$56.00 each = \$ ___

___ Total Complete Sets at \$96.00 each = \$ ___
(Includes 1 FREE Cassette and 1 FREE Storage Album!)

Maryland residents add 5% state sales tax = \$ ___

*Postage & Handling = \$ 3.00

GRAND TOTAL = \$ ___

*To calculate postage, add \$3.00 to any order to be shipped. For shipments outside the U.S. add 15% of the total order amount.

Interregional Migration: Boon or Bane for the South?

William J. Kahley

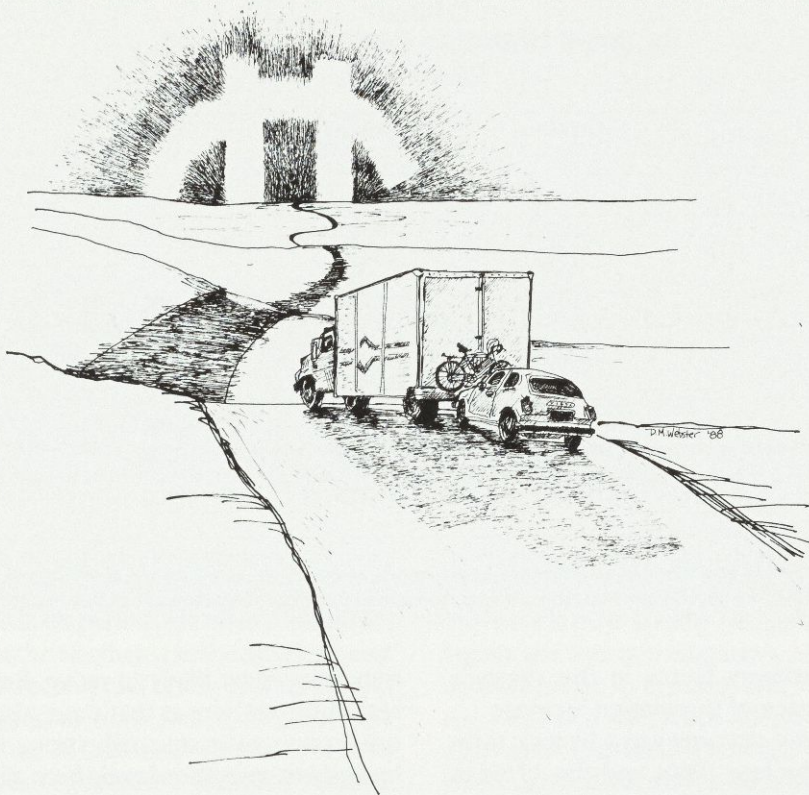
In a significant turnaround from the pattern of the late 1960s, North-to-South migration increased substantially during the 1970s and the first half of the 1980s. This article explores the reasons for these population movements, examines their impacts on economic conditions in the South, and reports projected migration patterns.

Most southern politicians, business leaders, and planners are aware that an important turnaround in South-to-North migration took place in the 1970s. In contrast to the 1960s, when population movements had a more northerly direction, during the 1970s the South began to attract a large number of workers and retirees from other regions. Many policymakers welcome population gain from migration in the belief that it raises incomes, fuels job growth, and promotes general economic development. However, others are less certain about the economic benefits that migration brings and are concerned about overcrowding, increased public infrastructure needs, and other possible adverse consequences of these population flows. This article explores the future direction of migration patterns affecting the South and considers their causes and impacts on the region's economic development.

The author is an economist in the regional section of the Atlanta Fed's Research Department.

Regarding the important practical question of expected regional migration flows in the United States, forecasters display a surprising consensus. Virtually all published projections assume that U.S. migration trends established in the 1970s will continue into the twenty-first century, meaning that the South is expected to gain population from migration for at least another dozen years.¹ Policymakers should be wary of these projections, though. Experience shows that merely extrapolating trends based on previous experience has often led economic and demographic forecasters astray; unforeseen events have upset even the most sophisticated projections. Furthermore, interpretation of the latest available migration data indicates a possible reversal of interregional migration trends, although the emerging pattern is not yet clear. More importantly, given the theoretical disagreements about what determines the direction and magnitude of migration streams, one would expect different projections.

Despite considerable research on migration and the resulting valuable insights, issues as



fundamental as migration's basic causes and economic impacts remain in dispute. Analysts have traditionally ascribed a great deal of importance to economic variables in explaining the migration of workers. Conventional wisdom holds that it is a response to differences in regional economic conditions and employment opportunities. In this light, population movements are viewed as enhancing public welfare since they serve as an equilibrating mechanism, moving resources to their most productive use. On the other hand, concentrated flows of migrants can speed economic decline in the sending areas (that is, the areas from which the population moved) if the remaining labor force as a group is less skilled than the out-migrants. Moreover, if in-migrants to an area are less skilled or have other attributes that differ from the resident population, their arrival can impose burdens on the receiving community.

This article first reviews, largely from a southern perspective, shifting U.S. migration patterns. This information serves as a framework for the subsequent discussion of interstate migra-

tion's causes and effects, primarily on receiving states. Finally, the article outlines alternative scenarios for future southern migration patterns. The major objectives of this research are to assess the benefits to the South of past migration and to discern what changes in population shifts are in the region's future.

Recent Population Movements

In 1970 the population of the South—defined by the U.S. Census Bureau as Delaware, Maryland, the District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas—was 62.8 million, or 30.8 percent of the nation's total. By 1987, the region's population had grown to 83.9 million and represented 34.5 percent of all Americans. During the 1970-87 period over half of the nation's population increase occurred in the South, and migration

Table 1.
Regional Migration Patterns, 1975-85
(in thousands)

	Northeast	Midwest	South	West
1975-80				
In-migrants	1,275	2,125	4,738	3,114
Out-migrants	3,059	3,505	2,752	1,935
Net migration	-1,784	-1,380	1,986	1,179
1980-85				
In-migrants	1,218	1,901	4,428	2,641
Out-migrants	2,240	3,426	2,530	1,992
Net migration	-1,022	-1,525	1,898	649

Sources: Data for 1975-80 are from 1980 Census of Population, *Geographical Mobility for States and the Nation*, PC-80-2-2A (Tables 22-23); data for 1980-85 are from Current Population Reports, *Geographical Mobility: 1985*, Series P-20, Number 420 (Table 19).

gain was the primary factor in the region's above-average pace of population increase.

One factor in this upsurge was a historic turnaround during the late 1960s and the 1970s in South-to-North migration. The magnitude of this shift was impressive. For the first six decades of the twentieth century, the South lost population through migration, and a majority of southern states continued to experience out-migration through the 1960s. In the 1970s, however, net migration losses from many southern states were reversed.² Today, the region still attracts a large number of people from other parts of the country. However, the migration experience of individual southern states is as varied as their economic performance.

Table 1 shows the pattern of interregional migration for the 1975-80 and 1980-85 periods. Both the South and West gained population from migration during these times, while the Northeast and Midwest each lost population. In the South the migration gain during the 1975-80 period was three times the amount added in the second half of the 1960s, but today the gain from migration is declining.

Net migration to the South probably will not regain the momentum reached in the late 1970s. Most members of the large post-World War II baby-boom generation were at that time reaching their twenties, a period in their lives when

they were most likely to move. Relative to the rest of the country at that time, also, the southern economy was unusually strong. Now, though, in- and out-migration levels from all four regions are declining as smaller successor population cohorts follow the baby boomers into the prime moving ages. Net migration to the South is declining also because several state economies are now relatively weak.

Changes in the flow of migrants, of course, depend on both the size of the migration pool and migration propensities. From an economic or business perspective, northeastern states and much of the South experienced comparatively strong economic activity during and after the two recessions in the early 1980s. In contrast, midwestern states, heavily dependent on manufacturing jobs, went through an economic restructuring, and growth in the energy-rich western states slowed or turned negative in response to lower prices for energy resources. Theoretically, these varying economic conditions should have affected migration tendencies and patterns among regions. A review of each of the regions shows that movement out of the Northeast appears to have slowed in the first half of the 1980s while continuing unabated out of the Midwest. The South received much of this migration, but population shifts to the West decelerated appreciably.

Table 2.
Southern Migration Streams, 1975-85
(in thousands)

	1975-80						1980-85					
	To South		From South		Net Migration		To South		From South		Net Migration	
	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black
Northeast	1,817	208	654	84	1,163	124	1,389	132	651	101	738	31
Midwest	1,878	144	1,029	130	849	14	1,954	171	854	105	1,100	66
West	1,044	87	1,069	117	-25	-30	1,085	110	1,025	123	60	-13
TOTAL	4,739	439	2,752	331	1,987	108	4,428	413	2,530	329	1,898	84

Sources: Data for 1975-80 are calculated by the Federal Reserve Bank of Atlanta from the 1980 Census of Population, PC-80-2-2A (Table 9); data for 1980-85 are calculated from Current Population Reports, *Geographic Mobility: 1985*, P-20, No. 420 (Table 19).

The magnitudes of specific migration streams between the South and other regions during the 1975-80 and 1980-85 periods are shown in Table 2. Migration from the Northeast to the South slowed sharply in the second half of the 10-year period while out-migration from the Midwest to the South increased. In addition, for the first time ever, the South registered a net gain (roughly 60,000 people) from population exchange with the West. Shifts in all of these streams were characteristic of both black and white migration activity.

The volatile pattern of migration, possibly in response to changing economic growth prospects, is suggested even more strongly by the net migration streams for individual states. Crude estimates of yearly net migration gains or losses for each southern state during the 1980-87 period are shown in Table 3.³ Evidently, some regions and states experienced dramatic shifts within this short period. Following the recovery from nearly three years of economic recession that marked the beginning of the decade, the U.S. Census Bureau's New England, Middle Atlantic, and East North Central divisions, which make up the nation's manufacturing heartland, tended to lose fewer people from migration. Michigan and Pennsylvania, two of the most important manufacturing states in the nation, exemplify migration experiences that have shifted with the manufacturing sector's restructuring and subsequent rebound.

Energy-dependent states like Louisiana and Oklahoma, on the other hand, experienced net

in-migration until the middle of the 1980-87 period when oil prices plummeted; thereafter, the previously strong net gains turned into significant net out-migration. Meanwhile, agricultural states in the East and West North Central areas and the South Atlantic region had no significant migration exchange shifts. Undiversified agricultural states such as Iowa and Kansas experienced net out-migration throughout the period. The South Atlantic states, with the exception of energy-dependent West Virginia, gained population from migration throughout the period.

Close examination of individual states' migration patterns over the entire 1975-87 period shows that migration in the South has been much more turbulent and volatile than data pertaining to the entire region imply. These data also suggest even more strongly a fairly close link between economic growth prospects and the direction of net migration for geographic areas. The information in Table 4 indicates that all of the states in the South Atlantic census division except West Virginia tended to gain more or lose fewer residents from migration throughout the 1975-87 period. These positive net migration performances coincided with above-average economic growth achievements in the South Atlantic states.

Among East South Central states, in contrast, migration losses mounted steadily for Kentucky and Mississippi, both of which suffered lingering economic weakness because of their dependence on energy and agriculture. Initially, net

Table 3.
Annual Net Migration, 1980-87*
(in thousands)

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
UNITED STATES	789	468	791	590	892	711	643
NEW ENGLAND	38	-1	-65	32	24	4	54
MIDDLE ATLANTIC	-73	-72	-81	-24	-105	-63	-31
EAST NORTH CENTRAL	-391	-377	-324	-175	-233	-116	-125
WEST NORTH CENTRAL	-105	-29	-39	-19	-80	-68	-61
MOUNTAIN	145	112	212	76	89	96	-3
PACIFIC	295	253	278	218	514	317	474
SOUTH ATLANTIC	536	225	371	432	536	431	556
Delaware	-2	1	-1	3	4	9	5
Maryland	15	-28	10	16	12	34	44
District of Columbia	-10	-3	-11	-3	0	-2	-7
Virginia	39	22	20	50	30	22	91
West Virginia	-10	-13	10	-19	-21	-20	-26
North Carolina	34	23	26	52	53	38	49
South Carolina	14	7	37	11	22	7	23
Georgia	49	22	49	62	91	83	68
Florida	408	193	230	261	345	260	310
EAST SOUTH CENTRAL	-72	-14	42	-3	7	22	-8
Kentucky	-31	-19	26	-12	-16	-9	-23
Tennessee	-14	13	9	8	22	22	27
Alabama	-8	-4	7	8	7	13	7
Mississippi	-19	-4	15	-8	-6	-3	-20
WEST SOUTH CENTRAL	415	373	396	51	140	90	-212
Arkansas	-8	-19	25	10	-2	5	4
Louisiana	45	6	27	-20	-29	-21	-82
Oklahoma	46	49	91	-26	-23	-21	-49
Texas	333	334	255	87	193	128	-85

* These numbers represent approximate estimates of state net migration gains or losses based on subtracting cumulative net migration estimates for successive years. For example, the 1986-87 estimate is the difference between the net migration estimate for the entire 1980-87 period and the net migration estimate for the 1980-86 period. These estimates include the effects of international migration.

Source: Current Population Reports, *Population Estimates and Projections*, Series P-25, Numbers 911, 927, 944, 970, 998, 1010, and 1024.

migration declined for Alabama and Tennessee, but it has rebounded over the past few years, paralleling the spurt in employment since mid-decade in these two manufacturing-intensive states. Similarly, the turnaround in net migration experienced by the West South Central region's energy-dependent states—Louisiana, Oklahoma, and Texas—coincides closely with the energy price cycle. Arkansas's performance corresponds strongly with changing fortunes in agriculture and light manufacturing.

Migration and Economic Growth

Economists, as mentioned earlier, have tended to view migration as the key link between regional economic and population growth. In short, perceived differences in wages and job opportunities motivate people to migrate. (However, regional wage differences can persist because of offsetting amenity advantages, such as weather and lifestyle, for some areas.)

Table 4.
Southern States' Migration Patterns, 1975-87
(in thousands)

	Net Migration*					
	1975-80	Average Annual	1980-85	Average Annual	1980-87	Average Annual
SOUTH ATLANTIC						
West Virginia	5	1.0	-53	-10.6	-99	-14.1
Maryland	-75	-15.0	25	5.0	103	14.7
Delaware	-9	-1.8	5	1.0	19	2.7
District of Columbia	-72	-14.4	-27	-5.4	-36	-5.1
Virginia	64	12.8	161	32.2	274	39.1
North Carolina	87	17.4	188	37.6	275	39.3
South Carolina	67	13.4	91	18.2	121	17.3
Georgia	131	26.2	273	54.6	424	60.6
Florida	823	164.6	1,437	287.4	2,007	286.7
EAST SOUTH CENTRAL						
Kentucky	23	4.6	-52	-10.4	-84	-12.0
Tennessee	103	20.6	38	7.6	87	12.4
Alabama	47	9.4	-4	-0.8	16	2.3
Mississippi	-2	-0.4	-22	-4.4	-45	-6.4
WEST SOUTH CENTRAL						
Oklahoma	7	1.4	137	27.4	67	9.6
Arkansas	56	11.2	6	1.2	15	2.1
Louisiana	47	9.4	29	5.8	-74	-10.6
Texas	574	114.8	1,202	240.4	1,245	177.9

* Includes international migration.

Sources: 1980 Census of Population, vol. 2, *Geographical Mobility for States and the Nation*, PC-80-2-2A (Table 25); Current Population Reports, *Population Estimates and Projections*, Series P-25, Numbers 998 and 1024 (Table 1).

Nonetheless, regional analysts disagree over whether migration is a response to differentials in regional economic growth variables such as wages or employment opportunities or at least a partial cause of regional economic growth. Whether so-called "push" factors that might be expected to stimulate out-migration are the same factors that "pull" or attract migrants to a receiving locale is also a matter of considerable debate. In effect, the possibility exists that in- and out-migration warrant separate economic modeling because migration involves not only making a decision to leave one place but also a decision to move somewhere else. The determining factors may be different for the two processes.

The internal migration literature suggests that the availability of jobs, especially when they pay well, appears to attract migrants and that population growth from migration can in-

duce economic growth.⁴ Moreover, tentative new research findings confirm that "push" and "pull" factors are often similar. However, economic influences on migration—such as unemployment rates and the pace of job creation—tend not to be entirely symmetrical in discouraging or encouraging migration.

