

Economic Review



FEDERAL RESERVE BANK OF ATLANTA

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Special Issue On
the South's
Economy

The changing South

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Tracing Its
New Landscape



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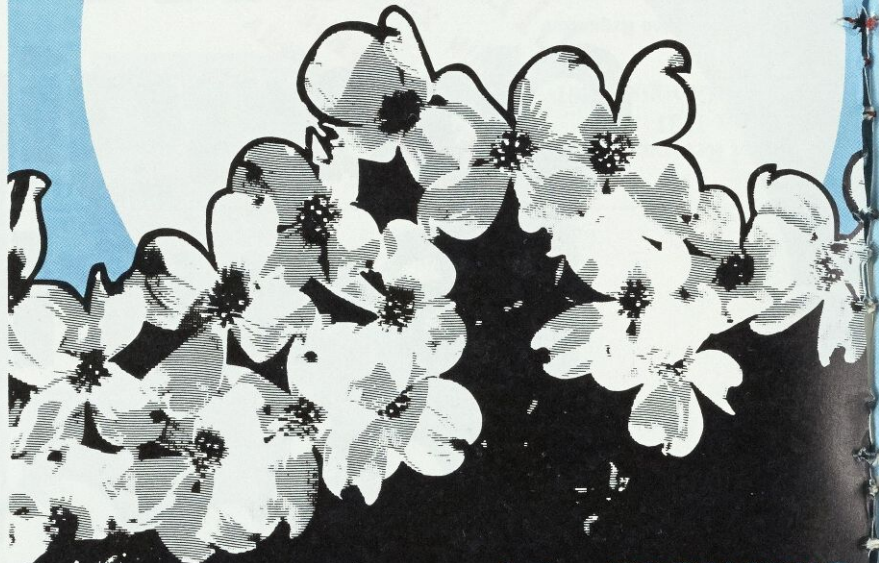
Eddie W. Lee, Jr.

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

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SPECIAL ISSUE

The Changing South



This special issue of the **ECONOMIC REVIEW** focuses on the surge of new residents and industries to the Southeast. What is the demographic profile of the newcomers, why are they coming, and perhaps most important, what effects will they have on the region's economy?

This issue was coordinated by Charlie Carter of the Bank's Regional Research Team.

Free subscriptions and additional copies are available from the Information Center, Federal Reserve Bank of Atlanta, P.O. Box 1731, Atlanta, Ga. 30301 (404/586-8788). Also, contact the Information Center to receive **Southeastern Economic Insight**, a free newsletter on economic trends published by the Atlanta Fed twice a month and mailed first class to subscribers. **Insight** is designed to give readers fresh and timely data, analyses and forecasts on the Southeast's economy.

**The Changing South:
An Overview 4**

**What Are Businesses Looking For?
A Survey of Industrial Firms
in the South. 6**

Speculation abounds as to exactly what factors appeal to industries locating or expanding in the South. A survey of manufacturing firms which built or expanded plants recently in three southern states offers some answers about what attracted firms in several different industries.

**Business Climate:
Behind the Geographic Shift of
American Manufacturing 20**

While everyone agrees that "business climate" is important when businesses decide to relocate, few agree on just what constitutes "business climate." The authors construct a business climate index using weights for the component factors and then examine whether business climate actually affects industrial performance.

**Migration:
Changing Faces of
the South 32**

Why did the historical outflow of people from the South reverse itself in the 1970s, and what kinds of people are moving to Dixie? This article, based on latest estimates of what the 1980 census will show, reveals some little-known changes in southern migration patterns which have major implications for the region's economic outlook.

**Uneven Growth:
Southern Population Changes
at the County Level 43**

The popular conception of massive population inflows throughout the South overlooks what is actually occurring: wide variations within the region and within states. This study of 680 counties sorts out several patterns—some of them surprising—behind the region's population growth.

**The New Federalism:
Assessing the Fiscal Health of
State and Local Governments
in the Southeast. 50**

With more responsibility for financing being shifted from federal to state and local levels, the growth of many localities may depend increasingly on the fiscal health of the state and local governments. How "fiscally fit" are the state and local governments in the Southeast and how will they cope with the possible loss of federal funds? This article also takes a close up look at Florida's fiscal situation.

Statistical Supplement 60

THE CHANGE

Interregional migration of people and industries has been one of the important forces associated with economic progress in the United States. Whether a New England family was journeying to the Midwest to farm in the 1800s, an entrepreneur was leaving New York destined for Texas or Louisiana for oil and gas exploration in the 1900s, or poor farmers were vacating the rural South seeking factory jobs in the industrial heartland in the 1950s, the driving force behind migration has been the search for economic opportunity.

The modern migration similarly has been influenced by the search for economic opportunity. But the reason behind the latest movement—primarily from the industrial coreland and to the South and West—is not just economic. Many individuals have moved for reasons related to “quality of life.” Climate, a more relaxed pace, and recreational and cultural opportunities have all been cited as drawing cards for the new migrants.

Regardless of the reasons, however, the outcome has been a bonanza in population and jobs in the South and West, largely at the expense of the North Central and Northeast regions. Nearly all of the nation’s population growth in the 1970s occurred in the South and West. Three states—California, Texas, and Florida—accounted for 42 percent of total gains in U. S. population. The South grew by 15 percent to 72 million people in 1980, about one third of the nation’s population. In contrast, established areas of the Northeast and Midwest, where about half of all Americans now live, have seen virtually no growth in the past decade.

Along with population growth came investment and jobs. From 1970 through 1977, investment in capital equipment, measured in 1972 dollars, increased 23 percent in the Northeast and Midwest. Yet it surged 74 percent in the South and West over those same years. Although factory employment increased by 900,000 in the South and 300,000 in the West, it grew by only 200,000 in the North Central and declined by 300,000 in the Northeast. In this special issue of the **Review**, we focus on the magnitude, causes, and

consequences of the net inflow of new residents and industries to the Southeast.

To lead off, **John Hekman**, Visiting Scholar at the Federal Reserve Bank of Atlanta and economics professor at the University of North Carolina at Chapel Hill, reports on the results of a survey of 194 manufacturing facilities that decided to build or expand in Virginia and the Carolinas in the last five years. As Hekman’s study clearly reveals, industrial climate, labor productivity, and transportation network were the three most important reasons why those firms decided to build or expand in the Southeast. Almost one third of all new manufacturing jobs gained in the Southeast between 1968 and 1978 were in three industries—metal fabrication, transportation equipment, and electrical equipment. Those involved in site selection for these types of firms included in Hekman’s study identified business climate as the most important factor in their decision.

Business climate, however, is not single dimensional. Instead, the concept serves as a proxy for many factors—state and local tax rates, wage rates, availability of labor, degree of unionization, and so on. To arrive at a measure of this elusive concept, each component of business climate must be assigned weights that reflect the importance attached to them by those involved in site selection. **James Fisher** and **Dean Hanink**, University of Georgia and University of Connecticut, respectively, address the problem directly using statistical techniques to derive weights. Applying this index to industrial performance, they find that business climate significantly affects industrial performance.

Those factors that cause industries to prefer one region over another clearly overlap with those that influence the decision of individuals to choose one region over another. Lower personal income taxes and a favorable climate, for instance, might influence the decisions of both people and businesses to relocate. In point of fact, the two decisions are very much interdependent. Businesses may move to take advantage of an expanding labor supply and people may move to take advantage of the new job opportunities.



ONG SOUTH

Therefore, we consider it an appropriate part of this special issue to examine the magnitude, characteristics, implications, and consequences of interregional migration of people. By examining changes in migration rates between 1965-70 and 1975-80, **William Kahley**, a regional economist with the Federal Reserve Bank of Atlanta, is able to pinpoint important changes in the economic and demographic characteristics of recent migrants.

However, population growth has not been evenly divided between states and localities around the region. Some areas within the region have been passed over by the flood of new residents and businesses while others have been inundated. **Alfred W. Stuart** and **James Clay**, University of North Carolina-Charlotte, focus on intraregional variation in population growth. By analyzing population growth in 680 counties covering eight southeastern states, Stuart and Clay identify common characteristics

of those counties in the Sunbelt which lost population, those that grew moderately, and counties that experienced rapid growth during the decade of the 1970s.

The issue concludes with a discussion concerning the fiscal plight of state and local governments in the region. Will states and localities around the Sunbelt be able to maintain quality and quantity of public services? These are important to preserve a favorable business climate. Rapid population and industrial growth during the 1970s has virtually overloaded the infrastructure of many areas in the Southeast, particularly Florida. Until 1976, states and localities could turn to Washington for help in financing state and local public services.