Though the migration of workers is probably quite sensitive to economic growth, this characteristic does not necessarily apply to elderly migrants. Worker migration and employment growth are interrelated or determined simultaneously, meaning that workers are attracted to existing job opportunities and that their migration helps to create additional jobs. This bi-directional causality almost certainly does not operate as strongly in the case of elderly migrants. Larry Long and Kristin Hanson (1979) found that most older people move in response to a desire for a change in climate, closer prox-

imity to relatives, or reasons linked to the availability and cost of amenities, health facilities, or other factors. Among the elderly, the decision to move is generally unrelated to labor market conditions or prospects, but their migration helps to create jobs in the receiving area. Findings by several researchers show numerous differences in motivations, migration patterns and propensities, and socioeconomic characteristics for the working and retiree populations. Because of these differences, especially the average age and likely employment status of the two migrating groups, the economic impacts of elderly migration might be expected to differ from those caused by workers' migration.

The South's specific migration experience apparently resulted partly from a competitive edge over other regions that enabled it to lure both workers and retirees; often, job growth was generated by an inviting business environment that encouraged firms to locate or expand in the region. A prominent researcher, summarizing the movement of workers to the South, concluded:

One important reason for the dramatic shift in interregional migration is that employment opportunities in the Northeast and North Central regions had been lagging since about 1970 and were, moreover, dealt serious blows by the recessions of the mid 1970's and the early 1980's. The large and potentially highly mobile baby-boom generation that was aging into the labor force of these old industrial regions was thus finding unattractive job prospects and relatively high unemployment. On the contrary, jobs were growing rapidly in many southern and western areas. The combination of a high propensity to migrate and a strong incentive to migrate resulted in tremendous migratory flows of relatively young people to the South and West.⁵

Among the factors that stimulated job growth in the South, analysts typically cite the availability and low cost of natural resources and dramatic improvements in transportation and communications linkages. The South's large and fast-growing internal market, abetted by the favorable business and weather climates of many southern communities, helped induce businesses to increase their investments in the region, thus creating more employment opportunities.

Substantial evidence, reviewed by Philip L.

Rone (1986), Michael J. Greenwood (1985), and others, shows that the relationship between migration and job growth in the South has been a beneficial and self-sustaining cycle for at least a decade and a half.⁶ In this cycle, the availability of work in the region has attracted job seekers from other parts of the country. (Gene D. Sullivan and David Avery's article on page 2 discusses manufacturing labor distribution in the Southeast.) Moreover, migration in and of itself raises employment in the region. The growing number of jobs in defense- and space-related electronics firms in Florida and the massive wave of retiree migration to that state are prime components and examples of this reinforcing cycle.

Impacts of Southern Migration Flows

Although migration and employment growth in the South most likely were self-sustaining and reinforcing in the past, this scenario may not be repeated in the future. An argument that has strong support, both theoretically and from a longer-run historical perspective, is that incomes and wages among regions will eventually converge and break the cycle. Shifts in regions' relative competitive positions occur for a variety of reasons. Several factors could be eroding the South's competitive advantage: the unexpected drop in oil prices, renewed competition from inexpensive foreign labor, and the heightened importance of a more highly educated labor force in generating U.S. economic growth, among others. In addition, the extent of migration to date could by itself be ending the South's boom because of certain adverse effects of rapid population influx—such as infrastructure strains, overcrowding of amenities, and rising living costs—discussed below.

The infusion of income and spending by both young and old migrants into a receiving area's economy will ripple through all of its sectors via the multiplier effect. However, as mentioned previously, still unsettled is the empirical issue of migration's impact on employment and income creation. Greenwood, Gary L. Hunt, and John M. McDowell (1986) concluded that one additional net migrant will add almost 1.4 jobs directly to the receiving area.

Migrants generally have influenced the southern economy in several well-publicized ways, but estimation of their overall impact remains unmeasured because the effects are so numerous and complex. For example, workers bring human capital and many other personal characteristics that add resources, but these factors can also change in offsetting ways the composition of socioeconomic and demographic traits in the receiving area. Similarly, retirees bring with them wealth or income generated outside the region, and they, too, skew the population in different ways. Both types of migrants influence labor supply and demand, directly or indirectly. They both also influence the production, price, and profitability of private goods and services such as housing or health care. Migration affects the demand for public infrastructure such as roads and schools as well.

One of the major impacts of interstate net migration to the South probably has been to increase the size of the work force. Migrants swelled the South's population in the 1975-85 period by more than 2.8 million people of working age while the region's entire labor force grew by less than 10 million. The desire to relocate tends to be highest among people in their twenties and among the more highly educated. In- and out-migration rates for selected demographic characteristics and the net gain or loss for the resident southern population are shown in Table 5. In both five-year subperiods the South gained large numbers of migrants in all age groups. However, because of the huge size of the baby-boom generation and the heightened tendency of workers to migrate early in their careers, the amount and rate of migrant gain in the 1975-85 period were highest for young workers. These demographic factors also help explain why the rate of gain to the South increased most for this particular age group. In effect, an abnormally large share of the nation's work force entrants began their careers in the South, and their numbers were sizable relative to the comparable resident base population.

This bulge of migrants to the South had several significant facets. First, some of the cost of educating and preparing these job seekers for entry into the southern work force was borne by other states. Thus, the change in the southern labor pool represented a North-to-South transfer of human capital. Second, although these

new workers were inexperienced and might have been expected to pose an absorption problem for the receiving states—thus retarding productivity increases—important advantages offset these potential problems. In the fast-growing southern labor markets the demand for workers outstripped growth in the pool of locally supplied labor. Also, as suggested by occupational growth data presented below, the strongest demand tended to be in jobs and occupations that, on average, paid more and provided more opportunity for advancement than those held by the resident population. In effect, baby-boomers from around the country were available to move into the many white-collar service jobs that were being created in the South as the nation's employment structure shifted from manufacturing to services. These developments resulted in below-average unemployment rates and above-average employment and income growth rates for both the southern states and substate areas that gained population from migration.

Available data on the educational characteristics of migrants to and from the South are presented in Table 6. From 1980 to 1985 the region gained nearly one-third of a million people aged 25 and over who held college degrees. More than one-fourth of the migrants in this age group were college graduates in 1980-85, compared to just 15 percent of the South's resident population in 1980. These data may even understate the South's "brain gain" from migration. Statistics on the educational characteristics of younger migrants to the South are not available (presumably because significant numbers of them, even those aged 20-24, had not completed their schooling). Judging by this lack of information on the younger cohort and by the statistics for migrants aged 25 years and over, a larger share of migrants aged 20-24 are likely to have attended college or to have earned a college degree compared to either the entire migrant population or the South's resident population. Moreover, an unknown number of the younger migrants from 1975 to 1980 may have been Southerners who were counted as migrants because they attended schools outside the region and then returned home after completing their education.⁷

The occupational characteristics of migrants to the South are consistent with the educational

Table 5.
Southern Migration by Selected Characteristics, 1975-85

	In-Migrants				Out-Migrants				Net Migration			
	Number (000)		Rate (per thousand)*		Number (000)		Rate (per thousand)*		Number (000)		Rate (per thousand)*	
	1975-80	1980-85	1975-80	1980-85	1975-80	1980-85	1975-80	1980-85	1975-80	1980-85	1975-80	1980-85
<u>Age</u>												
5-14	759	748	29.4	32.5	509	443	41.0	37.2	249	305	20.1	25.6
15-24	1,197	921	44.0	32.6	689	494	51.7	34.7	507	427	38.1	30.0
25-34	1,121	1,268	52.7	51.0	859	813	85.6	66.6	262	455	26.1	37.2
35-44	554	616	36.0	36.0	333	374	45.2	43.9	222	242	30.0	28.4
45-64	710	563	23.6	18.7	245	299	17.9	20.7	465	264	34.0	18.3
65+	398	312	25.8	18.3	117	107	16.1	12.6	280	205	38.6	24.2
TOTAL	4,738	4,428	35.0	31.5	2,752	2,531	42.9	36.2	1,986	1,897	31.0	27.2
<u>Race</u>												
Black	439	413	21.7	35.9	330	329	10.6	25.9	109	84	9.1	6.5
White	4,140	3,926	35.9	30.2	2,301	2,120	45.5	35.9	1,839	1,806	36.3	30.6
<u>Sex</u>												
Male	2,442	2,251	37.4	33.1	1,428	1,263	46.3	37.4	1,014	988	32.9	29.3
Female	2,297	2,177	32.8	30.0	1,325	1,268	39.8	35.1	972	909	29.2	25.2

* In calculating migration rates or propensities, the base populations used were the relevant age, sex, or race populations of the non-South U.S. population in 1975 and 1980 for in-migration rates, and the 1975 and 1980 Census South population for out-migration and net migration rates. The 1975 populations in the various age/sex/race groups were estimated on the basis of population distributions derived from responses to a question on the 1980 Census of Population concerning residence five years earlier and post-1980 Census estimates of the total 1975 South and non-South populations. The 1980 population groups are from the 1980 Census of Population.

Sources: Data for 1975-80 are from 1980 Census of Population, *Geographical Mobility for States and the Nation*, PC-80-2-2A; data for 1980-85 are from Current Population Reports, *Geographical Mobility: 1985*, Series P-20, Number 420. Rates calculated by the Federal Reserve Bank of Atlanta.

Table 6.
Educational Characteristics of Residents and Net Migrants, 1975-85
(Age 25 and Over)

Educational Level	Resident Southern Population (in millions)				Net Interstate Migrants (in thousands)			
	1975		1980		1975-80		1980-85	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No High School Diploma	16.1	44.0	17.4	39.8	336	27.4	235	20.2
High School Diploma	11.7	31.9	13.5	30.9	435	35.4	439	37.7
Some College	4.2	11.6	6.3	14.4	208	16.9	171	14.7
College Graduate	4.6	12.6	6.5	15.0	250	20.3	320	27.5

Sources: 1980 Census of Population, *Geographical Mobility for States and the Nation*, PC-80-2-2A (Table 26); Current Population Reports, *Geographical Mobility: 1985*, Series P-20, Number 420 (Table 19); Current Population Reports, *Educational Attainment in the U.S.: March 1975*, Series P-20, Number 295 (Table 3); 1980 Census of Population, *U.S. Summary*, PC-80-1-C1 (Table 316 A).

Table 7.
Occupational Characteristics of Residents and Net Migrants, 1975-85
(Age 16 and Over)

Occupation	Resident Southern Work Force (in millions)						Net Interstate Migrants (in thousands)			
	1975		1980		1985		1975-80		1980-85	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Collar	13.6	47.7	16.7	50.2	20	52.0	482	63.0	647	62.0
Blue Collar	10.1	35.4	11.4	34.2	12	31.2	181	23.7	217	20.8
Service	3.7	13.0	4.2	12.6	5	13.5	89	11.6	136	13.0
Farm	1.1	3.9	1.0	3.0	1	3.4	12	1.6	44	4.2

Sources: 1980 Census of Population, *U.S. Summary*, PC-80-1-C1 (Table 323); Current Population Reports, *Geographical Mobility: 1985*, Series P-20, No. 420 (Table 19); 1980 Census of Population, *Geographical Mobility for States and the Nation*, PC-8-2-2A (Table 29).

distribution of migrants. Table 7 shows that over 60 percent of the net migrant gain from 1980 to 1985, or almost two-thirds of a million workers, were engaged in white-collar executive, professional, sales, or administrative support occupations. For the resident population aged 16 and over, white-collar workers constituted 10 to 12 percentage points fewer workers. The white-collar job gain from migration can be primarily attributed to especially fast growth of jobs in accounting, legal, and other business services in burgeoning southern metropolitan statistical areas (MSAs) such as Atlanta, Charlotte, Nashville, Norfolk, Richmond, several Florida cities, and a scattering of MSAs in other southern states.

Aside from raising the level of education in the region, net in-migrants have helped to reduce the South's poverty rate. (For more information on poverty in the South, see the article by Jon R. Moen on page 36.) In 1980, 16.5 percent of the South's resident population lived below the poverty line. Among net in-migrants in the 1980-85 period, only 9.2 percent earned income below the poverty level. The relative income levels of the newcomers to the South lowered overall poverty in the region to 16 percent of the resident population in 1985. This decrease helped narrow the poverty differential between the South and the nation; the national poverty rate increased from 13 percent in 1980 to 14 percent in 1985.⁸

Beyond these favorable impacts of migration, a few other noteworthy beneficial changes occurred in migrants' characteristics between the 1975-80 and 1980-85 periods. First, the number of net in-migrants lacking a high school diploma dropped by 100,000, and this group's share of net in-migration dropped from over one-fourth in 1975-80 to one-fifth in 1980-85. Meanwhile, the number of college graduates represented in the net migrant gain was up 70,000 despite an overall decline of 90,000 net migrants. Second, from 1975-80 to 1980-85 the number of net migrants who were employed in white-collar jobs rose by 166,000, and the total number of white-collar jobs added through migration accounted for almost one-fifth of all white-collar jobs gained in the South during the 1980-85 period.

Net in-migration by the elderly added nearly one-half million people to the South's popula-

tion in the 1975-85 period, providing important benefits to the region. Although migration of retirees generally does not have a major direct impact on an area's labor supply, their migration does attract younger people who move to established or newly created retirement communities to serve the retiree population. This indirect effect on labor supply can be sizable for small local economies and even large parts of states, as Florida demonstrates.

The major positive economic impact of retirees' migration is that it provides the receiving economy with a stable and significant source of income and wealth from outside its boundaries, making the area less vulnerable to cyclical downturns. In Florida, for example, nearly 40 percent of total personal income comes from dividends, interest, and rent (24 percent) plus

"Aside from raising the level of education in the region, net in-migrants have helped to reduce the South's poverty rate."

transfer payments (15 percent), primarily Social Security. In contrast, these combined sources account nationally for less than one-third of personal income. In 1985, Florida's economy received a \$1 billion bonus each month just from Social Security; retirees also kept in the state's financial institutions sizable deposits that were recycled to foster economic activity. From an economic perspective, the flow of retirees has an effect similar to an "export-base industry" that produces mainly for out-of-state buyers.

Relatively little is known about the quantitative impacts that retirees' spending has on the economies of sending and receiving states. William H. Crown (1988) analyzed data from the 1980-81 Consumer Expenditure Survey and found that net elderly in-migration results in substantial increases in the demand for food, housing, transportation, and entertainment in the receiving area. Compared to younger house-

holds, the elderly also spend more on health and medical services. Crown also estimated that Florida's net expenditure gain from its migration exchange of persons aged 60 and over just with New York was more than \$1 billion in the 1975-80 period.⁹ Applying the researcher's methodology to the entire South suggests the region gained over \$3.6 billion from migration exchange of the elderly with the rest of the country during the 1975-80 period.¹⁰

Increases in the demand for goods and services can stimulate a state's employment and economic growth, but it may also strain the ability of local or state agencies to provide services. Crown argues that although policymakers tend to have a positive outlook toward increases in demand for privately produced goods, they are apprehensive about increased demands on

"For some real estate developers and rural community development experts, attracting retirees has become a lucrative venture that can be viewed as a new form of light industry."

public infrastructure or services. Even though health care, for example, is financed primarily by private insurance, Medicare, and out-of-pocket expenditures by the elderly, the state must cover medical expenses of the poor, including many older people, through Medicaid.

For some real estate developers and rural community development experts, attracting retirees has become a lucrative venture that can be viewed as a new form of light industry. The perception that the elderly's moving into an area can be as good or better for that local community than attracting factory jobs has been fairly well publicized by the national news media.¹¹ Currently, reporters are touting rural economic development successes in Arkansas and North Carolina as well as the economic clout retirees traditionally have brought to Florida.¹² Success has also come to communities in parts of South Carolina, Georgia, Alabama, and Mis-

issippi. Furthermore, a study by Mark Henry, Mark Drabenstott, and Lynn Gibson (1986) reports that economies based on retirees have outpaced all others in per capita income growth.

To summarize, the public impression of migration to the South—that the region has been highly successful at attracting both workers and retirees—is generally supported by available data. The net in-migration gain of young, relatively well-educated workers has been a vital force in enabling some states and metropolitan areas to experience burgeoning growth over the past few decades. Similarly, newly retired couples are younger, healthier, and more active than their counterparts of a generation ago. As a group, migrating retirees are better off than the average retired couple that does not move, and they have more discretionary income than the average American household.¹³ This group is both able and willing to spend, a trait that is vital to local economic performance since spending by 100 retiree households is estimated to have the same economic impact, or multiplier effect, as a new factory with 100 jobs.¹⁴

On the other hand, when migration causes an increase in the demand for services, such increases are often viewed with consternation because a portion of the cost, say, of medical services, is borne by state or local governments.¹⁵ Other potential costs may involve cultural disagreements, including the clash of migration-fed urban growth and nearby rural interests for scarce land.¹⁶ Migration can also generate other possibly important problems associated with competing demands. For example, poor adults with families and more affluent singles may contend for available housing or may have conflicting views on providing schools for the young or hospitals for the elderly. In Florida and elsewhere, retirees commonly oppose tax increases to fund services they do not use.¹⁷

The Future of Southern Migration

Current patterns of interstate and interregional migration are sending mixed signals about what may lie ahead. Net migration to the South declined from 426,000 in the year ending in March 1984 to 160,000 in 1985 and 35,000 in 1986.¹⁸ This sharp drop-off is consistent with

shifting strengths and weaknesses in the nation's economic sectors and differences in state economic dependencies on particular industries. In a few instances, turnarounds in state migration tendencies have been well publicized, primarily for states dependent on the flagging energy sector or those that benefit from renewed manufacturing strength. For example, Alvin J. Sanders and Long (1987) note that, according to Internal Revenue Service (IRS) figures, the net Michigan-to-Texas migration had nearly dried up by 1985 from a positive net flow into Texas of more than 30,000 in 1980.¹⁹ They also observe that Texas lost migrants to all six of its southeastern migration partners (Florida, Tennessee, Georgia, Alabama, North Carolina, and Virginia) between 1984 and 1985.

Sanders and Long argue in general that:

Now the long-standing pattern that links the Sunbelt giants to one another and to other states in the South and North has disintegrated: The traditional net southward flow of people into Florida from the other southeastern states has disappeared. The migration stream that sends southern residents West has been exceeded by a counter flow from West to East.²⁰

The authors also argued that the Sunbelt giants—California, Texas, and Florida—have become "revolving doors," pulling people from the Northeast and Midwest and then sending them out to other states in the South and West. Sanders and Long assert that the key question for the future is how the migrants from the Northeast and Midwest to the South and West will distribute themselves within these regions.

In an extension of the current low-migration experience, one can argue that net southern in-migration will continue at the low 1986 level for at least several more years. In this scenario, lingering weakness in energy-dependent southern states and continued economic rebound in northern manufacturing states lessen the traditional push and pull factors that sent so many workers to the South before 1985. Even formerly burgeoning Florida and metropolitan areas such as Atlanta and Nashville might now be experiencing notable reductions in net in-migration; evidence in this area is still only fragmentary, though, and is based on moderating employment and other labor market figures and softer housing market conditions rather

than direct measurements of migration flows. Moreover, longer-run demographic forces apparently are likely to cause reduced in-migration in the remaining year of this decade and in the 1990s. Fewer people will be migrating for two reasons: the post baby-boom generation is smaller, and the baby-bust cohort born during the Great Depression will reduce the number of new retirees during the 1990s.

What differences can we expect in the future pattern of southern population growth? By making certain assumptions about age-specific migration rates as well as mortality and fertility, population growth can be projected fairly simply. Table 8 shows alternative migration projections based on the propensities prevailing in the late 1970s versus those in the first half of the 1980s.²¹ These forecasts indicate that the decline in total net migration to the South, under either assumption, will continue for the remainder of this century as a consequence of the long-run demographic forces mentioned above. For example, if the migration rates of the first half of the 1980s hold steady, the South will add about 75,000 fewer people per year from migration in the late 1990s compared to its gains in the late 1970s. Significantly for Florida, more than 31,000 fewer people aged 65 and over would be migrating to the South; by the mid-1990s, this could amount to roughly a 10 percent decline.²²

The total amount of net in-migration is roughly the same during the 1985-2000 period under both sets of assumptions, but differences in age-specific migration rates influence timing and age patterns significantly. For example, the late 1970s migration rate for the elderly was significantly higher than in the first half of the 1980s. As a consequence, the elderly account for a larger migration share under the 1970s scenario. The total amount of migration gain also shifts under the two sets of rates, with a greater gain developing by the end of the century under the late 1970s rates.

By the year 2000, the South should have a slightly higher population under the 1980s migration scenario and a slightly smaller elderly population. These differences are attributable to the greater relative tendency of the young to migrate to the South under the 1980s scenario and vice versa for the 1970s scenario. If the very low current (1986) migration rates to the South continue, or if a rebound reaches only the 100,000

Table 8.
Southern Migration Projections by Age, 1985-2000
(in thousands)

Age	1985-90						1990-95						1995-2000					
	1975-80 rates			1980-85 rates			1975-80 rates			1980-85 rates			1975-80 rates			1980-85 rates		
	In	Out	Net	In	Out	Net	In	Out	Net	In	Out	Net	In	Out	Net	In	Out	Net
5-14	645	490	156	714	444	269	661	496	165	731	450	280	686	512	174	759	464	294
15-24	1,134	712	421	841	477	363	1,008	639	369	747	428	319	961	615	346	712	412	301
25-34	1,462	1,221	241	1,415	950	466	1,484	1,262	221	1,436	982	454	1,343	1,165	178	1,299	906	393
35-44	754	488	266	755	474	281	891	576	315	891	559	332	984	635	349	984	616	368
45-64	701	272	428	557	315	242	720	281	438	572	325	246	799	314	485	635	363	272
65+	662	155	507	346	122	224	708	165	543	370	129	240	732	170	562	382	133	249
TOTAL	5,359	3,339	2,020	4,627	2,782	1,845	5,471	3,420	2,051	4,746	2,874	1,872	5,506	3,411	2,094	4,772	2,896	1,876

Source: Projections from the Federal Reserve Bank of Atlanta based on 1975-80 and 1980-85 age-specific migration rates. Survival rates for these projections were calculated from the 1983 abridged life table for the United States; fertility was based on the 1985 ratio of the number of children to the total child-bearing adult population.

to 150,000 annual level from the 35,000 gain in 1986, the southern economy is likely to slow appreciably—to a pace substantially more restrained than that of the late 1970s—from the growth that would occur under the migration paths shown in Table 8.

Naturally, the actual future course of migration to the South and the region's economic growth will be affected strongly by the national environment. However, within that context, certain shifts are significant for southern states. For example, elderly migrants are becoming more affluent and thus can be expected to have an increasing impact as they spend more. In addition, migration rates for the elderly might rise again in the 1990s as the popularity of retirement planning climbs and continued improvements in the health of older people enable more of them to relocate easily. More and more retirees also have visited or lived in different parts of the country and thus may be more receptive to moving during retirement. These factors, along with a growing shortage of young workers, could also increase the labor market effects of elderly migration by making it financially possible for more of the North's elderly to migrate.

A final caveat is in order. U.S. Census Bureau and other projections of migration and population growth that are driven by the changing size of age cohorts and constant fertility, mortality, and migration rates are inherently prone to error. Virtually all projections of U.S. interregional migration implicitly assume that attractive living costs and employment opportunities for individuals, along with lower labor, land, and other resource costs for businesses, will continue to attract newcomers to the South. However, historical experience and theoretical expectations suggest wages and living costs in the South and the rest of the nation will continue to move toward equality. For example, increased population density and the need for more public infrastructure may cause the cost of living in the South to rise at an above-average pace.

If the national and regional economic environments shift as suggested above, the conditions that favored the South in the past decade are unlikely to favor it as strongly in the coming dozen years. Over time, the convergence process would diminish the South's net economic advantages. The momentum from demographic

forces is also waning. Nonetheless, while the South's population gain from migration can be expected to slow, it is highly unlikely that net immigration will evaporate entirely.

Conclusion

The 1970-85 period may eventually be viewed as a watershed for the South. During this time, millions of people flocked to the South whereas, previously, migration streams had tended to flow North and West. The surge of migration to the South coincided with and reinforced the

region's economic growth and development to the point where the southern economy advanced at a pace above the U.S. average. The South's favorable cost of production and living conditions fostered higher growth and attracted workers and businesses to the region. Moreover, demographic changes were ideal for helping transform the South's economy. In the future, as the region approaches other parts of the country in wages and cost of living, these relative advantages should erode. Weakening of the region's competitive advantage would reinforce the pattern of slower growth resulting from reduced demographic-influenced migration to the South.

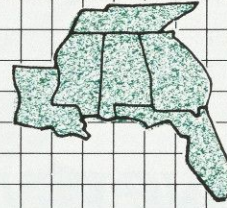
Notes

- ¹Technically, projections differ from forecasts in that the former only represent the mathematical results of a model that incorporates precise assumptions concerning rates of fertility, mortality, and migration. These assumptions usually emphasize current trends. When the mathematical results are expected or anticipated, they are called *forecasts*.
- ²For a detailed discussion of this turnaround in inter-regional migration, see Kahley (1982).
- ³State level data that are comparable to the regional data shown in Table 2 are not available because of the limited sample size of the U.S. Census Bureau's Current Population Survey.
- ⁴Comprehensive surveys of the extensive migration literature that are recommended to the interested reader are Greenwood (1985) and Greenwood (1975).
- ⁵Greenwood (1985): 524.
- ⁶Rone (1986) presents a comprehensive review of shifts in regional economic performance and job growth as well as a good discussion of the many factors that can alter regional advantages.
- ⁷The 1980 Census of Population counted students where they lived while attending school, and the 1980-85 survey data included students as part of their parental household.
- ⁸The overall poverty rate for out-migrants from the South in the 1980-85 period was 16.8 percent, and the rate for black out-migrants, who made up 13 percent of total out-migration, was 35.8 percent. Thus, southern out-migration also contributed to a narrowing of the non-South/South poverty gap by raising non-South poverty.
- ⁹This number was arrived at as follows: After-tax mean household income of elderly migrants from New York to Florida was \$16,545 in 1979, and 70,806 elderly households migrated to Florida in the 1975-80 period. Assuming, conservatively, that household expenditures equaled household income, Crown calculated that from 1975 to 1980 the increase in expenditures in Florida caused by the migration of households from New York was about \$1.163 billion. He estimated that the comparable rise in expenditures in New York due to migration of older households from Florida was \$57 million (3,420 households x \$16,600). The \$1.71 billion absolute value difference between \$1.163 billion and \$57 million is his crude estimate of the net effect of the migration exchange.
- ¹⁰These numbers are small compared to personal income in the region or even in Florida, where income is approaching \$200 billion annually. However, the high share of the South's \$3.6 billion gain resulting from New York-Florida exchange correctly suggests that the geographic pattern of elderly migration and the benefits it confers are highly concentrated. For several decades, one out of four elderly interstate migrants has been relocating to Florida. Even so, the volume of nonelderly migration there exceeds that of elderly migration.
- ¹¹An excellent recent example is Richards (1988). This article cites impressive anecdotal benefits that retirees bring to communities. A lengthier story told in a similar vein is found in Edmonson (1987).
- ¹²An informal calculation by Leonard Sahling of Merrill Lynch Real Estate suggests that one extra job is created for each retired couple that moves into Florida. Richards' (1988) article quotes state officials and developers who variously claim that an additional retiree household generates 0.25, 0.33, 0.60, and 0.70 new jobs for each retiree household that migrates to a community.
- ¹³Sahling and Strubel (1988).
- ¹⁴Phillips Publishing Company, *The Retirement Letter*, no. 238, September 1988. This estimate is based on an unpublished study by Mark Fagan, Jacksonville (Alabama) State University.
- ¹⁵Health care provides one-quarter of Florida's service jobs. Medicaid, the state-supported program that pays the medical expenses of low-income people, cost Florida \$581 million during the 12 months ending in June 1982, and over \$1 billion in 1986. This health tab is projected to continue rising as Florida's elderly increase in number.
- ¹⁶Richards (1988) reports on the spray-painting of a dumpster near a retirement development in South Carolina with the message "No more damn yankees."
- ¹⁷See Kahley (1988) for a detailed discussion of this issue and Florida's growth infrastructure needs, which are in large measure attributable to population gain from migration.
- ¹⁸U.S. Department of Commerce, Bureau of the Census, Current Population Reports, *Geographical Mobility: March 1985 to March 1986*, Series P-20, no. 425, June 1988.
- ¹⁹IRS data and Census of Population statistics are not strictly comparable because the Census counts students as living where they go to school, but the IRS places them in their parents' homes. Also, the Census tallies military personnel based on where they are stationed, but the IRS bases its numbers on mailing addresses. The IRS data also should be used cautiously. For the most recent year available, 1986, the migration gap between Texas and Michigan reappeared, contrary to the experience predicted by Sanders and Long, and perhaps also to economic developments in the two states.
- ²⁰Sanders and Long (1987): 39.
- ²¹As a consistency check, the total population projections from this exercise (not shown in Table 8 but available from the author of this article) were compared to newly released population projections for U.S. states and regions made by the U.S. Department of Commerce. See release CB88-48, April 1988, and Current Population Reports, Series P-25 (forthcoming report). Population totals for 1990, 1995, and 2000 for the South and non-South United States are nearly equal for the two sets of projections after factoring out the effect of international migration that is included in the U.S. Census Bureau's projections but excluded in the author's projections.
- ²²Coincidentally, Florida's official state population projections show that net migration of people aged 65 and over declines by 31,000 from 1985-90 to 1995-2000. Overall migration gain drops from 1.3 million to 1.17 million in the same period. These are unpublished data made available to the author by Stanley K. Smith, Bureau of Economic and Business Research, University of Florida. The bureau prepares the official state projections.

References

- Crown, William H. "State Economic Implications of Elderly Interstate Migration." *The Gerontologist* 28, no. 4 (1988): 533-39.
- Edmonson, Brad. "Is Florida Our Future?" *American Demographics* 9 (June 1987): 39-44.
- Greenwood, Michael J. "Research on Internal Migration in the United States: A Survey." *Journal of Economic Literature* 13 (June 1975): 397-433.
- _____. "Human Migration: Theory, Models, and Empirical Studies." *Journal of Regional Science* 25, no. 4 (1985): 521-44.
- Greenwood, Michael J., Gary L. Hunt, and John M. McDowell. "Migration and Employment Change: Empirical Evidence on the Spatial and Temporal Dimensions of the Linkage." *Journal of Regional Science* 26, no. 2 (1986): 223-34.
- Henry, Mark, Mark Drabenstott, and Lynn Gibson. "A Changing Rural America." Federal Reserve Bank of Kansas City *Economic Review* 71 (July/August 1986): 3-22.
- Kahley, William J. "Changing Faces of the South." Federal Reserve Bank of Atlanta *Economic Review* 67 (June 1982): 32-42.
- _____. "Florida's Challenge: Managing Growth." Federal Reserve Bank of Atlanta *Economic Review* 73 (January/February 1988): 14-23.
- Long, Larry, and Kristin Hanson. "Reasons for Interstate Migration: Jobs, Retirement, Climate and Other Influences." U.S. Bureau of the Census, *Current Population Reports*, Series P-23, no. 81 (1979): 1-29.
- Phillips Publishing Co. *The Retirement Letter*, no. 238, September 1988.
- Richards, William. "An Influx of Retirees Pumps New Vitality Into Distressed Towns." *The Wall Street Journal*, August 5, 1988, 1.
- Rone, Philip L. "An Analysis of Regional Employment Growth, 1973-1985." *Monthly Labor Review* 109 (July 1986): 3-14.
- Sahling, Leonard, and Joseph G. Strubel. *The Real Estate Markets in Tampa, Florida*. New York: Merrill Lynch, 1988.
- Sanders, Alvin J., and Larry Long. "New Sunbelt Migration Patterns." *American Demographics* 9 (January 1987): 38-41.

REGIONAL UPDATE



1989 Southeastern Economic Outlook Available in *Regional Update*

The southeastern economic outlook that has traditionally appeared in the January/February *Economic Review* is available this year in the Fall 1988 issue of *Regional Update*, a newsletter published by the Atlanta Fed's public information department. If you want to receive this short-term outlook and a state-by-state review for 1989, fill out the order form below and return it to the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta St., NW, Atlanta, Georgia 30303-2713. There is no charge for *Regional Update*.