Over the last few years, however, that aid has been on a downtrend and more responsibility is being shifted from federal to state and local levels.

In the final article, **Charlie Carter**, senior economist with the Federal Reserve Bank of Atlanta, examines the fiscal fitness of states and localities in the Southeast using objective measures of fiscal conditions. His general conclusion is that, in spite of rapid population and economic growth, states and localities in the Southeast are in a more favorable position than those elsewhere to cope with the loss of funding from

Washington. Florida's situation is notable in that its enormous population growth and low taxes have made its fiscal conditions relatively unusual compared to neighboring states. **Otis White**, a Florida business analyst, takes a closer look at the problems facing Florida.

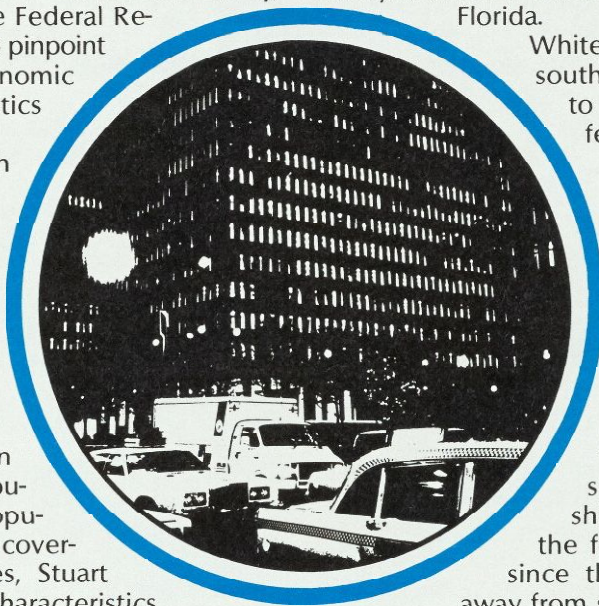
White finds that Florida, like other southeastern states, is trying to learn to live with less in the way of federal funds. How will state legislatures replace the vanishing cash from Washington? What additional state sources are available? Are new state taxes an acceptable answer, albeit a politically distasteful one?

In summary, this issue of the **Review** takes a fresh look at the South in an era when a new administration is seeking to redefine the relationship that has developed between the federal and state governments since the Depression shifted power away from state capitols.

In this issue, Federal Reserve Bank of Atlanta economists trace the economic development of the South—including the six states in our own Sixth Federal Reserve District—in an effort to uncover factors that have influenced the region's dynamic growth over the last two decades. It also suggests the directions the region's growth may take in coming years.

Those future years, the issue suggests, will require hard choices on such issues as business climate, the factor most frequently mentioned by manufacturing firms in explaining why they decided to relocate in southeastern states. This issue explains that a state's ranking in terms of business climate cannot be altered significantly by offering quick fixes such as tax-exempt industrial revenue bonds. Such incentives, our economists found, simply raise the net cost of industrial expansion to the states.

If the New Federalism comes to full flower, such industrial subsidies may be more difficult for states to offer in the future. If state and local governments should play a role in industrial expansion, our research indicated, it will be in providing training and infrastructure to ease the transition from an agricultural to a more industrial economy.



What Are Businesses Looking For?



Survey of Location Decisions in the South

Over the last few decades, the Southeast experienced rapid growth in employment relative to the rest of the nation. In terms of the often-mentioned Sunbelt-Frostbelt competition for industry, the Southeast has been winning most of the battles. Some ascribe this success to the ability of state industrial development agencies to attract new investments, while others emphasize low unionization and wages as the primary drawing cards. Instead of leaving this important issue to speculation, we surveyed manufacturing firms which decided to build or expand plants in the Southeast during the last five years. This article examines these companies' preferences and relates the growth trends to the region's changing industrial structure.

In the past, the Southeast attracted mainly labor-intensive light manufacturing industries such as textiles and apparel, or resource-tied industries such as lumber, furniture, paper and some kinds of chemicals. "Heavy" industries—mainly primary metals, fabricated metals, transportation equipment and machinery—were heavily concentrated in the Midwest. But as Table 1 shows, this pattern has been changing in recent years. In 1968, textiles employed 20 percent of manufacturing workers in the Southeast; apparel's share was 12 percent; and the next largest industry—chemicals—was only half the size of apparel.

From 1968 to 1978, the traditional industries of the Southeast grew slower than the average of all industries, while the rest—the "northern"

Manufacturing firms that decided to build or expand in three southern states were most concerned with business climate, labor productivity and transportation.

Table 1. Employment Gains (Losses) By Industry in the Southeast 1968-1978 (In Thousands)

Industry	AL		FL		GA		LA		MS		NC		SC		TN		VA		Total	
	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%	Gain	%
Textile Mill Products	(7)	(1.8)	2.1	84.0	3.1	2.7	2.7	*	0.0	0.0	(26.5)	(9.8)	(6.3)	(4.5)	(5.1)	(15.3)	3.3	8.1	(27.4)	(4.2)
Apparel	11.8	28.6	16.2	91.5	8.9	13.1	3.6	47.4	1.7	4.8	10.8	16.1	2.1	4.5	5.1	7.7	5.4	17.4	65.6	17.2
Lumber, Wood Products	2.0	10.0	6.3	49.2	9.0	51.7	(1.4)	(9.2)	1.1	5.3	8.4	32.2	1.6	12.2	3.1	21.7	2.9	15.3	33.0	21.1
Furniture, Fixtures	3.0	68.2	2.6	37.7	0.7	7.4	(13.4)	(92.4)	3.0	25.2	22.4	37.1	(0.9)	(17.6)	1.2	5.5	2.3	9.3	20.9	31.1
Paper	2.2	13.9	(0.4)	(2.4)	3.8	16.4	8.7	145.0	0.5	8.1	3.4	21.8	1.3	11.8	2.8	20.4	(0.2)	(1.5)	22.1	18.2
Chemicals	0.6	4.8	1.1	5.3	3.1	25.0	10.0	47.6	1.7	34.7	13.2	68.0	12.3	56.9	(1.2)	(2.2)	(10.8)	(24.9)	30.0	14.3
Rubber, Plastic Products	6.7	80.7	7.4	148.0	8.1	168.8	(0.4)	(100.00)	(2.4)	(54.5)	15.6	177.3	10.4	315.2	13.6	136.0	5.0	71.4	64.0	123.1
Fabricated Metal Products	9.8	61.3	8.7	45.8	6.1	44.5	4.6	47.4	2.2	25.9	14.6	101.4	8.2	124.2	10.7	42.6	4.1	33.3	69.0	55.1
Machinery Except Electrical	6.1	65.6	10.2	68.0	7.1	62.8	5.4	110.2	5.0	58.8	11.5	49.4	16.5	123.1	14.2	79.8	8.9	95.7	84.9	75.3
Electronic Equipment	9.8	118.1	24.7	93.6	8.5	87.6	7.1	191.9	9.5	86.4	10.3	30.8	6.5	49.2	9.9	32.8	3.7	15.0	90.0	56.1
Transportation Equipment	(1.6)	(7.9)	9.3	32.2	(10.0)	(22.9)	8.3	51.9	13.8	97.9	7.0	14.8	(0.8)	(23.5)	8.7	48.3	6.8	22.8	41.5	23.0
Instruments	2.5	625.0	7.2	240.0	2.9	145.0	(0.5)	(100.00)	0.1	4.3	3.1	54.3	3.1	119.2	2.5	113.6	3.1	140.9	24.0	114.8
Total Manufacturing	48.8	16.4	101.7	34.5	82.6	19.3	31.1	18.3	52.5	31.0	120.0	17.9	67.4	21.1	21.1	75.8	51.0	14.4	630.9	20.1

*infinite percent gain

industries—grew much faster than average. This process is resulting in a convergence of the economic structure of the Southeast as compared to the nation as a whole. Industry is becoming more balanced between durables and non-durables, and there is less reliance in most states on a small number of industries. This pattern is fairly general throughout the region, although there are differences from state to state, as the following discussion shows.

Alabama

Alabama's manufacturing has failed to grow as rapidly as in the region as a whole. The apparel industry, one of the largest in the state, still is growing rapidly. But fabricated metals and elec-

tronics were close runners-up for creating jobs, along with rubber, plastics and machinery. Alabama is moving in the same direction as the rest of the Southeast, but it is starting from further behind in industries such as electronics and instruments.

Florida

Everything seems to grow well in Florida except the paper and chemicals industries, which find few suitable sites in the state. Florida is the clear high technology leader in the Southeast, with the region's largest concentration of employment in electronics, transportation equipment (mainly aircraft and aerospace) and instruments. The state's overall increase in manufacturing employment is also the largest for the 10-year period.

Georgia

Georgia, along with North and South Carolina, depends on a heavy concentration of textile employment. Even though it is growing slowly, this industry still makes up 22 percent of manufacturing. Apparel runs second with 15 percent of employment, followed by transportation equipment with only 6.6 percent. Despite the fact that these three top industries grew slowly or declined, Georgia grew at a good pace in the 1970s, led by forest products, electronics and the heavy industries.

Louisiana

This state has the smallest industrial sector in the Southeast; it is also the most atypical, with almost no textiles or apparel but a great deal of chemicals and transportation equipment. It is also unique in that these two largest industries are among the fastest growing in the state. What's more, it can claim the largest increase in paper mill employment in the region.

Mississippi

Mississippi lacked a heavy concentration of "old" industries in the past except for apparel, which is widely dispersed throughout the Southeast. As a result, the state has grown at a higher-than-average rate for the region, due to its attraction for electronics and transportation equipment. Other states exceeded Mississippi's growth in the "new" industries but had lower overall growth because of the drag of slow-growing older industries. Mississippi's growth is not broad-based, however, containing less than the regional average increase in fabricated metal, machinery and instruments.

North Carolina

North Carolina has the second-highest concentration of textile employment in the country (after South Carolina), and the 10 percent decrease in this industry was significantly greater than the national decline of about 6 percent over this 10-year period. Textile employment is decreasing in the traditional South Atlantic center of the industry relative to the peripheral states (Virginia, Georgia and Florida), probably because North and South Carolina have the oldest plants, which are the first to close.

The heavy concentration of textiles and apparel

acted to pull down the overall growth rate of North Carolina, though one traditional industry, furniture, grew over 37 percent. This reflects a general centralization of furniture production in North Carolina, as every other state in the Southeast except Mississippi had below-average or negative growth in this industry.

Despite its below-average growth in the region, North Carolina had the largest absolute growth of employment and appears to be diversifying out of its traditional base of textiles, apparel and furniture. Growth in transportation equipment and fabricated metals testifies to the base of heavier industry which seems to be taking shape.

South Carolina

This state offers probably the best example of the Southeast's changing industrial structure. Textiles and furniture declined, and apparel, lumber and paper grew slower than elsewhere in the region. All the newer industries increased faster than the regional average. Chemicals and machinery experienced the largest absolute gains. As the survey results illustrate, South Carolina has a strong attraction for industrial concerns interested in locating in the Southeast.

Tennessee

Tennessee most closely resembles the industrial North both geographically and in its economic structure. Its chemical industry is the largest in the Southeast, and in electronics it ranks second behind Florida. Having a more mature structure meant that Tennessee grew at a slower rate than most states in the Southeast, especially since its dominant apparel sector grew at a sluggish pace and textiles declined sharply. But the state did not suffer the same fate as the North over this decade; its declining industries shrank less than the national average, while fabricated metals, machinery, electronics and transportation equipment far outpaced the nation.

Virginia

Virginia recorded the lowest manufacturing growth rate in the Southeast. This slower growth was fairly widespread, with textiles, apparel, lumber and furniture performing about average for the region, paper and chemicals declining, and rubber, plastics, fabricated metal, electronics and transportation equipment below average.

Only instruments and machinery grew rapidly, but they are a minor factor in the economy of the state so far.

The Industrial Site Selection Survey

As the above review of industrial expansion reveals, business investment in the Southeast over the last decade has been more broad-based than in the past, both among industries and among states. Manufacturing attracted to the Southeast in the past had two main characteristics: it used a significant amount of low-skill labor, and it produced goods with a high value-to-weight ratio, so that transportation to final markets was not a large cost factor. The principal examples of this kind of industry were textiles and apparel. In addition, the Southeast had industry which was tied to natural resources, such as lumber, paper and some types of chemicals.

But these easy generalizations don't fit the industry which is growing most rapidly in the region at present. Fabricated metals, machinery and transportation equipment fail to fit the old mold; they require skilled labor and may have high transportation costs. And what about electronics and instruments?

To shed some light on the reasons for manufacturing location in the Southeast today, we conducted an industrial survey in three states in March 1982¹. Our results are in harmony with many national plant location studies, but they also serve to isolate some of the Southeast's unique factors that draw industry to this region.

In order to place our survey in perspective, we must compare it with similar national studies. In 1977, *Fortune* magazine polled the top 1,000 industrial concerns and asked them what factors had been most important in siting a plant within the previous five years. Transportation, proximity to customers, unskilled labor, energy supply and productivity were the top five concerns expressed.

There may be a difference between a company's reach and its grasp, however. The top two factors—transportation and customer proximity—are best met in the Northeast, yet only 11 percent of the plants in the survey were actually placed in the Northeast. Clearly, firms may have to trade off

some factors for others. The Southeast is strong mainly in the unskilled labor area of the top five factors, with a good showing also in energy and productivity.

Roger Schmenner conducted a more detailed industrial survey, using the *Fortune* top 500.² He grouped firms according to location factors such as market-sensitive, labor-cost sensitive and high technology. For example, 77.5 percent of the firms in industries considered market-sensitive reported that being near the market was indeed a constraint for them, and 62.1 percent of high technology firms said an attractive place for engineers and managers to live was important for them. However, the advantage of this kind of breakdown is in looking at, for example, what other factors were mentioned by market-sensitive firms besides proximity to market. Specialty chemicals and metals pointed to environmental permits 57.1 percent of the time, and cited a favorable labor climate 100 percent of the time. Industrial machinery and transportation equipment firms, usually thought to be midwestern oriented, mentioned a favorable labor climate in 85.7 percent of the cases.

Site and State Preferences in the South

Our survey, using both telephone and mail, questioned managers who had been involved in the decision to site a new plant or expand an existing one over the last five years. Of 317 facilities located in Virginia, North Carolina and South Carolina, 204 responses were recorded. The decision-makers were asked to rate, on a scale of one to five, the importance of 19 business factors in their choice of a site. Since the study sought to discriminate between what they looked for and what they actually found, they also were asked to judge whether the attributes of the site they selected were "better than," "the same as" or "worse than" their next best alternative. Unlike other studies of the kind, this one asked firms to identify their other possible sites for the facility. This permits a comparison of states in direct competition for industry.

In a separate set of questions, we asked firms whether quality-of-life factors such as education, housing and climate were important in their

¹John Hekman, Mike Miles, Roger Pratt, Ray Burby and Anthony Marimpietri, "Impact of Environmental Regulations on Industrial Development in North Carolina," Center for Urban and Regional Studies, University of North Carolina, 1982.

²Roger Schmenner, *Making Business Location Decisions*, Prentice-Hall, 1982.

Table 2. North Carolina Facilities By Type Of Growth And Headquarters Location

Location of Firm Headquarters	Number of Industrial Facilities by Type of Growth				
	Independent ^a	New Branch	Expansion	Relocation	Total
Located Within North Carolina	16	15	7	4	42
Not Located within North Carolina	2	53	13	6	74
Total	18	68	20	10	116

^aSingle establishment firm.

choices. Overall importance of business factors compared with quality-of-life factors were also evaluated. Finally, we included a series of questions on the environmental permitting process, with such factors as the ease of permit processing and the occurrence of construction delays and changes in facility design to meet requirements.

Firms included in the study represent almost every industry group and illustrate the diversity of the recent industrial development process in the Southeast, as well as the reasons given by management for the choice of a particular state.

The Key Factors in the Location Decision

Industrial site selection is complicated not only by the myriad economic and social factors that can vary widely within and between regions, but also by the numerous layers of management responsibility in many companies. Most facilities in this survey were owned by corporations which operated plants in more than one state. As a result, they have as many as three levels of management involved in the site selection process: national headquarters, regional or divisional headquarters, and plant management.

Most surveys find that small firms, especially those with only one establishment, have a much narrower focus for their site selection than large companies with plants in several states. Most of the small firms consider sites in only one state, and a large percentage look at just one site, usually close to the owner's place of residence. Large firms, on the other hand, are becoming increasingly sophisticated at compiling data on many sites and making the selection on the basis of many characteristics. In general, the greater the distance of a firm's headquarters from a particular state, the greater the competition that state faces in attracting industry.