YES! I want to receive *Regional Update* and the 1989 economic outlook.

Name _____

Address _____

City _____ State _____ ZIP _____

Return to the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta St., NW, Atlanta, Georgia 30303-2713.

Poverty in the South

Jon R. Moen

Though the South's manufacturing sector has been updated in the last two decades and though migration of people and companies to the region has moved the income of Southerners closer to that of the nationwide income level, large numbers of the region's citizens, especially its black and rural citizens, are still impoverished. In this article, the author studies the distribution of the poor throughout the region and suggests that increased education and stable employment are two ways of mitigating the poverty problem, particularly in rural areas.

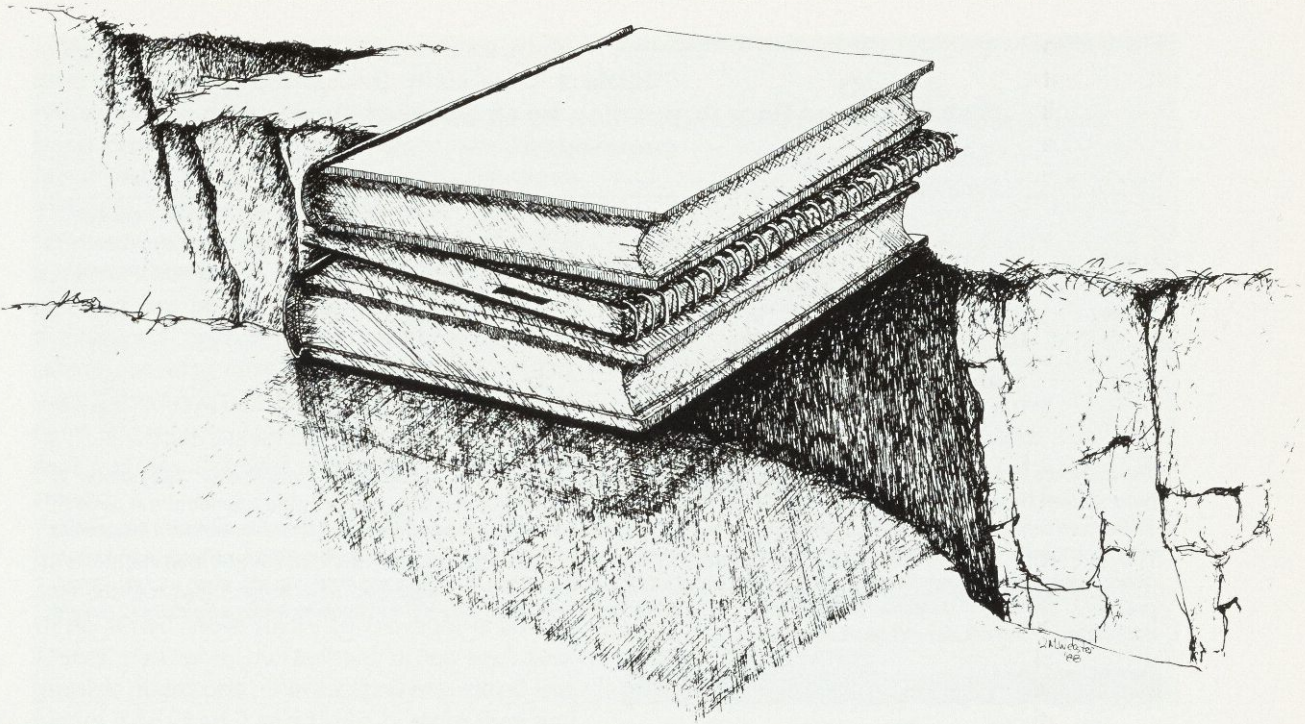
Since the Civil War, if not before, poverty has been more widespread in the South than in the rest of the United States. Although rapid economic growth has brought the region closer to the national average of per capita personal income, not everyone has shared in this progress nor have some states benefited as much as others. Less educated and low-skilled people have often been left behind, and those already living in poverty have become relatively poorer because a higher-income population has been migrating from the North. This article examines the demographic distribution of poverty in the South, evaluates the effectiveness of some current poverty-directed programs, and suggests some ways to curtail the region's persistent poverty problems.

Most people have little trouble recognizing poverty, though characterizing accurately what "being poor" is presents greater difficulty. Nevertheless, precise definitions and identification of poverty are critical for making decisions on how to battle it. A program that is appropriate for the elderly poor may be ineffec-

tive for impoverished young people or single parents. Moreover, the rural poor have different concerns than do unemployed urban workers and inner-city families. Therefore, to design appropriate policies, individuals and governments need to know who is poor, where they live, and, whenever possible, whether their spells of poverty are chronic or intermittent. A comparison of southern and U.S. poverty reveals that the southern poor, on average, are more geographically dispersed and, to a lesser extent, demographically distinct from those in the nation overall. Poverty-directed efforts in the South must, as a result, be targeted differently from national programs.

If the South's economic expansion is to continue, the poor need to be brought more fully into the work force, especially as labor becomes scarcer in the future. Workers must have higher education and skill levels as manufacturing becomes more technologically advanced and as employment in information-based service industries becomes more widespread. Because the South does not compare well against the nation in educational achievement, programs to improve schools and occupational training will be particularly important in reducing the region's level of poverty.

The author is an economist in the regional section of the Atlanta Fed's Research Department.

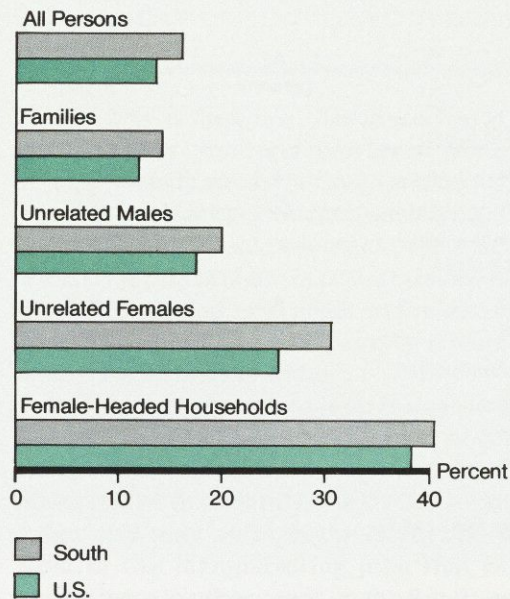


Who is Poor in the South?

In 1986, 16.1 percent of the South's population lived in poverty compared to 13.6 percent for the United States.¹ Since 1970, however, the incidence of poverty has declined in the region, while rising in the nation as a whole. In 1970, 20.3 percent of the South's population lived in poverty, yet just 12.6 percent of the U.S. population that year was considered poor.²

Poverty Distribution by Household Classification. One way to study the composition of poverty in an area is to classify individuals by the types of households in which they live. This form of analysis reveals that the South has higher poverty rates in each category than the nation, although the patterns of the two are similar (see Chart 1). The distribution of all persons across the different types of households is also roughly the same for the South and the nation; the same is true for the population in poverty. Table 1 presents the distribution of persons in poverty by household type and race for the region and the nation. The numbers in each column indicate the percentage of poor individuals that lives in each household classification. The figure in parentheses shows that group's representation

Chart 1.
Poverty Rates by Household Type, 1986



In each household classification, southerners were more likely to be poor than were U.S. citizens in general.

Source: U.S. Department of Commerce, Bureau of the Census. *Poverty in the United States: 1986*, Current Population Reports, Series P-60, No. 160, tables 5 and 6.

Table 1.
Distribution of Poor Population by Household Type, 1986
(percentages)

		Families		Unrelated males		Unrelated females		Female-headed household, no husband present	
White	South	75	(87)	7	(6)	15	(6)	22	(10)
	U.S.	74	(86)	8	(6)	15	(7)	28	(10)
Black	South	83	(87)	6	(6)	9	(6)	58	(35)
	U.S.	82	(86)	7	(7)	9	(6)	61	(34)

The numbers in each column indicate the percentage of all poor people in each household classification. The number in parentheses shows that group's representation in the total population. For example, among white southerners in poverty, 75 percent lived in a household with their family. In the total population of white southerners, 87 percent lived in a household with their family. The total of the four categories does not sum to 100 percent for two reasons: (1) households with female heads are counted as families and are included in that category in addition to being a separate classification and (2) a small category, "persons in unrelated subfamilies," is not presented. These individuals live in families within a household but are not related to the household head.

Source: See Chart 1.

Table 2.
Poverty Rates in the South by Race according to Type of Household and Degree of Urbanization, 1986
(percent in poverty)

		All persons	Families	Unrelated males	Unrelated females	Female-headed household, no husband present
<u>Central cities</u>						
White		13.3	11.6	14.2	24.8	28.4
Black		30.3	29.0	30.9	44.1	50.5
<u>Urban/outside central cities</u>						
White		8.1	6.8	13.0	21.1	20.5
Black		26.9	25.8	28.9	46.0	56.2
<u>Nonmetropolitan areas</u>						
White		16.5	14.5	36.0	40.0	34.2
Black		43.6	41.2	50.2	67.9	65.9

Source: See Chart 1.

in the total population. For example, among white southerners in poverty, 75 percent live in households made up of families, whereas 87 percent of the total white southern population live with their families. On the other hand, among

poor blacks nationwide, 61 percent live in a female-headed household with no husband present, though only 34 percent of the total black population in the United States lives in this type of household.

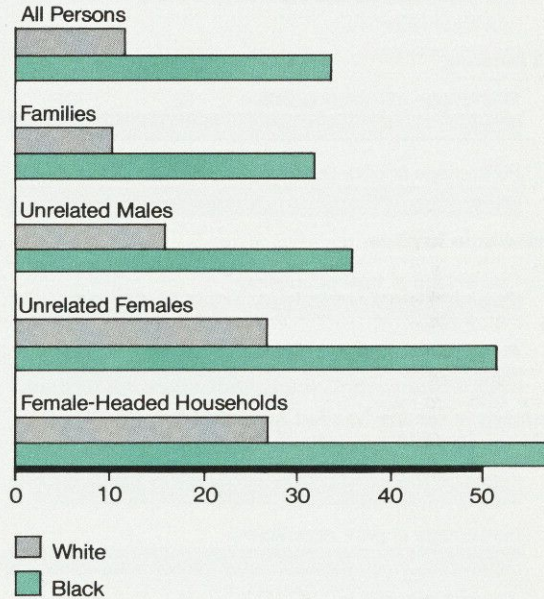
Persons in families with two or more adults have the lowest poverty rates, while those in households headed by a woman with no husband present have a much higher rate. Unrelated individuals living separately also have higher-than-average poverty rates. The differences between household types are about as great for the nation as a whole, although each category has higher rates in the South than in the nation. Consistent with the behavior of the overall poverty rate in the South since 1970, each category's rate has fallen roughly 20 percent. The relative ranking by household type or race has not changed significantly during this period.

Poverty Distribution by Race. Race is still the most important indicator of poverty in the South and the United States. On average, blacks are three times more likely to be poor than are whites. Across all household types and geographic locations, blacks' poverty rates are higher (see Chart 2 and Table 2). More than half of all blacks in female-headed households live below the poverty level. This situation exacerbates the poverty problem for blacks in general because female-headed households are more predominant among them. Only 10 percent of whites as opposed to about one-third of blacks fall in this household classification, a pattern that holds for the nation as well as the South.³

It is sometimes pointed out that poor whites outnumber poor blacks. That statement obscures the fact that in the South blacks make up 40 percent of the poor but just 20 percent of the total population. Their disproportionate representation in this income category appears across all household types (see Chart 3). The confusion over who suffers more from poverty results from mistakenly comparing numbers or levels to percentages or rates; more whites suffer from poverty, but proportionately far more blacks are poor.

A Comparison of the Nation and the Region. Southern and U.S. poverty differ in some important respects. Poverty in the South is less urban than in the rest of the country, primarily because the population distribution, especially among blacks, is less urban in the South. Fewer than two-thirds of the southern poor are urban residents, while nationally almost three-quarters of poor whites and virtually all poor blacks live in or near cities (see Table 3). In the South, poor

Chart 2.
Poverty Status of Southerners
by Race, 1986
(percent in poverty)



In each household classification, black southerners experienced more widespread poverty than did white southerners.

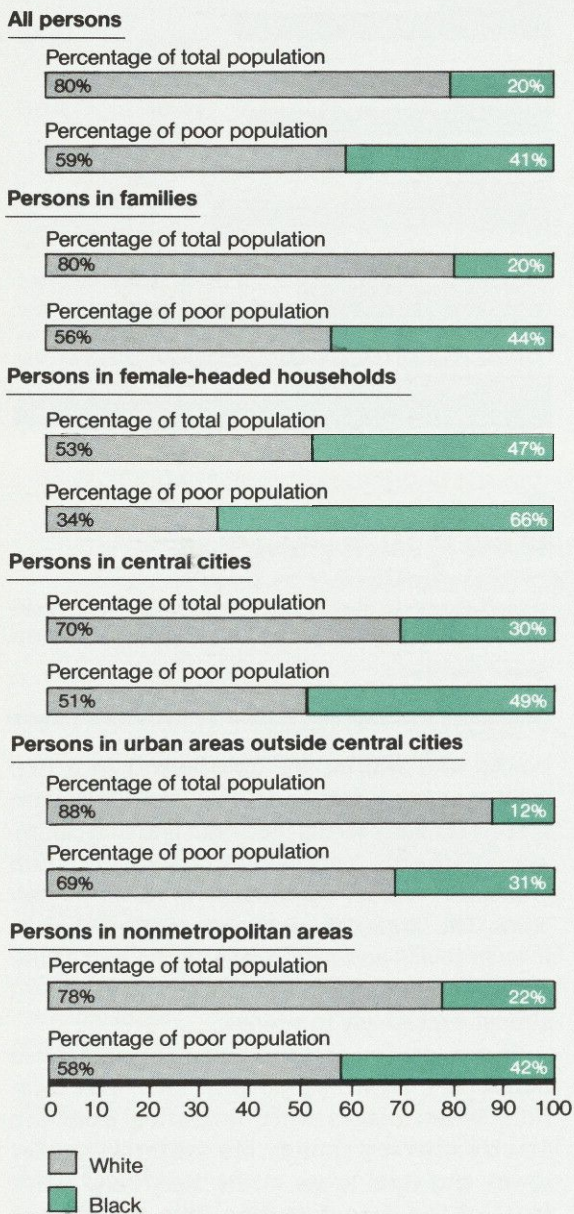
Source: See Chart 1.

blacks and whites are distributed in a like fashion across urban and rural areas. Whites are spread similarly across the South and non-South, whereas the black population outside the South is located almost completely in metropolitan areas. The largest share of poor southern blacks lives in towns and rural areas. In the rest of the country nonmetropolitan poverty is confined almost exclusively to whites.

Prior migration patterns help to explain these differences regarding poverty, race, and location. When blacks were migrating from the South earlier this century, few settled in smaller towns and rural areas in the North and West. Most of the manufacturing jobs that blacks sought were in urban areas. In the South, on the other hand, many blacks continued to be farmers and agricultural laborers, occupations that often garnered only subsistence income.⁴

Poverty rates for southern blacks are lowest in metropolitan areas outside central cities, as is

Chart 3.
Distribution of Individuals
in the South by Race
according to Household Type
and Location, 1986



In each classification, blacks experience more poverty than whites. For example, outside of central cities, 12 percent of all people are black, but 31 percent of the poor are black.

Source: See Chart 1.

true for whites (see Table 2). Areas outside of central cities—referred to here for simplicity's sake as "suburbs"—have the lowest poverty rates throughout the nation on average, and suburban blacks in nonsouthern states have poverty rates that approach the national rate for whites. White rates in the suburbs, however, are substantially lower than the national averages for whites and blacks.

Groups with Higher Poverty Rates. Households headed by females with no spouse present are much more likely to be impoverished than are other households. Of all categories, the contrast between white and black poverty is most apparent here. While 10 percent of whites in the South live in female-headed households, that figure is over 34 percent for blacks. The incidence of poverty is more than twice as high among blacks as among whites in female-headed households (56.5 percent vs. 26.6 percent), and in nonmetropolitan areas the rates are even higher—65.9 percent vs. 34.2 percent. Compare these high rates to overall poverty rates for blacks and whites: 33.6 percent and 11.8 percent, respectively.