An important characteristic of the facilities surveyed for this report (selected in random fashion) is that the great majority were headquartered out-of-state. For example, in North Carolina,



Table 3. Where The Site Decision Was Made For North Carolina Facilities

North Carolina Industrial Facility Location Decisions		
Location of Decision Maker	Frequency	Percent
Plant Personnel	28	24
Regional Headquarters	14	12
National Headquarters	72	62
Other	2	2
Total	116	100

most of the plants were new branches rather than headquarters (59 percent); headquarters for these branches are owned out-of-state in 78 percent of the cases, and 64 percent of all plants are out-of-state owned (Table 2).

The survey also asked explicitly where the site location decision had been made, at the plant level or at regional or national headquarters. Table 3 shows the number of decisions made at the different levels for the 116 North Carolina facilities which responded to this question. In some cases respondents indicated that several management levels were involved in the decision, but the basic decision was most often made by national headquarters. Our survey indicates that the decision to locate a facility in North Carolina was most often made in another state. Other studies, such as that by David Birch,³ have also found that a large fraction of new manufacturing in the Sunbelt is composed of branch plants of northern firms.

The distribution of headquarters states for these facilities is quite revealing. As Table 4 shows, 80 percent of the new branch plants in North Carolina are operated by firms from the Northeast and North Central. New York, Michigan, and Ohio together account for 42 percent of the branches. In some cases, especially New York and Illinois, this pattern may mean only that corporate headquarters is located in New York City or Chicago, with manufacturing capacity entirely in the Southeast. But more often the

headquarters-branch pattern in this survey represents a decision to locate new capacity in the Southeast, breaking with the old tradition of expanding within the Manufacturing Belt. The growth of industries in the Southeast which were previously concentrated in the North is a significant trend in the past 15 years, one seen clearly in the survey results.

Which Industries are Coming

Table 5 presents the industry distribution for the new and expanded facilities in the survey. Since the individual plants were selected randomly from published lists of announced spendings and expansions, this distribution can be considered fairly representative of the pattern of industrial growth in these three states. New employment was created in all 20 industry groups except leather goods. Even textiles, where employment has been falling in recent years, are well represented; however, their percent representation in the sample of new plants is far less than their share of the region's economy, reflecting their shrinking importance. All of the traditional industries of the South Atlantic—tobacco, textiles, apparel, lumber and furniture—have a smaller share in the sample than their share of the economy.

Industries new to the region are well represented. Fabricated metals, nonelectrical machinery, electrical equipment and transportation equipment together make up over 40 percent of the facilities studied.

Business Location Factors

Table 6 summarizes the ranking of 19 business location factors for facilities in the study. The rankings are based on the mean of the rating (on a 1-to-5 scale) given to each factor by the managers involved in choosing the plant locations.

The top five factors for all firms were: (1) state and local industrial climate; (2) labor productivity; (3) transportation; (4) land availability and room for expansion; and (5) cost of land and construction. These results differ markedly from those of the **Fortune** survey. While business climate ranked only ninth in the **Fortune** study, it was a strong first in the Southeast. Nationally, firms said they

³David Birch, **The Job Generation Process**, MIT Program on Neighborhood and Regional Change, 1979.

Table 4. Headquarters State For New Branch Plants, Plant Expansions, And Plant Relations Locating In North Carolina: 1977-1981^a

Headquarters State	Frequency	Percent
<u>Mountain</u>	4	6
Arizona	1	1
Idaho	1	1
Wyoming	2	3
<u>North Central</u>	29	43
Iowa	1	1
Illinois	4	6
Indiana	2	3
Kansas	2	3
Michigan	9	13
Missouri	2	3
Ohio	9	13
<u>Northeast</u>	25	37
<u>New England</u>	8	12
Connecticut	4	6
Massachusetts	5	6
<u>Middle Atlantic</u>	17	25
New Jersey	3	4
New York	11	16
Pennsylvania	3	4
<u>South Atlantic</u>	5	7
Georgia	2	3
Maryland	2	3
Virginia	1	1
<u>South Central</u>	3	4
Mississippi	1	1
Tennessee	1	1
Texas	1	1
<u>Foreign</u>	1	1

^a Excluding firms headquartered in North Carolina

were most concerned with transportation and proximity to customers, while in this region transportation is third and proximity to markets only 11th. Land availability and the cost of land and construction were much more important in the Southeast.

The best generalization of these results for the Southeast as compared to the whole country is

that firms come to this region for its lower overall production cost—from labor productivity, land and construction—and for its “business climate.”

Nationally, on the other hand, most firms are more market-oriented, seeking good transportation and proximity to markets.

The similarities between the two studies are also revealing. In both surveys, state financial inducements and environmental regulations ranked relatively low. Since these are the factors most under the control of state economic development agencies, these results have led some to suggest that plants are not lured to particular states by industrial recruiters so much as they are drawn by overall economic factors such as labor rates. In the telephone interviews, less than a half-dozen firms said they had been influenced substantially by the states’ financial programs.

The composite business factors in Table 5 conceal some important differences among industries. Apparel firms, for instance, are far more interested in the availability of unskilled labor, while chemical firms view environmental constraints as a major concern.

Textiles

Cost of land and construction is at the top of the needs list for textiles, compared with an overall rank of fifth; environmental regulations move up from 13th to ninth; and transportation is only ninth, compared with third overall. Textile firms, extremely sensitive to production cost and foreign competition, appear to be looking for low-cost, non-urban locations as well as environmentally acceptable sites, given the pollution problems of some of their processes.

Apparel

Apparel firms are fairly close to the overall average, except for the high number two ranking they give to skilled labor supply. This is surprising, since apparel is mainly interested in low-cost labor, and the firms in this sample rated unskilled labor supply lower than average. Also, apparel firms do not appear interested in technical training programs (they came in last); perhaps these programs do not fill the industry’s particular needs.

Furniture

Furniture manufacturers also are concerned with the availability of skilled labor, as it ranks

Table 5. Distribution of Plant Location Decisions Studied
By State and Industry

Industry	Number and Percent of Facilities Studied							
	All Facilities		North Carolina		South Carolina		Virginia	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Food	11	5.5	5	4.7	1	1.8	5	17.2
Tobacco	4	2.0	3	2.8	0	0.0	1	3.5
Textiles	16	8.0	10	9.4	4	7.1	2	6.9
Apparel	13	7.0	7	6.5	5	8.9	1	3.5
Lumber	6	3.0	5	4.7	1	1.8	0	0.0
Furniture	10	5.0	8	7.5	2	3.6	0	0.0
Paper	3	1.0	3	2.8	0	0.0	0	0.0
Printing	4	2.0	1	0.9	1	1.8	2	6.9
Chemicals	26	8.0	9	8.4	5	8.9	2	6.9
Petroleum	1	0.5	1	0.9	0	0.0	0	0.0
Rubber/Plastic	9	4.5	3	2.8	6	10.7	0	00.0
Leather	0	0.0	0	0.0	0	0.0	0	0.0
Stone, Clay	4	2.0	1	0.9	1	1.8	2	6.9
Primary Metals	4	2.0	0	0.0	4	7.1	0	0.0
Fabricated Metals	16	8.0	9	8.4	6	10.7	1	3.5
Non-electrical Machinery	33	17.0	18	16.8	12	21.4	3	10.3
Electrical Equipment	24	12.0	12	11.2	4	7.1	5	17.2
Transportation Equipment	12	6.0	8	7.5	0	0.0	3	10.3
Instruments	4	2.0	1	0.9	2	3.6	1	3.5
Miscellaneous	4	2.0	2	1.9	1	1.8	1	3.5
Total	194	100.0	107	100.0	56	100.0	29	100.0

fourth for them versus ninth overall. Although the industry is highly concentrated in North Carolina, proximity to suppliers ranks relatively low, while fuel availability and cost rank surprisingly high.

Chemicals

Environmental regulations are far more important to the chemical industry than to any other in the study, ranking fourth. Water supply is also crucial, and solid and hazardous waste disposal gets its highest rating here. Together these mean that chemical firms are quite concerned with finding suitable sites for their plants. To compound their problems, transportation and proximity to markets are big considerations. The Southeast provides a good balance of all these factors, which helps account for the fact that they have received the most new employment in chemicals over the last decade (Table 1).