In contrast to the poverty experience for other family types, the numbers and proportion of poverty-stricken female-headed households have increased in the South since 1979. During that time, the number of poor living in these households has risen dramatically—by 41 percent for whites and 46 percent for blacks. The number of persons living in households headed by women has also increased substantially—up 33 percent for whites and 35 percent for blacks since 1979.

Several other demographic groups in the South and the nation have higher-than-average poverty rates. Persons who are 65 and older are slightly poorer on average than people of all ages (17 percent vs. 16 percent). Moreover, elderly persons living alone have much higher poverty rates than older people on average. Almost 30 percent of older whites living alone were poor compared to 14 percent of all older whites. The pattern is similar for older blacks; 38 percent on average were poor, while 61 percent living alone were impoverished.⁵

Similarly, children are somewhat more likely to be poor in the South than in the rest of the nation; 15.8 percent of white children and 44.8 percent of black children in the South are

Table 3.
Location of Poor Population by Race and Urban Area, 1986

		Central Cities							
		Families		Unrelated males		Unrelated females		Female-headed household, no husband present	
White	South	27	(24)	35	(40)	32	(34)	34	(32)
	U.S.	36	(22)	46	(40)	39	(35)	46	(37)
Black	South	38	(42)	44	(51)	45	(52)	43	(48)
	U.S.	85	(76)	87	(81)	82	(77)	86	(82)
		Urban/Outside Central Cities							
		Families		Unrelated males		Unrelated females		Female-headed household, no husband present	
White	South	32	(48)	34	(41)	31	(39)	32	(42)
	U.S.	34	(53)	30	(43)	37	(43)	33	(46)
Black	South	21	(26)	18	(22)	19	(21)	20	(21)
	U.S.	13	(24)	11	(19)	17	(23)	13	(17)
		Nonmetropolitan Areas							
		Families		Unrelated males		Unrelated females		Female-headed household, no husband present	
White	South	41	(29)	31	(19)	37	(27)	33	(26)
	U.S.	30	(22)	24	(17)	24	(18)	21	(18)
Black	South	41	(32)	38	(27)	36	(27)	37	(31)
	U.S.	2	(1)	—	—	—	—	—	—

The numbers in each column refer to the percentage of all poor people in each location, and the number in parentheses indicates the percentage of all people that lives in each classification. For example, 19 percent of poor southern blacks in households of unrelated females lived in urban areas outside central cities. On the other hand, 21 percent of all southern blacks in households of unrelated females lived in urban areas outside central cities. Since this table does not show a distribution of the poor across household classifications (as does Table 1), the rows across do not sum to 100. However, the vertical columns total 100 when one adds the figures that apply to each regional or national race category for each location and household classification. For example, among poor white southern families, 27 percent live in central cities, 32 percent live in urban areas outside central cities, and 41 percent live in nonmetropolitan areas.

Source: See Chart 1.

poor, compared to 15.3 and 42.7 percent, respectively, in the nation. In female-headed households the figures are much higher in both the United States and the South. Over 40 percent of white children and nearly 70 percent of black children in female-headed households in the South are living in poverty.⁶

In short, persons living outside of "traditional" two-parent households have a much higher chance of being poor than persons in families

with both spouses present. Events that break up or hinder the formation of families—like divorce, teenage pregnancy, or death of a spouse—appear to be some of the causes of poverty, rather than life in a nontraditional household itself. The proportions of both poor and non-poor population living in nontraditional households are about the same in the South and the rest of the nation. However, the location of these households is less urban in the South, espe-

cially for blacks, and the incidence of poverty is higher in all household types in the South than in the rest of the nation.

The South's Persistent Poverty Problem

More than 90 percent of U.S. counties where poverty persists are located in the South, particularly in Appalachia and the Mississippi Delta cotton-growing area.⁷ A county with persistent poverty has had per-capita income in the lowest quintile—that is, the lowest 20 percent in terms of per capita incomes among counties in the United States—for the past three decades. This type of county tends to be rural and thinly populated—containing about 6 percent of the nonmetropolitan population. In counties with persistent poverty, disproportionate levels of persons have physical disabilities and health problems that prevent them from participating fully in the labor force. Blacks are concentrated in these counties, as are individuals with low education. Even though these counties are rural, some of them are also dependent on manufacturing for wage and proprietor income; this reliance reduces the option to use farm income maintenance and crop subsidy programs, which have provided almost half of total farm income in the United States in recent years. Few counties have much dependence on services or government employment as a source of income.⁸

Many counties with continuing poverty problems were at one time dependent on agriculture and forestry. However, the mechanization of cotton-picking and timber-cutting eliminated many low-skill, low-wage jobs. In the 1940s and 1950s some of the displaced population moved north to seek manufacturing jobs. Others remained in the South and worked in rural manufacturing industries like textiles and food or paper processing, which at the time required low-skill labor. A remaining segment of the population joined the ranks of the poor or took up farming on marginal land. During the 1980s rural manufacturers who had relied on low-wage labor began to modernize as domestic and foreign competition made cost reduction urgent. Employment levels of unskilled workers dropped,

although the demand for skilled workers to operate the new machines has remained strong. In these rural manufacturing counties technological change has adversely affected the poor and unskilled in each of the last two generations. (The article by Gene D. Sullivan and David Avery on page 2 discusses the changing composition of manufacturing in the South. They point out that the demand for higher wage, skilled labor predominates in urban areas.)

Because many people in counties with persistent poverty have less access to education, health care, and other resources to improve their skills and productivity, underemployment in poor counties is extensive. Low labor force participation results in lower income, which helps to perpetuate poverty. Insufficient skills also prevent many of the poor from taking jobs in manufacturing elsewhere.

What Should Be Done about Poverty?

Researchers and policymakers are handicapped in their efforts to formulate solutions to reduce poverty because they do not fully understand its cause.⁹ They do recognize, though, that people living in poverty are in general poorly educated, which contributes to their inability to obtain good-paying jobs. Being black or living in a female-headed household adds to one's chance of being poor. Unemployment resulting from business cycle downturns or a long-run restructuring of the economy explains some of the rise in poverty in the early 1980s. Coming from a poor family increases one's chance of being poor as well.

Are Current Programs Effective? Though the results have been sketchy at times, several lessons can be learned from the attempts over the past 20 years to lessen poverty. Programs like Head Start that try to improve the skills and education of the very young have had some success in helping people escape impoverishment. Such efforts have contributed to a reduction in high school dropout rates—increasing the chance of future employment—and even have helped increase enrollment in further education or training programs. Programs like the Job Corps, which provides remedial education and some training for disadvantaged youth, also have

benefited a number of individuals and communities. Gauging the extent of these programs' successes relative to their costs is difficult, though, because the results unfold slowly. When it comes to adults, little evidence exists to show that education and training programs have in fact helped reduce their poverty rate.

Aside from education, income transfers—that is, direct payments from government to individuals—have reduced the incidence of poverty. The Social Security Administration's payments in particular have reduced poverty rates of the nonaged in addition to those of the elderly and retired. Income transfers through Social Security, Unemployment Insurance, Workers' Compensation, various government pensions, and Medicare have been greater than those provided by the means-tested and welfare-oriented programs such as Aid to Families with Dependent Children (AFDC), Supplemental Security income, general assistance, food stamps, school lunches, or subsidized housing. This disparity helps explain the greater drop in poverty among the elderly than among the nonelderly. Of course, some of the payments, particularly Social Security, go to retirees, many of whom were not poor before they retired. The additional income supplements their savings. However, Social Security may have replaced some private saving for retirement.

Income transfers such as the ones mentioned above reduce the labor supply. Yet, with the difficulty in measuring changes in the labor supply and the differences in the programs being studied, the overall reduction in work is difficult to gauge.¹⁰ Nevertheless, many studies indicate that some withdrawal of labor occurs because of transfer payments, which dampens their effectiveness in eliminating poverty by reducing earned income. More difficult to establish clearly has been a relationship between welfare or income transfers and the rise of female-headed households, the increasing number of children born outside of marriage, or the development of a permanently welfare-dependent class. The current programs do not seem to exacerbate poverty, but whether they have helped reduce it is not yet certain either.

Migration from low- to-high wage areas is a way that persons can improve their income and perhaps escape poverty. However, general economic growth appears to have been more im-

portant than migration in reducing impoverishment in the South relative to the rest of the nation in the late 1970s. Actually, a net migration of poor people into the South took place during this time.¹¹ During the 1980s, when the southern economy began growing rapidly, the higher incomes of in-migrants helped to reduce the South's poverty rate. (The article by William J. Kahley on page 18 gives more detail on the role of migration in the South's recent economic development.)

Conclusion

The South's fight against poverty presents several challenges. Relative to the rest of the nation, the low levels of education in the region and the recent success of educational enhancement in the early years indicate that improving the young's learning skills may be the most effective method of helping the South reduce poverty at least to the nation's rate in the long run. If educational programs work, they will also lessen the need for welfare and relief payments in the future. Though these payments have helped people rise above the poverty threshold, they are unlikely to eliminate the causes of poverty.

One major characteristic distinguishes southern poverty and may call for a different mix of government programs in the region: the greater tendency of southern poor to be in rural locations. Bringing aid to the poor is more difficult and perhaps more costly in rural areas. When poverty is geographically more concentrated, as it is in cities, identifying the impoverished and making them aware of available benefit programs is easier. Rural poverty tends to be more dispersed, which renders delivery of aid and education more difficult. Yet improved education and training are vital if the rural poor are to secure jobs that pay more than a subsistence income, either in their current home or one to which they have migrated. Because not all rural poverty stems from low farm income, steps to revitalize rural manufacturing and produce better paying jobs may be useful in the long run to diminish southern rural poverty. Better education will help to assure that manufacturers will have access to a skilled labor force, thus improv-

ing the attractiveness of rural areas for potential investors.

The slightly larger shares of the poor in the South who are young or living in female-headed households also distinguish this region from the rest of the country. Members of this group of poor are less likely to be able to take advantage of the benefits offered through the Social Security Administration, which, as mentioned before, has helped boost many of the elderly above the poverty threshold. In 1984 about \$100 billion of aid was provided nationally to families through the various means-tested plans like AFDC and food stamps. Social Security's retirement insurance provided about \$375 billion overall in 1985, although much of it was not available to young people with little or no work history.¹² AFDC benefits vary greatly across the nation, the lowest levels being dispensed in the South. In 1985 Mississippi made available to families an average of \$103.50 in monthly benefits while in Minnesota, for example, the average benefit was \$494.62. The national average was \$342.15.¹³ Most southern states also receive less revenue per capita for welfare expenditure from the federal government than the national average (see Aruna Srinivasan's article on page 48 for a discussion of state finances in the South). By raising benefit levels for these programs, there

seems to be room to improve the assistance provided to female householders without introducing new programs.

To fight southern poverty seriously, though, raising the educational and skill levels of the poor and the rest of the population is, in the long run, a key step. Reaching the young with better education, and, if necessary, remedial schooling will probably be the most effective method of actually eliminating one of the fundamental causes of poverty in the South.

The importance of job creation and stable employment is beginning to be recognized as an important approach to reducing poverty rates.¹⁴ Welfare and assistance programs, though helpful economically in lessening short-run suffering, do not seem to be useful in curbing poverty and eliminating its fundamental causes. With state and local policies encouraging business growth in higher value-added industries and industries using skilled labor, particularly in rural areas, continued emphasis on improving education will help reduce dependence on welfare and transfer payments. Relying on jobs in low-skill industries will not, because the pace of economic development in the region has eliminated many of these jobs, first in forestry and agriculture and now in textiles through technological improvements.

Problems in Defining Poverty

Inaccessibility to resources is certainly a characteristic of being poor, as is a shortage of money income. Yet characteristics alone do not tell which resources poor people lack or how much money they would need to emerge from poverty. Being poor is not a clear-cut condition; at no naturally defined point does one stop or start being poor. Definitions of poverty thus tend to be arbitrary, reflecting current beliefs about an appropriate standard of living.

Poverty is usually measured in one of two ways. *Absolute* measures of poverty select a level of income below which people are considered poor. This level reflects how much society considers to be just sufficient to provide basic food and shelter. Although this poverty indicator is termed "absolute," a society's values and its degree of concern for its less fortunate members, rather than a scientifically determined standard of living, are still the focus.

In a growing economy poverty tends to disappear when measured with an absolute standard. This vanishing act is the result of an across-the-board per-capita income increase coupled with a fixed poverty threshold. As income grows, proportionately fewer and fewer people will be found in the left tail, that is, the poorer end of the distribution.

A *relative* measure of poverty counts as poor those individuals who are in the bottom X percent of the income distribution. Like the absolute measure, the poverty threshold under a relative measure is chosen according to a society's attitudes. In contrast to the absolute measure, though, a relative measure does not guarantee that in a growing economy fewer and fewer people will be below the poverty level. As more income generally becomes available, the poverty threshold also increases. By definition, the proportion of the population living in poverty will remain statistically the same with a relative measure.¹ Of course, their level of real income may be growing, but they will not be advancing on the rest of the population.

This article uses the definition of poverty developed by the Social Security Administration in 1964, which is the definition currently used by the U.S. Census Bureau in estimating national and regional poverty rates.² The current definition is an absolute measure of impoverishment. The threshold was established on the basis of the Department of Agriculture's 1955 Survey of Food Consumption, which revealed that families of

three or more persons spent about one-third of their income on food. The poverty level was subsequently established at three times the level of the U.S. Agriculture Department's economy food plan, a low-cost food budget that provided adequate nutrition. Several thresholds were created, depending on the number and age of children in the family.³ The average poverty threshold for a family of four in 1966 was \$3,317. By 1986 it had risen to \$11,203, mostly because of adjustments for inflation. In 1980 the poverty threshold for farm households was readjusted to be 100 percent of the threshold for nonfarm households rather than 85 percent.

The downward trend since 1959 in the number and percent of persons below the poverty level is consistent with that of a growing economy and an absolute measure of poverty. Both the number and percent have fallen, except during periods of recession, although the upturn in black poverty between 1986 and 1987 is troublesome.

The absolute measure used by the Census Bureau has its limitations, of course. Variations in the cost of living across the nation are not considered. An individual earning \$5,701 in rural Mississippi faces different costs from someone living in Atlanta. The measure no longer adjusts for differences in the cost of living between farm and nonfarm households, although the small share of the population living on farms suggests that most adjustments will not make much difference in overall poverty rates. Because farm households probably now rely less on home production than in the past, a lower poverty threshold for farm households as measured by money income is less important.

The measure of money income that the Census Bureau uses presents its own complications in determining the extent of poverty in the United States. Money income includes wages and salaries; Social Security, public assistance, and welfare payments; dividends, interest, and rents; unemployment compensation; and government and private pensions. Goods and services produced and consumed in the home or on a farm are not included in money income, nor is noncash income like food stamps, health benefits, subsidized housing, and employer contributions to health insurance or retirement plans. According to the Census Bureau, 59 percent of all poor households received at least one of the following non-cash benefits in 1985: food stamps, Medicaid, subsidized school lunches, and public or sub-

sized housing. If certain noncash benefits were included in income, the Census Bureau claims, the poverty rate would fall between 8 and 34 percent.⁴ Other noncash benefits like employer-provided stock purchase plans and company perquisites

are probably not widely available to working persons below the poverty threshold, and their inclusion in income would have little effect on measured poverty rates.

Notes

¹Using a percent of median income as a poverty threshold will result in fewer impoverished people if income inequality is reduced. Victor Fuchs has suggested that 50 percent of median income be used as a poverty threshold ("Redefining Poverty and Redistributing Income," *The Public Interest* 6 (Summer 1967): 3-27.)

²Isabel Sawhill points out that the official definition has been useful for analyzing trends in poverty rates. Even

though different measures produce different point estimates, the trends are consistent. See her article, "Poverty in the U.S.: Why Is It So Persistent?" *The Journal of Economic Literature* 26 (September 1988): 1073-1119.

³See *Poverty in the United States: 1986*, U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 160, pp. 154-55, 1988, for details.