Rubber and Plastics

Proximity to markets is this industry's top priority; firms in the study produce products for industry rather than for final markets, so presumably the markets they are referring to are in the Southeast. Technical training programs also are judged more important than average.

Fabricated Metals

The fact that these firms' output is not a final product is reflected in the low value given transportation and the high value of proximity to markets. The industry is growing in the Southeast basically as a result of the growth of machinery and other industries which use their products. They award the highest rating to business taxation, while cost of land and construction comes in second. This would indicate they are very sensitive to production cost differences. But they rank wage rate lower than average because they use relatively more skilled labor, and technical training programs are above average in importance.

Nonelectrical Machinery

This was the largest industry in the sample, and the firms' responses are about the same for the top five factors. Technical training ranks relatively

high because of their need for skilled labor. Many of these firms are producing machinery for the southeastern market, for instance textile machinery. Yet many are also producing for the national market, so proximity to market is above average.

Electrical Equipment

Since most electrical equipment firms lack extensive, automated production lines, these firms rate land availability and cost of land and construction relatively low. Electronics firms are footloose, not tied to any particular locations, so they tend to rate business taxation and state financial incentives somewhat higher than the average. Technical training, which in many states today is geared toward electronic skills, receives its highest rating here.

Transportation Equipment

This group is made up of some very large and some fairly small facilities. Most produce parts or subassemblies for customers or other plants in their own company. They have come to the Southeast, according to their responses, for business climate, labor productivity and transportation. Surprisingly, for an industry thought to be large scale and capital-intensive, they rank cost of land and construction fairly low—10th as opposed to fifth overall. Availability of skilled labor and technical training are rated above average.

Overall, industry mentioned most frequently the cost, business climate and productivity aspects of the region. This is in accord with the reasons for traditional industry's attraction. But it is significant to note that this newer wave of "heavy" industry (fabricated metals and machinery) and "high technology" industry (electronics and instruments) is expressing the need for a more diverse set of resources, such as skilled labor and transportation facilities. The question is whether the demand for these resources will elicit its own supply as the region develops, or whether more government and business action is required to plan for them.

Quality of Life Factors

The questionnaire also contained, as a separate group, 12 quality of life characteristics. Respon-

dents ranked them for importance in choosing a facility location on a scale of 1 to 5. The top factors cited by industry were educational system, cost of living, housing, quality of air and water, and personal taxes. Of lesser significance were such things as climate, recreation, cultural resources and entertainment.

The mean scores on the quality of life factors were about one full point lower than their corresponding business factors by rank. Many managers who were interviewed clearly believed that quality of life as a whole was a consideration in locating their facility, but they could not break this down precisely into specific characteristics. When asked how important business characteristics had been overall, they rated them about 4, versus a little under 3 for the composite quality



of life factors. There was little variation among states or industries in the overall importance ratings. However, the ratings did differ by the size of the facility responding. Large plants said both business factors and quality of life factors were more important than medium-sized plants, and medium-sized ones rated them higher than small plants. The large facilities, more likely to be branches of out-of-state corporations, as a result were more systematic and wide-ranging in their analysis of possible sites.

Competition Between States

A novel feature of this survey was that we asked what alternative sites were considered by firms in locating facilities. Table 7 presents the distribution of states containing the next

best site and other sites screened by firms locating a facility in Virginia, North Carolina and South Carolina. About 25 percent of the firms considered no other site, and the largest number of alternative sites were in the same state where the facility located. In fact, adding together the percentage of firms that looked at no other sites and the percentage whose next best site was in the same state accounts for the majority of the next best sites: 71 percent for North Carolina, 62 percent for South Carolina and 74 percent for Virginia.

States considered by firms for their plants are mostly within the Southeast. North Carolina and South Carolina are in close competition with each other; for example, 19 percent of the plants in South Carolina considered their next best site in North Carolina. Pennsylvania was the only state outside the region mentioned with any frequency, mainly by firms based in that state. Other northeastern and midwestern states were considered. But most firms decided on a region first and, having selected the Southeast, they concentrated on sites within that region. This is in accord with the responses to the locational factors reported above. Industrial climate, labor productivity and land availability are considered to be shared characteristics within the region.

Large plants cast a wider net in their location search than small ones. Only 15 percent of the facilities with over 250 employees in North Carolina said they did not consider another site, versus 23 percent of medium facilities and 38 percent of the small ones. The large plants also considered more sites, on average: 65 percent report "other" sites, as compared with 50 percent of the medium plants and 38 percent of the small ones.

Not surprisingly, there were also differences by industry in the states considered. Ninety-nine percent of textile firms said they considered sites only in the Carolinas and Virginia. At the other end, 61 percent of the electronics firms locating in the three states considered no states outside of the three. Machinery firms were the most surprising. They are normally considered to be attracted mainly to the large industrial concentrations of the Midwest, California and similar areas, yet they rarely mentioned the major industrial states in this survey, and 82 percent had their next best site in the three states studied plus Georgia and Tennessee.

**Table 6. Ranking Of Business Location Factors
By Major Industry Groups**

Business Location	Rank by All Firms	Textiles (22)	Apparel (23)	Furniture (24)	Chemicals (28)	Rubber & Plastic (30)	Fabricated Metals (34)	Nonelectrical Machinery (35)	Electrical Equipment (36)	Transportation Equipment (37)
State/Local Industrial Climate	1*	2*	5*	3*	2*	4*	1*	1*	2*	1*
Labor Productivity	2*	3*	1*	2*	9	2*	7	2*	1*	2*
Transportation	3*	9	3*	7	1*	3*	9	4*	8	3*
Land Availability/Room for Expansion	4*	4*	8	1*	6	4*	4*	3*	4*	5*
Cost of Land & Construction	5*	1*	7	4*	3*	11	2*	5*	10	10
Wage Rate	6	6	3*	6	12	4*	9	7	3*	9
Business Taxation	7	13	6	7	6	9	2*	5*	11	5*
Electricity Availability/Cost	8	12	9	12	10	4*	6	8	9	8
Skilled Labor Supply	9	7	2*	4*	15	9	11	11	6	4*
Proximity to Suppliers/Services	10	14	10	16	13	13	11	10	13	10
Proximity to Markets	11	18	13	10	5*	1*	5*	12	15	10
Unskilled Labor Supply	12	8	15	11	14	8	15	16	7	13
State/Local Environmental Regulations and Permit Processing	13	9	12	13	4*	17	17	12	12	16
Water Supply	14	11	14	17	6	14	16	15	15	16
Availability of Technical Training Programs	15	17	19	18	18	10	8	8	5*	7
Fuel Availability/Cost	16	16	11	9	11	14	11	17	14	13
State Financial Incentives	17	15	17	14	14	16	14	14	17	13
Public Wastewater Treatment Capacity	18	5*	15	14	19	18	18	19	18	16
Solid/Hazardous Waste Disposal Facilities	19	19	17	19	16	19	19	18	19	19
	194	14	13	10	15	9	17	34	22	11

*Top five factors

Firms reported as many as five sites that they had considered for their facility. While most firms considered more than one state, Table 7 shows that the majority had their top two or three sites in only one state. Some states have "captive" industries which do not look elsewhere, while some states are in competition with quite a few others. It is noteworthy,

however, that most of the state competition in all industries in this survey was contained in the Southeast.

How Alternative Sites Compared

Given that firms are considering several states for a plant location and are concerned with a

Table 7. Alternative Sites Considered For Facilities, By State

Location of Alternative Sites	Percent of Firms Reporting Next Best and Other Sites Considered							
	All Firms		North Carolina		South Carolina		Virginia	
	Next Best	Other	Next Best	Other	Next Best	Other	Next Best	Other
No Others Considered	25	0	26	0	26	0	24	0
North Carolina	32	28	45	45	19	9	0	0
South Carolina	16	22	9	20	36	39	0	0
Virginia	9	13	3	8	0	0	50	43
Georgia	0	7	0	0	4	9	0	14
Alabama	0	6	0	6	0	0	0	0
Tennessee	3	0	5	0	0	0	0	0
Florida	0	0	0	0	0	9	0	0
Maryland	0	5	0	0	0	9	0	14
Pennsylvania	0	0	0	0	0	0	8	0
Other States	15	19	12	21	15	25	18	29
Number of Facilities	172	88	101	51	47	23	24	14

number of business and quality of life factors, the question remains: Do firms find the chosen site to be any better than the next best one and, if so, on what dimensions?

We asked respondents how each location factor compared between the chosen site and their second choice. For the most part, the factors which industry considered most important in choosing a site are the ones they find better in the site actually chosen. Land availability, cost of land, and labor productivity rank about the same in both comparisons. The first two may be site-specific factors, not reflecting overall differences between the states. Wages and unskilled labor, on the other hand, seem to be found more favorable in North Carolina, whereas South Carolina respondents preferred the industrial climate in their state. North

Carolina, being farther north, offers better proximity to markets (Table 8).

States Considered Best for New Industrial Facilities

After evaluating their chosen site, managers were asked in an open-ended way to vote for the top three states in which to locate a new facility in their industry. We also asked them to list the location factors which would be most important in the decision. The results of this "beauty contest" are reported in Table 9. Because this was a popularity contest rather than an actual site selection, a wide variety of states received mention. California, Texas and Florida were named more often in this question than in

Table 8. Site Comparisons By Firms*

Factors Considered to be *Better* at Chosen Site in South Carolina When Compared to Next Best Site in North Carolina

Business Factors (in order of most frequently mentioned)

State and Local Industrial Climate
 Land Availability, Room for Expansion
 Cost of Land and Construction
 Availability of Technical Training Programs
 Wage Rate
 Labor Productivity
 Unskilled Labor Supply

Factors Considered to be *Better* at Chosen Site in North Carolina When Compared to Next Best Site in South Carolina

Business Factors (in order)

Wage Rate
 Unskilled Labor Supply
 Cost of Land and Construction
 Land Availability, Room for Expansion
 Labor Productivity
 Proximity to Markets

*There were nine firms in both comparisons.

Table 9. Most Preferred States For Locating A New Facility and Most Important Factors in the Decision, By State

Most Preferred States	Percent of Firms Listing State as:		
	First Choice	Second Choice	Third Choice
All Firms Interviewed			
North Carolina	45	20	5
South Carolina	19	22	16
Virginia	7	0	0
Georgia	0	9	14
Tennessee	0	0	7
Texas	8	7	6
Florida	0	7	0
Other States	21	35	52
Number of Firms	169	148	127

Top Location Factors (in order)

Proximity to Markets
 Industrial Climate
 Labor Productivity
 Unskilled Labor Supply
 Skilled Labor Supply

the question regarding the states considered in the site selection. This may reflect the influence of national publicity regarding the most popular states.

The top location factors mentioned correspond fairly closely to those the respondents rated as important for their own site selection. Industrial climate and labor productivity were again the most often mentioned. Individual industries followed the same general pattern as in their site preferences. Textiles did not consider any states other than the three being studied. Chemicals, metals and machinery voted mainly for the Carolinas, with the rest of their votes scattered widely among other states. Electronics firms cast the largest concentration of votes outside the region, with many voting for Texas and California, centers for that industry.

On the other hand, some differences appear

in the state popularity contest as a result of the nature of the question. Since firms were not looking at actual sites in voting for the best states, land availability and cost of land do not appear here, while they ranked fourth and fifth as actual site selection factors. Conversely, proximity to markets is a top factor in the popularity contest but ranks 11th overall in site selection.

A comparison of the two lists of preferences, from two different types of questions, provides more insight into what companies are looking for in a region and what they are looking for in a particular site. Industrial climate and labor are issues at the regional level which distinguish the Southeast, while market proximity is a regional need which the Southeast does less to fulfill. Land availability and cost of land are characteristics of particular sites which may determine the site chosen within the region.

Conclusion

Business investment in the Southeast in recent years has been characterized by an increasing industrial diversity in most areas. Nationally, manufacturing has been moving out of large central cities—especially in the North—and moving into the suburbs, smaller cities and non-metropolitan areas. The Southeast, Southwest and Pacific regions have seen large increases in manufacturing employment, while the Northeast and North Central have experienced sharp reductions in their industrial bases.

The trend in the near-to-intermediate future would appear to be for a continuation of high investment in the Sunbelt. Industry surveys such as the one reviewed here usually indicate that business climate, wages and market proximity are the most important factors in choosing a site. The Southeast is highly competitive in at least the first two of these. And since industry is becoming somewhat less market sensitive today as transportation is becoming a smaller

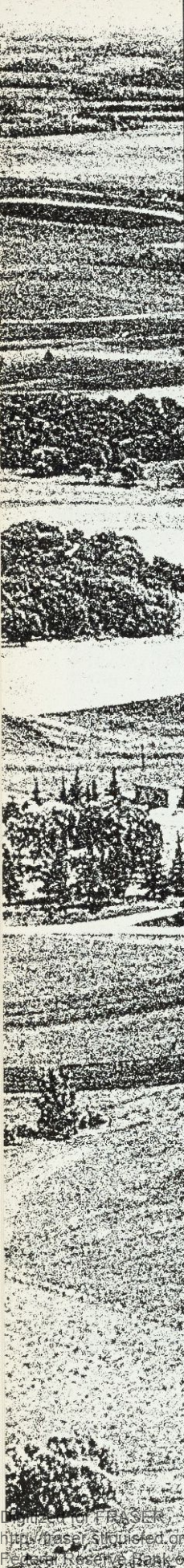
component of total cost, there is little reason to believe that industry will reverse its trend and move back to the big cities.

Some have voiced concern that the movement of industry to the Southeast will of itself eliminate the very advantages that brought it there, for example by driving up wages and producing congested urban areas. There is little or no evidence for this so far. Reports that Atlanta or Dallas are becoming high-living-cost cities are not sufficient to support these claims. Smaller cities and non-urban areas are attracting industry at a faster rate than the largest cities, and there is still a substantial production cost advantage in these areas of the Southeast as compared with the North.

An important concern voiced by firms in the survey who invested in the Southeast was for available land and suitable sites. Many of the respondents testified to the difficulty of finding large industrial sites in the North; by contrast, none was concerned that the Southeast is running out of room for development.

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Business Climate: Behind the Geographic Shift of American Manufacturing

The outflow of industry and jobs from the American manufacturing heartland of the Northeast and Great Lakes states began in the early 20th century. The rate of outflow was fairly slow, however, until the mid-1960s. Despite higher growth rates elsewhere, innovation and new industry growth allowed the heartland to maintain a strong industrial position. However, the loss of well over one million jobs in the region between 1969 and 1977, together with large gains in other parts of the country (more than 700,000 in the South), suggests that we have reached a major turning point, characterized by massive and continuing regional adjustments in manufacturing.¹

The basis for this change is the subject of considerable debate, much of which includes either direct or implicit reference to "business climate" as a factor in the relocation of American manufacturing (see Box). Business climate should stem from a set of important regional attributes which, in concert, generate a distinctive non-physical environment for enterprise. Many manufacturers expect this environment to affect probabilities of return from a given investment, whether that investment involves a new location or expansion of an existing site. References to "business climate" are frequently ill-defined and include little empirical support of business climate's role despite the implicit suggestion that it serves as an important location factor. This vagueness is less a matter of neglect than of difficulty in providing a tangible measure of business climate which can be related to standard measures of industrial activity.

The difficulty stems from the fact that business climate cannot be measured by a simple variable. Rather, its components are a set of synergistic indicators which, though economic in implication, contain a strong element of the socio-political environment of a particular region. Existing business climate should be viewed as the product of an evolutionary process influenced by social, economic and political forces.

¹M. F. Petrusis, **Regional Manufacturing Employment Growth Patterns**, (Washington: U.S. Department of Agriculture, Rural Development Research Report No. 13, 1979).

A Business Climate Index

Since business climate cannot be measured directly, a major focus of our analysis is to develop a measure of business climate that is empirically testable. Following the approach of others, we first devised a general framework of variables with the intent that the 20 often used variables capture three primary components of business climate: government policy, labor, and quality of life. We then compared regions and states based upon these groupings.

Twenty variables often thought to compose business climate are shown in Table 1. Nine of them have been selected as surrogate measures of the role government policy plays in business climate. Variables 1 and 2 serve as measures of reliance on income taxes for revenue. Variables 3, 4, and 5 attempt to reflect attitude toward transfer payments. Variable 6 measures government's willingness to invest in one aspect of specialized human capital. Variables 7, 8, and 9 measure government fiscal policy, general tax level, and state generated tax burden, respectively.

The labor component of business climate is measured by three variables. Variable 10, presence or absence of right-to-work legislation, could be considered a government policy variable. It is used here, however, to indicate the strength of labor's influence. Variable 11 indicates production reliability with regard to labor, while variable 12 measures the influence of organized labor.