⁴*Ibid.*, p. 3.

Notes

¹The U.S. Census Bureau defines the South as Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

²The 1970 figures are from the 1970 *Census of Population*, vol. 1, Characteristics of the Population, part 1, U.S. Summary-sec. 1, table 135 (Government Printing Office; Washington D.C., June 1973). The estimates for 1986 are taken from *Poverty in the United States: 1986*, U.S. Bureau of the Census, Current Population Reports Series P-60, No. 160, 1987. This same source, tables 5 and 6, was used for the other 1986 figures as well.

³In the South, races other than whites and blacks account for about 1 percent of the population, and their poverty rate averages 11 percent.

⁴See Gavin Wright's *Old South, New South* (New York: Basic Books, 1986).

⁵*Poverty in the United States*, tables 5 and 6.

⁶*Ibid.*

⁷*The Diverse Social and Economic Structure of Nonmetropolitan America*, U.S. Department of Agriculture Rural Development Research Report No. 49, 1985: 12-14.

⁸*Dependent* is defined as 30 percent or more of labor and proprietor income coming from manufacturing, or 20 percent or more from mining.

⁹Most of the following discussion is based on an excellent survey article by Isabel Sawhill, "Poverty in the U.S.: Why Is It So Persistent?" *The Journal of Economic Literature* 23 (September 1988): 1073-1119.

¹⁰*Ibid.*, p. 1103.

¹¹Larry Long, *Interregional Migration of the Poor: Some Recent Changes*. U.S. Bureau of the Census, Current Population Reports Series p-23, No. 73, 1978.

¹²See Sawhill (1988): 1099.

¹³*Social Security Bulletin, Annual Statistical Supplement, 1987* (1988): 295.

¹⁴See Wilson (1987).

References

Sawhill, Isabel. "Poverty in the United States: Why Is It So Persistent?" *The Journal of Economic Literature* 23 (September 1988): 1073-1119.

Social Security Administration. *Social Security Bulletin, Annual Statistical Supplement, 1987*. Washington: GPO, 1988.

U.S. Department of Agriculture. *The Diverse Social and Economic Structure of Nonmetropolitan America*. Rural Development Research Report No. 49. 1985.

U.S. Department of Commerce, Bureau of the Census. *Characteristics of the Population, U.S. Summary*. U.S. Census of Population, 1970, vol. 1. Washington: GPO, 1973.

U.S. Department of Commerce, Bureau of the Census. *Interregional Migration of the Poor: Some Recent Changes*. Report prepared by Larry Long. Current Population Reports Series p-23, No. 73. 1978.

U.S. Department of Commerce, Bureau of the Census. *Poverty in the United States: 1986*. Current Population Reports Series p-60, No. 160. 1987.

Wilson, William. *The Truly Disadvantaged: the Inner City, the Underclass, and Public Policy*. Chicago: The University of Chicago Press, 1987.

Wright, Gavin. *Old South, New South*. New York: Basic Books, 1986.

Working Paper Series Available

The Research Department of the Federal Reserve Bank of Atlanta publishes a working paper series to stimulate professional discussion and exploration of economic subjects. We welcome readers of the *Economic Review* to complete and return the form below in order to receive new working papers as they are published. If you would like a copy of any of the current papers, simply check the box next to the paper's number.

- 88-1 William J. Kahley
Countervailing Advantage and Foreign Direct Investment in the United States
- 88-2 William Roberds
A Quarterly Bayesian VAR Model of the United States Economy
- 88-3 Jon R. Moen
The Shifting Structure of Occupations and the Effect on Labor Force Participation Rates of American Males, 1860 to 1980
- 88-4 Paul D. Koch and Jeffrey A. Rosensweig
The U.S. Dollar and the "Delayed J-Curve"
- 88-5 Thomas J. Cunningham and Rosemary Thomas Cunningham
What's the Surprise in Money Supply Announcements?
- 88-6 William Curt Hunter and Stephen G. Timme
Technological Change and Production Economies in Large U.S. Commercial Banks
- 88-7 Larry D. Wall and Pamela P. Peterson
Valuation Effects of New Capital Issues by Large Bank Holding Companies
- 88-8 Joseph A. Whitt, Jr.
Commodity Prices and Monetary Policy
- 88-9 Steven P. Feinstein
A Source of Unbiased Implied Volatility Forecasts
- 88-10 Peter A. Abken
Option Replication with Transactions Costs: An Analysis of Hedging Errors

Previous working paper series are also available. For more information, contact the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta Street, NW, Atlanta, Georgia 30303-2713 (404/521-8788).

Please start my subscription to the Working Paper Series.

Please send me a copy of the following working papers:

88-1 88-2 88-3 88-4 88-5 88-6 88-7 88-8 88-9 88-10

Name _____

Address _____

City _____ State _____ ZIP _____

Return to the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta Street, NW, Atlanta, GA 30303-2713.

Public Finance and Economic Growth in the Southeast

Aruna Srinivasan



The influx of population from other regions and the South's persistent poverty problem are two major stresses on the region's system of public finance—that is, the revenues and expenditures of state and local governments. This pressure comes at a time when the federal government is paring back its levels of support. This article reviews the sources of state and local governments' monies as well as the ways these funds are spent, and considers the capacity of public finance in the region to address these problems.

State and local governments in the Southeast are at a crucial financial juncture. They are being pressured toward providing expanded health care, education, and similar public services. Not only are states and localities being asked to fill

the gap left by reductions in federal support, but in some cases governments are being called on to offer an improved or broadened range of services as well. The willingness of many southeastern states to launch new programs—while simultaneously adjusting to less federal aid—demonstrates the initiative of state and local leaders and the improved condition of their governments' finances. With the exception of Louisiana, the financial status of most state and

The author is an economist in the regional section of the Atlanta Fed's Research Department. She would like to thank Steve Benenson for valuable research assistance.

local governments in the region has been good in the late 1980s. Yet even though resources and responsibilities for providing services are fairly well matched, uneasiness abounds about what the future may hold.

The economic slowdown in the early 1980s was a reminder that the health of state and local finances depends largely on the performance of the national economy. Moreover, the movement to limit taxes showed that even during periods of economic growth, taxpayers may constrain the increase of state and local expenditures and revenues.

Issues relating to public finance—that is, the management of a government's revenues and expenditures—vary widely among the southeastern states. This diversity often reflects the disparity of their growth experiences. The long-term development concerns in the region range from fostering growth in Mississippi to managing it in Florida. In Louisiana, the key development problem is to reduce a historical dependence on primary industries. In contrast, Tennessee has already experienced a considerable transformation from traditional manufacturing to a more diversified industrial base. Virtually all states proclaim the need to build up infrastructure. Providing a nationally competitive education is another objective that transcends state lines.

With revenues, the problems range from building up the tax base in capital-poor Mississippi to tapping Florida's considerable tax capacity to pay for its infrastructure needs. A major concern of state policymakers in Louisiana is the heavy reliance on oil and gas production as revenue sources; production is steadily declining as the state depletes these non-renewable resources. The call for tax reform in Tennessee is not merely to raise more money but to achieve revenues that are more responsive to new and changing economic conditions. Tax reform that would exploit the economy's shift toward the service sector is desirable but politically difficult to achieve.

State and local governments in the Southeast confront these and many other issues. The choices facing these governments are important ones regionally and nationally. This article contributes to the understanding of public finance in the region by providing an overview of the Southeast's revenue and expenditure systems.

The essential feature that emerges is diversity, both in the relative size of expenditures and revenues and in the types of financing used. This article also examines the impacts of recent changes in state and local relations. Two important trends of the last decade are that state and local revenues have grown relative to federal revenues, and transfers of funds from federal to state governments have been cut. Finally, the implications of fiscal policy changes for economic developments in the region are considered.

Overview of Public Finance in the Southeast

The great diversity among southeastern states precludes generalizations about the way they raise and spend their money. The difference between Georgia, which took in \$2.6 billion in income taxes alone in 1987, and neighboring Florida, which has no income tax and garnered the bulk of its \$9.8 billion revenue from general sales taxes, is too great to make comparisons meaningful. Similarly, the \$1.9 billion spent on public welfare programs during 1987 in Florida may have been used much differently than the \$544 million dispensed in nearby Mississippi. Moreover, the variety of governments' accounting rules and budget procedures contributes to the diversity.

Still, the funds for state and local governments come from the same three main sources (see Table 1). By far the most important is taxation—sales and income taxes for states, and property taxes for cities and counties. In the early part of this century, states also relied heavily on the property tax. Mississippi was the first state in the Southeast to adopt both an income and a sales tax, and by the early 1950s all states in the region had begun collecting some form of income or sales taxes.

A major concern in evaluating revenue systems is the degree of sensitivity to business cycles. A tax system is considered sensitive when its receipts come from sources that are more easily affected by shifts in economic conditions. Examples of such sources are income taxes and general sales taxes. Sensitivity is measured by income elasticity, which is the per-

Table 1.
Distribution of Total Revenue by Source in Southeastern States, 1987
(percentages)

	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	Southeast	United States
TOTAL REVENUE	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL TAXES	45.5	56.6	52.0	37.3	44.0	48.8	49.1	47.8
Broad-Based Taxes	27.3	34.9	42.4	19.7	32.5	32.0	32.2	34.1
General Sales	12.5	31.5	17.0	12.9	23.0	27.0	22.1	15.4
Income	14.8	3.4*	25.4	6.8	9.5	5.0*	10.1	18.7
Severance Taxes	0.8	0.5	0.0	4.9	1.1	0.0	1.1	0.8
Other Taxes	17.5	21.2	9.6	12.7	10.4	16.8	15.8	12.9
Property	1.0	1.3	0.2	0.0	0.0	0.0	0.6	0.9
Motor Fuels and Vehicles	5.2	6.2	4.5	4.6	4.2	8.4	5.6	4.6
Other Narrow Taxes	11.3	13.7	5.0	8.1	6.2	8.4	9.6	7.3
CURRENT CHARGES	10.6	4.5	6.0	7.8	7.3	7.4	6.7	6.2
Education	5.5	2.0	3.3	4.7	4.4	4.4	3.6	3.5
Hospital	3.6	0.4	0.9	1.2	1.7	2.1	1.4	1.3
Other	1.5	2.1	1.8	1.9	1.3	1.0	1.7	1.4
FROM FEDERAL GOVERNMENT	20.9	16.1	22.3	26.5	26.0	25.1	21.6	18.5
For Public Welfare	6.7	5.9	9.8	9.0	9.9	11.3	8.3	8.7
For Education	5.9	4.1	4.5	4.0	5.7	4.4	4.5	3.3
General Revenue Sharing [†]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	8.3	6.1	8.0	13.5	10.4	9.4	8.7	6.5
INTEREST EARNINGS	5.2	3.6	2.1	3.2	2.8	2.6	3.3	3.6
MISCELLANEOUS REVENUE	17.8	19.2	17.6	25.3	19.8	16.1	19.4	24.0

* Corporate income taxes only. These states do not impose a personal income tax.

† States were excluded from general revenue sharing beginning in 1980.

Note: Total revenue is the sum of general and miscellaneous revenues. General revenue consists of taxes, current charges, transfers from the federal government, and interest earnings. Miscellaneous revenue consists of utility, liquor store, and insurance trust revenues and totaled almost one-fifth of total revenues in 1987. Miscellaneous revenue is especially important in Louisiana.

Source: U.S. Department of Commerce, Bureau of the Census, *State Government Finances in 1987*.

centage change in revenues that can be related to a given percentage change in income. The higher the elasticity, the more sensitive to changes in income are the source's revenues. An elasticity of 1.2, for example, indicates that a 10 percent change in personal income automatically results in a 12 percent change in revenues.

Of the \$54 billion total revenues of southeastern states in 1987, taxes provided almost exactly half of them, or \$26.5 billion. Of that amount, nearly \$17.9 billion came from broad-based taxes such as general sales and income taxes, which are especially sensitive to economic fluctuations, according to Stephen P.A. Brown (1987). Narrow taxes such as property, motor fuels, and vehicle taxes provided \$8.7 billion in revenues in 1987. These are relatively insensitive to business cycles. Motor fuel and vehicle usage does not vary much cyclically, and so tax revenues from these sources are less sensitive than income taxes. Since assessments are infrequent and many mortgage lenders require borrowers to escrow money for property taxes, payments are made even in bad times. As a result, this revenue source shows little sensitivity over the business cycle.

In 1970 the share of narrow taxes was greater than that of broad-based taxes. However, the pattern was reversed in 1975; since then in the Southeast, broad-based taxes as a percentage of the total have steadily increased, standing at 66 percent in 1987. Because the importance of broad-based taxes has climbed, the revenue system's sensitivity to economic fluctuations has been amplified. Though convenient during periods of economic growth, the increased elasticity of the tax structure is actually a mixed blessing. For example, states are more fiscally vulnerable to recessions because of the increased weight of broad-based taxes.

Severance taxes, which make up just over 1 percent of southeastern governments' total revenue, are directly affected by the production and price of commodities such as oil and gas. (Severance taxes are imposed on nonrenewable resources extracted from a political jurisdiction.) In the region as a whole, severance taxes, royalties, and rentals are declining. On the other hand, user fees, current charges, and interest earnings constitute a small but growing share of state finances.

Payments from the federal government provide the second leading source of funds in the Southeast, accounting for about 20 percent of state revenues (see Table 1). After steady increases throughout the post-World War II era, payments to state governments peaked at the end of last decade. Under the revenue-sharing program that began in 1972, undesignated fiscal help was provided to state and local governments. In 1980, however, according to Helen F. Ladd (1984), the relatively healthy condition of state treasuries, in combination with the prospect of growing federal deficits, led to the exclusion of states from revenue-sharing. At that time, federal grants—subsidies and shared taxes, for example—provided 26 percent of state revenues. Within seven years, federal budget constraints had pushed that level down to 20 percent.

Moreover, the nature of federal grants has shifted, adding to short-term fiscal pressures on state governments. The two main types of federal grants are welfare and other payments to individuals, and direct payments to state governments. Only the direct payments to governments help state officials balance their books, and this segment of the federal grant structure is growing at less than half the rate of welfare and other individual payments. The finances of state and local governments are strained as a result.

Bonds and other kinds of debt issues represent the third significant source of financing. They differ from taxes and other sources of income because the money raised is usually designated for long-term capital spending projects, such as bridges and school buildings, and not for day-to-day operations of the government that show up in year-end revenue and expense statements. Although few states in the region have budget deficits, in the sense of an annual excess of spending over income, they do have large and growing debts.¹ Among southeastern states debt has grown at an annual rate of 26 percent in the 1980s, reaching a total of \$4.8 billion in 1987. However, changes over the years in the character of those debts have resulted in less of a burden on taxpayers (Harrison Donnelley, 1986). For example, general obligation bonds, a type of full faith and credit debt that must be repaid from tax revenues, have shrunk to a third of states' total debt. Half a decade earlier, these bonds made up 50 percent of state debt. Reve-

Table 2.
Distribution of State Government Expenditures by Type, 1987
(percentages)

	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	Southeast	United States
TOTAL EXPENDITURES	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Education	43.37	37.24	40.23	30.62	37.86	35.44	37.25	32.89
Public Welfare	10.04	12.35	15.79	12.37	13.77	17.85	13.53	17.21
Highways	8.77	9.51	10.23	8.41	9.78	12.14	9.73	8.40
Hospitals and Health	9.85	8.91	7.89	8.57	7.05	8.26	8.55	7.05
Natural Resources	1.91	3.35	2.56	3.10	2.58	1.45	2.67	1.72
Public Safety	2.81	4.64	4.42	3.60	2.51	4.04	3.94	3.46
Administration	3.20	3.74	2.42	2.06	2.04	2.91	2.90	3.02
Interest on General Debt	4.04	3.68	1.80	7.17	2.70	2.41	3.73	4.08
Miscellaneous Expenditures	16.03	16.59	14.66	24.11	21.71	15.51	17.71	22.18

Note: Miscellaneous expenditures include utility, liquor store, and insurance trust outlays.

Source: See Table 1.

nue bonds have now become more prevalent in state government financing. They are repaid from income generated by the projects the debt helps fund. A revenue bond would be used, for example, to build a toll road on which the tolls collected would help service and retire the debt.