The third business climate component, quality of life, is measured broadly by eight variables. Variables 13 and 14 deal with educational achieve-

ment and accessibility. Variables 15 and 16 concern the incidence of crime. Variables 17 and 18 deal respectively with recreation and health care. Finally, variables 19 and 20 deal with quality of life in terms of income and death rates.

Questions can be raised concerning the selected set of variables. First, the allocation of variables to government policy, labor, and quality of life is subjective. For example, variable 4, dealing with workmen's compensation payments, undoubtedly would be measured by some as more appropriately a quality of life measure. The allocation scheme is well suited to this research, however, which is aimed at cost conscious management.

Second, the number of variables may be questioned. The variable set is designed to assess each of the selected components of business climate and yet maintain diversity among the individual variables. Computation of a preliminary correlation matrix indicated relatively low inter-correlation among the selected variables.

It is also important to stress that the direct measures provided by the individual variables are not of primary importance. Rather, these variables (tax rates, days lost due to strikes, etc.) function as a set of synergistic indicators which, when combined, provide broad yet meaningful insights into the structure of state business climate.

Further, the variables selected aren't intended to represent attributes with precisely measurable impact on conventional factor costs. For example, a state's average hourly production wage is not utilized in the labor component of business climate. Similarly, manufacturers' pollution abatement costs and other operating costs based on environmental regulation are not considered. As Carter suggests, they tend to be targeted towards specific industries and rely ultimately on federal and not state requirements.² Furthermore, Storper provides evidence that state-based environmental

²Charlie Carter, "Environmental Regulations: A Constraint on Southeastern Productivity," *Economic Review*, Federal Reserve Bank of Atlanta, 1979, Vol. LXIV, No. 2.



**Exactly what is "business climate"?
A weighted index of 20 factors shows
that business climate does affect
industrial performance.**

Table 1. Selected State Business Climate Variables and Their Short Names

Variable	Short Name
Government Policy	
1. Percent revenue by individual income tax	individual income tax
2. Percent revenue by corporate income tax	corporate income tax
3. Public assistance payments per capita	public assistance
4. Workmen's compensation payments per capita	workmen's compensation
5. Average weekly unemployment benefits	unemployment benefits
6. Vocational education spending per capita	vocational education
7. State debt per capita	state debt
8. State tax per capita	taxes
9. State tax per capita/income per capita	tax burden
Labor	
10. Right-to-work legislation ¹	right-to-work
11. Percent non-agricultural workers in work stoppages	strikes
12. Percent non-agricultural workers in labor unions	unions
Quality of Life	
13. Percent population illiterate	illiteracy
14. Education spending per capita	education spending
15. Violent crime rate	violent crime
16. Property crime rate	property crime
17. State recreation area per capita	parks
18. Hospital beds per capita	hospital beds
19. Income per capita	income
20. Death rate	death rate

¹Dichotomous

protection regulations are enforced irregularly and so are difficult to assess quantitatively.³

Notwithstanding efforts to categorize each of the 20 variables into what we consider more general groups, 20 variables are still unwieldy in assessing the importance of business climate. So we completed a common factor analysis of the variables to efficiently reduce the data set from 20 to 6 factors: 1) Crime-Transfer, 2) Income-Education, 3) General Taxation, 4) Labor, 5) Life,

³M. Storper, et al., "Performance Regulations and Industrial Location: A Case Study," unpublished manuscript, Dept. of Geography, University of California, Berkeley, 1980.

Table 2. Business Climate Factor Structure: 1967

Factor (eigenvalue)	Factor Name	Variable Name	Loading
I (3.436)	Crime-Transfer	Property crime	.858
		Violent crime	.752
		Workmen's compensation	.649
		State debt	.641
		Income	.577
II (2.693)	Income-Education	Public assistance	.566
		Unemployment benefits	.739
		Education spending	.704
		Income	.615
		Illiteracy	-.788
III (2.559)	General Taxation	Tax burden	.893
		Taxes	.808
		Vocational education	.659
IV (2.457)	Labor	Unions	.806
		Strikes	.777
		Right-to-work	-.658
V (2.229)	Life	Hospital beds	.784
		Death rate	.763
VI (1.770)	Income Tax Revenue	Corporate income tax	.853
		Individual income tax	.643
		Parks	-.555

and 6) Income Tax Revenue (Table 2). Conceptually, the derived factors should reveal more appropriate dimensions of the milieu we term business climate.⁴

If our conceptual model has any validity, or business climate rankings any meaning, then business climate should demonstrate some relationship to industrial performance. Our empirical test of this relationship is directed at two scales, aggregate industrial performance and performance in specific industries. Our assessment of the relationship between business climate and industrial performance is based on the simple premise that an area's nationwide ranking on some measure of industrial performance is associated with the area's ranking on some measure of business climate. To empirically test this hypothesis, we used two measures of industrial performance: 1) annual layoff rates per

⁴The selected business climate variables were factor analyzed for each of the years 1967 through 1975. Six factors with eigenvalues greater than unity were consistently extracted. For convenience, we measure state business climate as the sum of a state's scores on the six factors extracted. Therefore, the business climate typology evolved thus far may be expressed as:

$$BC_{jt} = F_{1jt} + \dots + F_{6jt}$$

where BC is business climate,
F is one of six factor scores,
J is a state, and
t is one year (1967-1975).

1000 manufacturing employees, and 2) change in manufacturing employment.⁵

To consider the relationship between business climate and performance in specific manufacturing industries, we used the same general procedure used in assessing the relationship between state business climate and aggregate industrial performance.

We used one, two, and three year lagged systems to derive the business climate factor weights for each industry, with the weighting system that best explains business climate chosen for the empirical test.

An important requisite of the common factor approach is coherence and comparability of the extracted business climate factors over time. Noting that factor comparison always contains an element of subjectivity, we used the results for 1967 as an index of the variable factor loadings over the time period for this comparison.

Empirical Results

We focused on states for three reasons: First, the state scale of analysis is pertinent to real location decisions.⁶ Second, many of the variables selected have uniform statewide impact. Finally, related studies have shown the state-as-observation to be meaningful.⁷ Our study period (1970-1976) is particularly appropriate given the accelerated manufacturing shift which began in the late 1960s.

State rankings on unweighted mean business climate (a simple average of a state's yearly rankings from 1967-75) are shown in Table 3. These rankings correlate highly with the Fantus and Grant rankings discussed previously.⁸ These

⁵Algebraically the variable can be stated as:

$$l_{jt} = \gamma + \alpha l_{jt-1} + e_{jt}$$

where l is manufacturing employment, and t is a year.

⁶See Fantus and Grant studies.

⁷R.J. Genetski and Y.D. Chin, "The Impact of State and Local Taxes on Economic Growth," *HEROS*, 1979, November 3. L.K. Lynch, "Economic Structure and Economic Performance: Some Evidence for States," *Regional Science Perspectives*, 1979, Vol. 9, No. 1. T. Romans and G. Subrahmanyam, "State and Local Taxes, Transfers and Regional Economic Growth," *Southern Economic Journal*, 1974, Vol. 46, No. 2.

⁸Calculated Spearman rank correlations for the unweighted mean business climate ranks and the Fantus and Grant rankings are .893 and .815, respectively.

Table 3. States Ranked by Unweighted Mean Business Climate (average yearly ranking from 1967-75)

1 Texas	25 Oklahoma
2 South Carolina	26 Montana
3 Mississippi	27 Ohio
4 Utah	28 Colorado
5 Arkansas	29 Louisiana
6 Tennessee	30 Missouri
7 Georgia	31 Kentucky
8 North Carolina	32 New Jersey
9 North Dakota	33 Oregon
10 Arizona	34 Connecticut
11 Alabama	35 Rhode Island
12 Virginia	36 Maryland
13 New Hampshire	37 Illinois
14 South Dakota	38 West Virginia
15 Florida	39 Wisconsin
16 Idaho	40 Minnesota
17 Nebraska	41 Vermont
18 Wyoming	42 Michigan
19 New Mexico	43 Washington
20 Kansas	44 Pennsylvania
21 Indiana	45 California
22 Iowa	46 Delaware
23 Maine	47 Massachusetts
24 Nevada	48 New York

Source: Calculated by the authors.