To date, gains in personal income and population have outstripped debt issuance in all of the Southeast except Louisiana. Bond ratings according to Standard and Poor's are generally good across the region, ranging from AA- in Mississippi to AA+ in Georgia and Tennessee. Louisiana was downgraded to BBB+ earlier this year as it struggled with falling oil prices and a heavy debt load. The debt-income ratio is low but rising in Alabama and Florida, a trend that can help maintain capital programs in down cycles. However, a state with a low debt burden is not necessarily a better credit risk than a state with more debt. Factors such as the level, nature, and history of a state's revenues and expenditures are also important in this determination. Moreover, failure to incur debt and make necessary infrastructural investments could dampen future growth and thus imply a poorer credit risk.

Table 2 shows expenditures by functional categories for Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee. The first eight items constitute total general spending and include both direct and intergovernmental expenditures, that is, those channeled from the state government to local governments. Like revenues, expenditures are sensitive to business cycles. During contractions, spending tends to increase automatically since governments must pay more into income-maintenance programs to respond to rising unemployment. When recovery begins, the decline in the demand for income maintenance and the need to rebuild fund balances often lead to reductions in expenditures. However, in the later stages of the expansion, inflationary pressures may escalate the cost of providing established levels of services.

Like most states, those in the Southeast spend more on education than on any other single item: \$562 per capita of total state general expenditures in 1987, or 37 percent of total expenditures (see Table 2). In recent years, though, growth in education spending has

slowed, now claiming a smaller share of the total than in the 1970s. On the other hand, government expenditures on public welfare and health have increased, growing more rapidly than state expenditures as a whole. The aged now constitute a larger proportion of the population, and continuing advances in medicine are lengthening lives and broadening the range of treatments. Relatively large increases in health and hospital spending have resulted. Highways are another important expense for state governments. The interstate highway system is largely completed, but repairs and maintenance of roads and bridges are costly.

One-third of the general expenditures of southeastern states in 1987 was channeled to local governments in the form of shared taxes or grants. At the local level, education received the bulk of such revenue, with public welfare and highways also priority items. Miscellaneous expenditures (see Table 2) consist of utility, liquor store, and insurance trust outlays. This category represents the second highest share of total expenditures in Alabama, Florida, Louisiana, and Mississippi.

Interstate Variations in Revenues and Expenditures

As mentioned above, each of the southeastern states spends and collects money in different ways. The variety among the states, and among the hundreds of localities within each state, reflects historical and economic conditions.

Characteristics of State Revenue Systems. Table 3 shows that per capita revenues in the Southeast range from \$1,520 in Tennessee to \$2,075 in Louisiana. The long-standing fiscal conservatism of the region is reflected in per capita revenues and taxes that fall below the national average. Currently, the primary focus of state taxes is on consumption and income. Though the income tax has increased in relative importance, the largest source of revenue for the majority of the southeastern states has been the sales tax. Only in Alabama and Georgia is the income tax the major source of funds.

According to the Tax Foundation, southeastern states ranked in the top twenty-five in the

use of the sales tax, which in most states is confined to tangible property. Specific consumption taxes, such as on gasoline, beer, alcohol, and tobacco, combine with severance tax revenues to make up over 30 percent of the tax base in Alabama, Florida, Louisiana, and Tennessee. Broad-based taxes, which have performed substantially better than inflation, constituted over 70 percent of state tax collections only in Georgia and Mississippi. This heavy reliance on inelastic revenue sources has resulted in a great discrepancy between the sensitivity of the revenue base and the expenditure base. In other words, during inflationary periods, costs of providing services increase, but collection of sales taxes lags. During recessions, sales tax receipts fall more than personal income (which is maintained by unemployment compensation and other factors) because consumers postpone spending on durable goods such as cars and appliances. The requirement that states maintain balanced budgets implies that governments must act quickly to increase taxes and cut expenditures during recessions. For example, all southeastern states except Georgia responded to fiscal pressures in the early 1980s by increasing tax rates in income-elastic revenue sources such as income and general sales taxes.

Although Tennessee taxes interest income and dividends, its constitution prohibits an income tax, as does Florida's. As a result these two states have long been dependent on the sales tax as a principal source of revenue. One advantage of the sales tax in Florida is that it relies heavily on out-of-state visitors, that is, tourists. However, during the 1980s, sales tax revenues have not kept pace with the Florida economy; the service sector, which is untaxed, has grown faster than the taxed goods sector. Tax revenue growth exceeded economic growth only for a few years, primarily due to tax increases (Academy for State and Local Government, 1986). Florida has thus been under steady pressure to raise the rates or expand the base to meet greater fiscal demands created by the state's rapid growth. Changes in the sales tax system are made more difficult by the system's complexity; all of the taxes imposed include numerous exemptions, exclusions, multiple ratios, and special conditions.²

Another major drawback arising from the absence of an income tax in Florida and Ten-

Table 3.
Per Capita State Government Revenues by Source, 1987

	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	Southeast	United States
TOTAL REVENUE	\$1,733.19	\$1,446.75	\$1,645.86	\$2,075.18	\$1,681.33	\$1,520.62	\$1,683.82	\$2,129.60
TOTAL TAXES	789.17	818.95	855.62	773.06	740.34	742.19	786.56	1,017.12
Broad-Based Taxes	473.52	505.26	697.14	407.87	546.18	486.32	519.38	726.29
General Sales	216.45	455.65	279.54	266.69	386.82	410.78	335.99	328.03
Income	257.08	49.61*	417.60	141.19	159.36	75.54*	183.39	398.26
Severance Taxes	13.06	6.76	0.00	100.78	18.74	0.33	23.28	16.67
Other Taxes	302.59	306.93	158.49	264.41	175.42	255.54	243.90	274.15
Property	16.81	18.46	2.86	1.02	0.11	0.00	6.54	18.99
Motor Fuels and Vehicles	89.84	89.76	73.74	96.10	70.80	127.62	91.31	98.91
Other Narrow Taxes	195.93	198.71	81.88	167.30	104.52	127.93	146.04	156.25
CURRENT CHARGES	183.37	64.92	98.10	161.32	123.29	112.46	123.91	131.40
Education	95.14	28.91	53.81	98.22	73.50	66.65	69.37	74.62
Hospital	63.08	6.22	15.43	24.71	28.51	31.24	28.20	27.84
Other	25.15	29.80	28.86	38.39	21.28	14.58	26.34	28.94
FROM FEDERAL GOVERNMENT	362.80	232.81	367.64	549.37	437.93	381.52	388.68	393.21
For Public Welfare	116.37	85.61	161.13	185.85	167.21	172.16	148.05	185.23
For Education	102.34	58.88	74.13	82.65	96.43	66.73	80.19	69.54
General Revenue Sharing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	144.09	88.33	132.38	280.87	174.29	142.63	160.43	138.44
INTEREST EARNINGS	90.08	52.58	35.35	67.42	46.75	39.63	55.30	77.56
MISCELLANEOUS REVENUE	307.78	277.49	289.16	524.00	333.02	244.83	329.38	510.32

* Corporate income taxes only. These states do not impose a personal income tax.

Source: See Table 1.

nessee is the "importation" of a substantial quantity of taxes through the federal tax structure. Residents of these two states carry more of a federal tax burden since the absence of a state income tax gives them fewer deductions from federal income tax. In Florida, the effect is to offset the sales tax collected from nonresidents.

In 1987 Florida tried to impose a broad-based tax on services. However, some groups opposed it so strongly that it was repealed in early 1988, six months after taking effect. To make up the lost \$1.2 billion tax revenue in 1988, the sales tax rate was raised from 5 to 6 percent (Robert K. Landers, 1987).

Fiscal Capacity and Tax Effort in the Southeast. Comparisons of states' revenues are more meaningful when they are modeled on a measure that relates the revenues available to state and local governments to a relevant, uniform base. One popular way to gauge the fiscal capacity, or tax base, of state and local governments is with personal income, though that may not always be accurate. The corresponding tax effort measure is the ratio of tax collection to personal income. Using this fiscal capacity measure, Georgia exhibited the highest fiscal effort (10.5 percent), while Mississippi had the lowest (8.4 percent). All the states in the region were below the national average of 11.3 percent in 1987 (Advisory Commission on Intergovernmental Relations, 1987).

An alternative evaluation, devised by the Advisory Commission on Intergovernmental Relations, is the yield of the representative tax system (RTS). It can help calculate how much revenue a government could raise by applying national average tax rates to the tax bases under its jurisdiction. Representative tax system numbers do not show absolute changes in the level of fiscal capacity over time, but the statistics do highlight uneven relative changes, as well as the extent of differences among states. This measure is much more comprehensive in determining fiscal capacity than is per capita income, not only because the representative tax system incorporates a broader range of tax bases, but because it implicitly accounts for a state's tax exportation opportunities, that is, the chances to collect taxes from nonresidents.

Another important advantage of this system as an indicator is that it is far more sensitive than the per capita income measure to changes

Table 4.
Tax Capacity and Tax Effort, 1985
(U.S. average = 100)

	Tax Capacity Index	Tax Effort Index
Alabama	75	87
Florida	103	76
Georgia	90	90
Louisiana	97	93
Mississippi	69	93
Tennessee	83	82

Source: Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism* (1988): Washington, D.C.

affecting a state's tax base. For example, shifting oil prices may not strongly and quickly affect the per capita income of Louisiana, but they clearly have a large and immediate effect on the state's fiscal capacity. From 1980 to 1985, the representative tax system capacity indices fell by more than 10 points in energy-rich Louisiana but increased in Florida, Georgia, and Tennessee and held steady in Alabama and Mississippi.

Using this alternative fiscal capacity measure, Florida had the highest index in 1985 (103) and Mississippi emerged with the lowest (69) (see Table 4). Thus, Florida would collect taxes 3 percent above the national average if it applied national average rates to its state, and Mississippi would raise only 69 percent of the national average. Florida and Louisiana have higher tax capacity indices than other southeastern states because of their ability to collect sales and severance taxes, respectively, from nonresidents.

Analysis of a state's tax structure should also include a review of tax effort. Tax capacity and tax effort indicators are complementary in that the former measures a state's tax base and the latter indicates the overall burden placed on that base. Together, they offer a perspective on each state's general fiscal status. The tax effort index is found by dividing a state's actual tax collections by its estimated tax capacity. The result may be interpreted as a measure of how much that state chooses to exploit its potential tax bases relative to other states. (A state with a

Table 5.
Per Capita State Government Expenditures by Type, 1987

	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	Southeast	United States
TOTAL EXPENDITURES	\$1,551.06	\$1,283.06	\$1,456.24	\$1,896.39	\$1,507.05	\$1,367.92	\$1,510.29	\$1,877.24
Education	672.68	477.78	585.85	580.69	570.50	484.78	562.05	617.44
Public Welfare	155.73	158.46	229.97	234.51	207.53	244.14	205.06	323.15
Highways	135.95	121.96	148.95	159.53	147.35	166.08	146.64	157.65
Hospitals and Health	152.76	114.30	114.87	162.52	106.27	112.94	127.28	132.35
Natural Resources	29.55	42.95	37.32	58.74	38.91	19.88	37.89	32.19
Public Safety	43.52	59.48	64.34	68.27	37.85	55.26	54.79	64.88
Administration	49.61	47.95	35.22	39.03	30.70	39.82	40.39	56.66
Interest on General Debt	62.63	47.27	26.22	135.98	40.71	32.92	57.62	76.54
Miscellaneous Expenditures	248.64	212.91	213.50	457.12	327.23	212.11	278.58	416.37

Source: See Table 1.

tax effort beneath the national norm will have an effort index under 100.) Louisiana and Mississippi lead the region in tax effort, although they are still below the national average (see Table 4).

Characteristics of Expenditure Systems

Interstate comparisons that highlight each state's finances can be quite misleading because many factors affect expenditure levels. First, some state governments either take over and perform functions that others provide for locally or assist by grants-in-aid. Florida's state government, for example, spends the lowest proportion in the region on total (state and local) direct expenditure. Second, although more revealing comparisons can be made when state expenditures are expressed on a per capita basis, population is by itself an inadequate proxy for expenditure needs. Some groups—for example, dependent children and the aged—require extra public assistance. Per capita spending is a rough measure also because it does not allow for price or quality differences, state by state, of public goods. Third, state variations in expenditure cannot be thoroughly explained by quantitative means; noneconomic and intangible factors stemming from different historical backgrounds are also important (J. Richard Aronson and John L. Hilley, 1986).

With these caveats in mind, Table 5 shows state expenditures in the Southeast for fiscal year 1987. Note that the average outlay of \$1,510 per person is well below the U.S. norm of \$1,877. Only Louisiana surpassed the national average. Florida and Tennessee spent less than \$1,400; Alabama, Georgia, and Mississippi, between \$1,400 and \$1,600.

Aside from population, the most important factor accounting for the diversity among states is income. As a group, the southeastern states appear to defy the generally held perception that personal income and government expenditure tend to rise together. Public spending in the region has not climbed as quickly as personal income. A plausible explanation is that local governments in some states are performing functions that are typically left to state governments. In addition, factors such as the

density and age structure of the population as well as the degree of urbanization may lessen the effect of per capita income on expenditure.

When expenditures on particular functions are examined, diversity rather than uniformity again prevails. However, state rankings of socioeconomic indicators should be discussed guardedly, particularly because distributions vary among states. For example, Florida ranks the lowest regionally in per capita spending for education, but at the top in spending per pupil. The difference reflects Florida's large share of elderly residents. Furthermore, variations in state levels of per pupil expenditure cannot be explained entirely by differences in fiscal capacities. Studies find a positive relation between these two measures, but Aronson and Hilley indicate that price, socioeconomic status, and preferences can also be important. For example, educational services may simply be cheaper in Mississippi than in Florida.

Apparently, the expenditure preferences of southeastern governments for most functions are quite diverse from state to state, with the exception of education. Variations across states in functional expenditures can be examined in Table 2. The relative proportions of total state expenditure on education by Florida, a rich state, and Mississippi, a poor state, are quite similar (37 percent), indicating that both governments placed similar degrees of importance on this function even though the actual per capita expenditures were quite different.

The extent of state variation in proportionate expenditure on each function can be measured first by calculating the standard deviation of that function, and then calculating the coefficient of variation. The lower the value of the coefficient, the more similar the proportionate amounts spent by the states; the higher the value, the greater the variability. The coefficients of variation for the southeastern states in 1987 shown in Table 6 indicate that differences in the ratios of state spending for education are modest.

Expenditures for education fall into two categories: (1) elementary and secondary schools and (2) higher education. The lack of variation among the states in educational spending can be explained by the relative similarity of expenditure on elementary and secondary schools. Variations in expenditures for most other functions are much greater than that for education.

Table 6.
Variation in Proportionate Expenditures of States by Type, 1987

	Mean	Standard Deviation	Coefficient of Variation
Education	37.25	3.95	10.61
Public Welfare	13.53	2.54	18.74
Highways	9.75	1.21	12.41
Hospitals and Health	8.55	0.86	10.11
Natural Resources	2.67	0.65	24.38
Public Safety	3.94	0.79	19.99
Administration	2.90	0.62	21.32
Interest on General Debt	3.73	1.75	46.96
Miscellaneous Expenditures	17.71	3.52	19.86

Source: Calculated at the Federal Reserve Bank of Atlanta from U.S. Department of Commerce, Bureau of the Census data.

Fiscal Decentralization in the State-Local Sector

The state revenue and expenditure policies described in the previous section, of course, are not made in a vacuum but rather are influenced by federal policies and local needs. Because of reductions in federal aid in the early 1980s, state governments were forced to adjust almost all aspects of their budgets. Kenneth E. Quindry and Niles C. Schoening (1981) report that in some states, these constraints have led to a reappraisal of both the appropriate role of state aid to localities and the proper distribution of service responsibilities between state and local governments.

In 1902 local governments accounted for 82 percent of the combined tax revenues of the state and local sector; by 1986 this figure had fallen to 43 percent. Major centralization occurred in the first half of this century, according to John Joseph Wallis and Wallace E. Oates (1988). As with many matters, wide variations exist among the states

Table 7.
State and Local Government Shares in State-Local Expenditures for Selected Years
(percentages)

	Alabama		Florida		Georgia		Louisiana		Mississippi		Tennessee		Southeast		United States	
	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local
1970	49.1	50.9	33.0	67.0	42.1	57.9	49.4	50.6	46.6	53.4	42.9	57.1	43.9	56.1	37.1	62.9
1975	48.9	51.1	34.0	66.0	43.0	57.0	49.1	50.9	47.1	52.9	43.0	57.0	44.2	55.8	37.6	62.4
1980	48.1	51.9	30.5	69.5	37.0	63.0	48.7	51.3	48.2	51.8	35.5	64.5	41.3	58.7	40.1	59.9
1982	49.0	51.0	30.2	69.8	36.3	63.7	49.7	50.3	46.2	53.8	35.7	64.3	41.2	58.8	40.6	59.4
1984	46.8	53.2	28.9	71.1	37.2	62.8	50.8	49.2	45.8	54.2	35.6	64.4	40.9	59.1	40.6	59.4
1985	48.8	51.2	29.2	70.8	36.9	63.1	50.0	50.0	45.2	54.8	35.6	64.4	41.0	59.0	41.0	59.0
1986	47.9	52.1	29.1	70.9	36.5	63.5	50.2	49.8	44.7	55.3	36.6	63.4	40.8	59.2	40.8	59.2

Source: U.S. Department of Commerce, Bureau of the Census, *Government Finances*, various issues.

in the extent of fiscal centralization. For example, state government spending in Florida accounted for only 29 percent of total state-local expenditures in 1986. In Louisiana, on the other hand, state government's share of spending was 50 percent.

The difficulty of developing a fully satisfactory measure of centralization must be acknowledged at the outset. Following earlier work by the U.S. Treasury Department (1985) and David A. Wildasin (1987), the fiscal share of the state government in the state-local sector is used as the measure of fiscal centralization. Fiscal "centralization ratios" can be constructed on either an expenditure or revenue basis. For the purposes of this article the basic issue is how to treat intergovernmental transfers of revenues. The revenue-basis measure attributes intergovernmental transfers of funds to the grantor, a treatment that seems sensible if the grantor authorizes use of the funds only for specific purposes. However, when funds are transferred unconditionally (for example, under a revenue-sharing program), attributing the funds to the transfer recipient may make more sense. This article presents fiscal centralization measures in both revenue and expenditure terms.

Table 7 shows state and local government shares in public expenditure for selected years. These "direct expenditure" shares attribute intergovernmental transfers of funds to the receiving government. The most striking feature of Table 7 is the divergent trend between the United States and the Southeast. The region appears to have decentralized since 1970, whereas the nation has shown signs of increasing centralization. In the last two decades the state share in public expenditure has declined in all southeastern states except Louisiana, where it showed a marginal increase. Decentralization is especially marked in Florida, Georgia, and Tennessee.

Until 1950 the state share of spending grew rapidly with the expansion of the states' role in several major new public services—education, highways, and public welfare, for example. Once these services were established, however, the responsibility for them began shifting from state to local governments. What's more, new services have been disproportionately assigned to the local government level (Mary H. Cooper, 1986). The significance of this development should not

be overrated, though. This trend toward local governments' bearing an increased share of the burden is relatively recent, is not especially large in comparison to the earlier centralization, and may not persist.

In examining trends in fiscal centralization from the perspective of revenues rather than expenditures, roughly the same picture emerges. However, state governments account for a larger portion of state-local revenues than they do for expenditures. Slight trends toward decentralization of revenue decisions in the Southeast and centralization of them in the nation are apparent (see Table 8).³ As with expenditures, the bulk of the revenue centralization process took place in the first half of the century. Until 1980 fiscal decentralization brought with it an increase in the reliance on state intergovernmental grants to localities and a decline thereafter. Table 9 documents this trend, indicating the percentage of state and local revenues coming from intergovernmental transfers.

To sum up, in 1970 the region was more centralized than the nation, both in terms of revenues and spending. Since then the Southeast's state and local sectors have revealed a moderate tendency toward decentralization in both measures. However, the increase in the share of the local sector has been modest. In addition, interesting and persistent patterns emerge across states. For example, rapid population growth in certain areas of Florida and Georgia has led to relative decentralization as a result of an increase in the demand for local government services. Furthermore, local governments in Florida have historically been less regulated in their revenue-raising functions.

The major concern of a decentralized revenue and expenditure structure is the greater effect that cutbacks in federal grants-in-aid have on it. In general, local governments are more heavily dependent on federal revenue-sharing funds, and so cutbacks reduce the ability of economically poor localities even to maintain existing services.

Fiscal Policies and Economic Growth

An overview of state and local revenue and expenditure systems in the Southeast helps to

evaluate the overall fiscal health of the southeastern states now and in the years ahead. Because of constitutional or statutory requirements that budgets be balanced, a state's revenue collections are generally very near to or slightly higher than its expenditures. In fiscal 1987, southeastern states reported growth in revenues of 8.3 percent. (Only Louisiana reported revenue slippage.) This figure compares favorably with the growth rate in expenditures of 6.3 percent. However, fiscal difficulties may be coming soon as expenditures are projected to grow faster than revenues in 1989.

One of the leading indicators of fiscal health in state budgets is the ending balance of the general fund. The government standard for this balance—5 percent of total expenditures—is generally recognized as adequate. The National Governors Association reported in 1988 that "an ending balance of this size is necessary to provide cash flow during the year to accommodate the cyclical nature of revenue collections and disbursements, and most particularly, to provide sufficient revenue at the change of a fiscal year without disruption of service."

State governments in the region and the nation have not achieved the 5 percent standard in the aggregate since 1980. In 1987, the general fund balance in the Southeast varied from -11.72 percent in Louisiana to 7.76 percent in Tennessee. Perhaps more telling of the narrowing gap between expenditures and revenues is the number of states budgeting for ending balances in the general fund of 1 percent or less in fiscal 1989 compared to those with similar balances in fiscal 1987. Although three of the six southeastern states ended 1987 with fiscal balances over 1 percent, only Louisiana is projected to do so in 1989. Furthermore, Florida, Alabama, and Georgia are anticipating zero ending balances in fiscal 1989.

Overall, all southeastern states except Louisiana continue to hold the line at present, but expenditures are likely to increase vis-a-vis revenues, eventually putting pressure on the ending fund balances. As noted earlier, with the exception of Louisiana, per capita expenditures in southeastern states are below the national average. Virtually all states proclaim the need to build up public infrastructure. The pressing need to provide a nationally competitive education for all of the region's students is a promi-

Table 8.
State and Local Government Shares in State-Local Revenues from Own Sources
(percentages)

	Alabama		Florida		Georgia		Louisiana		Mississippi		Tennessee		Southeast		United States	
	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local
1970*	62.0	38.0	51.8	48.2	55.8	44.2	66.9	33.1	65.2	34.8	56.1	43.9	59.6	40.4	52.8	47.2
1975*	64.3	35.7	53.7	46.3	52.0	48.0	65.9	34.1	66.8	33.2	53.8	46.2	59.4	40.6	53.4	46.6
1980	58.8	41.2	50.9	49.1	50.7	49.3	65.3	34.7	66.1	33.9	42.7	57.3	55.8	44.3	57.7	42.3
1982	59.8	40.2	45.9	54.1	48.8	51.2	62.7	37.3	64.4	35.6	41.4	58.6	53.8	46.2	57.0	43.0
1986	59.2	40.8	47.3	52.7	49.1	50.9	60.0	40.0	63.0	37.0	43.7	56.3	53.7	46.3	57.1	42.9

* General Revenues

Source: See Table 7.

Table 9.
Share of Intergovernmental Revenue in Total Revenue of State and Local Governments
(percentages)

	Alabama		Florida		Georgia		Louisiana		Mississippi		Tennessee		Southeast		United States	
	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local	State	Local
1970	34.6	45.0	20.0	36.6	27.9	36.5	26.8	45.1	32.4	48.8	31.6	40.2	28.9	42.0	26.0	36.5
1975	32.9	47.1	24.1	44.2	33.2	35.7	26.4	49.1	33.3	54.7	32.0	41.0	30.3	45.3	28.1	42.4
1980	34.5	45.9	24.5	44.2	31.2	39.8	27.2	47.0	37.4	54.7	34.8	40.6	31.6	45.4	27.5	44.1
1982	28.3	43.6	23.1	39.1	29.1	35.8	20.7	43.2	32.1	51.2	32.0	35.5	27.6	41.4	25.1	41.5
1984	24.7	40.2	20.4	37.0	29.0	33.9	24.0	37.1	30.1	46.9	32.4	33.7	26.8	38.1	24.6	39.2
1986	27.1	40.7	20.3	34.4	27.9	32.3	25.1	35.5	32.7	46.8	31.5	33.4	27.4	37.2	25.1	38.7

Source: See Table 7.

nent example of a common shortcoming and objective of southeastern states. Spending on schools per pupil is nearly 30 percent lower in the region than the nation. Closing the gap involves somehow raising the priority given education as well as devoting more resources to financing the educational process. Unfortunately, there are formidable financial obstacles to bettering educational systems in the Southeast.

Thus, southeastern states are still positioned precariously, vulnerable to economic swings or changes in federal grants and aid. Given the relatively low tax burden and expenditures per capita in the Southeast, the region's fiscal problems would appear to be more closely tied to its revenue structure. Reforming this structure, though, entails a number of problems, ranging from cyclical and excessive reliance on energy-related severance taxes in Louisiana to increased demands from rapid growth in Florida.

Since Louisiana businesses are already taxed heavily, a likely candidate for increased revenue would appear to be the property tax, which is not as sensitive to changes in the economic environment. Florida has different concerns. Unable constitutionally to tax personal income or personal property, the state government in Florida has had to rely largely on the sales tax at a time when more and more money is being spent on services, which are exempt from taxation. Tax revenues in Florida are also more sensitive to national business cycles than to local conditions because of tourism's significance there.

Tennessee's problems are similar to Florida's but probably not as acute because it has not experienced the rapid overall growth that Florida has. Growth in services is also not as robust as in Florida. The Special Joint Legislative Task Force on State and Local Tax Structure, created in 1983, considered imposition of the personal income tax to be the most desirable form of taxation in Tennessee (Academy for State and Local Government, 1986).

Mississippi has traditionally been a capital-deficient state, heavily dependent on transfers from the federal government. Furthermore, the economic problems of rural Mississippi have reduced the local tax base, and so the state has had to seek funds elsewhere. Transfer payments, though, are also somewhat vulnerable to

budget-reduction programs and recession-induced declines in government revenues.

The governor of Georgia recently proposed doubling the state's motor fuel tax to 13.5 cents, a proposal that comes as the state grapples with a tight budget. The increased revenues, which would be earmarked for road construction, are expected to help free up the state's general fund for other programs such as education and health.

State tax policy in Alabama has continued to nurture the state's primary industries; however, the tax structure is more diversified than that in Louisiana, and the existing revenue sources are expected to prove adequate in the coming years (National Governors Association, 1988).

Conclusion

State and local governments in the Southeast should now prepare themselves to play an expanded role in financing and providing services. Improved financial conditions and a diminished federal presence have created a momentum toward state and local assumption of responsibility. Thus, in the coming years, those governments that pay the bills must have access to adequate revenue sources. According to a study conducted by the Academy for State and Local Government, the shift toward a service-based economy means that states need to diversify their revenue sources by broadening the bases of their existing taxes, finding new taxes, and "tailoring them to the unique attributes of services within a jurisdiction."

Looking ahead, the infrastructure demands of the states are great, as is the need for increased resources. Several states have undertaken programs to improve the quality of their school systems. Spending on health and hospitals can also be expected to rise as costly medical advances and longer life spans drive up public and private health expenditures. In welfare spending, the debate over federal versus state responsibility suggests that the state role may grow here as well.

The issue of financing increased expenditures is an important one. Governments must cope with reduced federal aid by turning to alternative sources. Most states rely on both an

income and a sales tax; the high income elasticity of the income tax serves as a boon in good times. Though more stable, the sales tax has its own well-known drawbacks. Since 1970, states

have improved the productivity of their revenue systems by diversifying their tax bases and increasing collection efficiency, but much more can still be done.

Notes

¹Virtually all states and local governments share a common mandate to balance their budgets. States have laws that include barring the governor from submitting an unbalanced budget and preventing the legislature from passing one. Should unexpected developments threaten to cause a deficit in the middle of a fiscal year, many states require the governor to take emergency measures to bring spending down to the level of revenues.

²Exemption of necessities such as food and drugs tends to make the Florida revenue system more elastic.

³The major difference between Tables 7 and 8 is that the latter attributes intergovernmental revenues to the level of government which is the source (not the recipient) of the funds.

References

- Academy for State and Local Government. *Where Will the Money Come From?* 3 vols. Washington, D.C.: Academy for State and Local Government, 1986.
- Advisory Commission on Intergovernmental Relations. *1983 Tax Capacity of the States*. Washington, D.C.: ACIGR, 1986.
- _____. *Significant Features of Fiscal Federalism*. Washington, D.C.: ACIGR, annual editions, 1984, 1985-86, 1987, 1988.
- Aronson, J. Richard, and John L. Hilley. *Financing State and Local Governments*. Washington, D.C.: Brookings Institution, 1986.
- Brown, Stephen P.A. "New Directions for Economic Growth: Redesigning Fiscal Policies in Louisiana, New Mexico, and Texas." *Federal Reserve Bank of Dallas Economic Review* (July 1987): 13-20.
- Cooper, Mary H. "Revenue Changes Make Waves in The States." *Editorial Research Reports* (October 17, 1986): 755-59.
- Donnelley, Harrison. "State Financing." *Editorial Research Reports* (February 21, 1986): 127-43.
- Ladd, Helen F. "Federal Aid to State and Local Governments." In *Federal Budget Policy in the 1980s*, edited by Gregory B. Mills and John L. Palmer. Washington, D.C.: Urban Institute Press, 1984: 165-202.
- Landers, Robert K. "Taxing Business Services." *Editorial Research Reports* (August 28, 1987): 442-54.
- National Governors Association. *Fiscal Survey of the States*. Washington, D.C.: National Governors Association, October 1988.
- Quindry, Kenneth E., and Niles C. Schoening. "Changing Relationships in the American Federal System." *Growth and Change* 12 (October 1981): 33-42.
- Tax Foundation. *Facts and Figures on Government Finance*. 1988-89 ed. Baltimore: Johns Hopkins University Press, 1988.
- U.S. Department of the Treasury. *Federal-State-Local Relations*. Report to the President and the Congress. Washington, D.C.: U.S. Government Printing Office, September 1985.
- Wallis, John Joseph, and Wallace E. Oates. "Decentralization in the Public Sector: An Empirical Study of State and Local Government." In *Fiscal Federalism: Quantitative Studies*, edited by Harvey S. Rosen. Chicago: University of Chicago Press, 1988: 5-28.
- Wildasin, David A. "Federal-State-Local Relations: A Review of the Treasury Report." *Public Finance Quarterly* 15 (October 1987): 472-99.

An Important Notice for Readers of the *Economic Review*

Beginning with this issue, the Federal Reserve Bank of Atlanta will no longer publish the statistical pages (with finance, employment, construction, and general data) that have traditionally appeared at the end of the *Economic Review*. Another source for southeast regional economic indicators is *Regional Update*. Aggregate financial data for each state are available in *Financial Update*. Both of these quarterly newsletters are also published by the Federal Reserve Bank of Atlanta and are available free of charge.

Data formerly printed in the *Economic Review* are still being made available to interested subscribers. If you want to continue receiving this data, please fill out the form below and return it to the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta Street, NW, Atlanta, GA 30303-2713. To find out more about the specific data provided in each of these three sources, contact the Public Information Department at 404/521-8788.

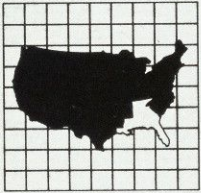
Yes, I want to receive the southeastern data pages.

Name _____

Address _____

City _____ State _____ ZIP _____

Please return this form to the Public Information Department, Federal Reserve Bank of Atlanta, 104 Marietta Street, NW, Atlanta, Georgia 30303-2713.



Economic Review

Federal Reserve Bank of Atlanta
104 Marietta St., N.W.
Atlanta, Georgia 30303-2713

Address Correction Requested

Bulk Rate
U.S. Postage
PAID
Atlanta, Ga.
Permit 292