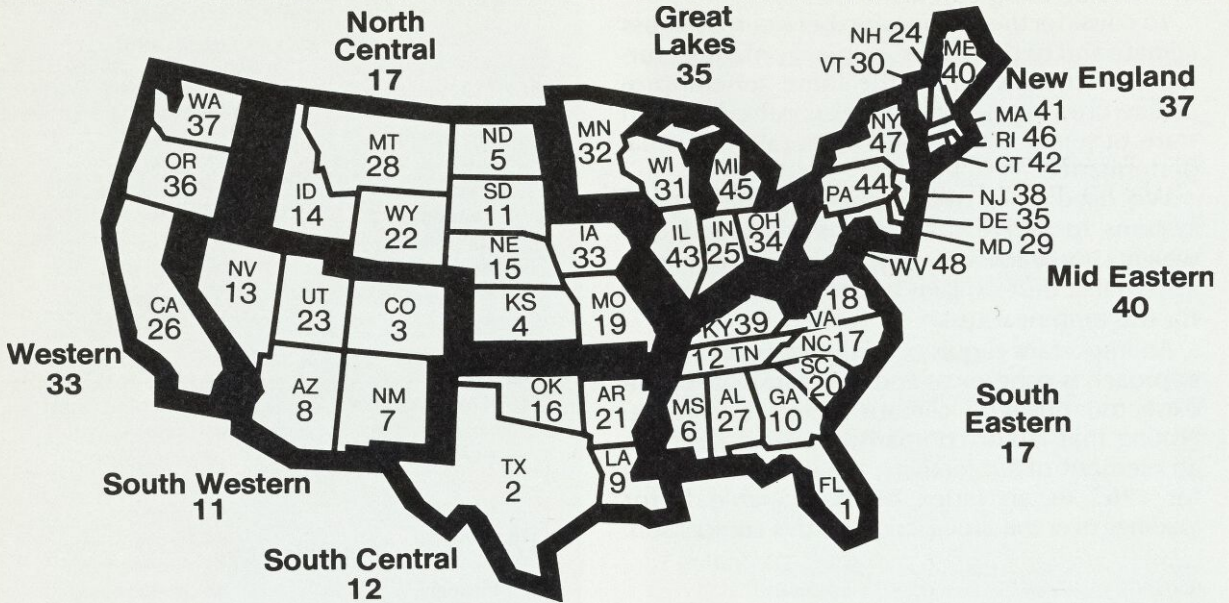
high correlations indicate an underlying consistency in the original business climate variable sets. Map I shows the results of the 1981 Grant study. In general, the states placing in the lower two quartiles are found in the New England, Mid-Atlantic, and North Central regions of the United States. With the exception of California, states ranking in the higher quartiles are generally in the South and West.

Weighted Business Climate: An Alternative

Table 5 shows the association between the two measures of industrial performance and our six business climate factors (see Appendix for a description of the weighted business climate factor measures). The table indicates that states with high scores on the General Taxation, Labor, and Life business climate factors have high layoff rates. It is interesting to note that the negative weight on Income Tax Revenue indicates that this type of revenue source may have some positive implications for layoff rates, but high

Map 1. 1981 Business Climate Study

State Ranks and Regional Averages



Number within the state is its overall rank based on 22 factors affecting business climate (1 best, 48 worst). Number below the regional name is the average rank of states within the region.

Source: Alexander Grant & Company, Certified Public Accountants

Empirical Studies

Business climate is a recurring theme in recent analyses of plant location decisions. Survey results indicate business climate plays an important albeit usually secondary, role in plant location decisions. Business climate ranked consistently high as a factor in Mandell's recent study of plant location decisions involving Detroit, Chicago, and Atlanta: in the latter case it was considered the second most important factor. Hekman's study of 204 firms in Virginia and the Carolinas also shows business climate to rank highest. These and similar findings are mirrored in a Harris survey of 487 executives bearing major responsibility for their company's manufacturing locations.⁹

Recently, the Fantus Company and Alexander Grant and Company undertook independent state-by-state evaluations of business climate.¹⁰ Both evaluations were prepared for manufacturer associations, a point which perhaps speaks to the subject's rising import. The two studies differ somewhat in the variables selected, but both concentrate on labor legislation, tax and transfer payments levels, and government spending. Neither the Fantus nor the Grant study contains proxies for state industrial recruitment spending. In addition, the Grant study includes manufacturer's

energy and pollution abatement costs. Both studies ranked states from one to forty-eight on "quality" of business climate. The results of the two studies are generally similar.

Both studies deal only indirectly with the impact of business climate on manufacturing. The Grant study compares states' business climate rankings to economic performance measured by absolute change in manufacturing employment. Weinstein and Firestone have in turn compared the Fantus rankings to both absolute and percent change in manufacturing employment for the period 1970 to 1976. Table 4 shows a strong similarity between the Fantus and Grant orderings of states by business climate and alternative measures of economic performance. The relationship between business climate and industrial performance shown in this manner, however, is rather superficial. Both measures of industrial performance subsume such primary location factors as the market and material cost, certainly more influential than regional business climate in affecting employment fluctuations.

A study concerning the causes of manufacturing migration, economic growth, and employment changes in over 100 medium sized cities concluded that:

Environmental phenomena, new construction, aging housing stock, incidence of crime, race, etc. have a

taxes in general are not good. States with negative scores on the Life, Labor, and Income-Education business climate factors generally have higher manufacturing employment growth rates than the national standard.

Rank correlations are also displayed in Table 5. The rankings are highly correlated with the industrial performance rankings. The sign on the rank correlations is negative in the case of layoffs because the state with the highest mean layoff rate during the period is ranked first, while the state with the lowest, or worst, business climate score is ranked last.

The states are mapped by weighted mean business climate quartile in Maps 2 and 3. The layoff quartile map is based on national extrapolation of empirically validated weighted mean business climate scores. With some exceptions such as Louisiana, state rankings by layoffs and change in manufacturing employment are similar to business climate. Both the layoff and residual growth in manufacturing business climate maps follow a general pattern. The differences, however, underscore the importance of the weights in explaining industrial performance in relation to state business climate. Southern business

Table 5. Weighted Mean Business Climate Results: Layoff and Residual Change in Manufacturing Employment

A. Mean Business Climate Factor Score Weights						
Indicator	Crime-Transfer	Education	General Taxation	Labor Life	Income Tax Revenue	
Layoff Rate	.140	.114	.282	.264	.256	-.159
Manufacturing Employment Residual	-.070	-.126	-.066	-.177	-.240	-.013

B. Spearman's Rank Correlations (r_s)		
Indicator	Weighted Mean Business Climate	Observations
Layoff Rate	-.503 (-3.13) ^a	31
Manufacturing Employment Residual	.608 (5.19)	48

Source: Calculated by the authors.

^at-statistics in parentheses, all significant at .99.

Table 4. Rank Correlations (r_s) of Fantus and Grant State Business Climate Rankings with Industrial Performance Measures^a

Ranking Firm	Manufacturing Employment Absolute Change	Manufacturing Employment Percent Change
Fantus	.564 ^b	.596 ^b
Grant	.596 ^b	.613 ^b

^aChange data for the period 1970-1977.

^bSignificant at the .99 level of confidence.

greater impact on industrial growth than economic variables such as wages, productivity, availability of skilled labor, and investment.¹¹

Other studies have considered independently government policy, labor, and quality of life as the dominant ingredient of business climate. Norton and Rees cite the impact of business climate on the recently acceler-

ated dispersion of U.S. industry. McConnell also considers business climate a partial explanation for domestic manufacturing shifts during the 1970s. Ady cites unionism in the 1970s and environmental concerns and living conditions in the 1980s as important factors in location decisions. Arpan suggests that "investment climate" outweighs state-provided inducements in attracting foreign investment.¹²

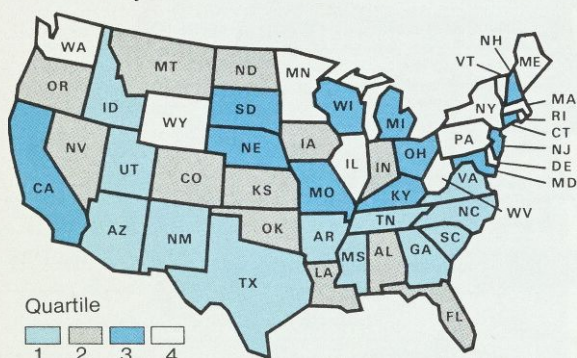
⁹L. Mandell, *Industrial Location Decisions: Detroit Compared with Atlanta and Chicago* (New York: Praeger, 1975). Louis Harris and Associates, *Attitude of the Nation's Corporate Leaders Toward California as a Business Location* (Sacramento: State of California Commission for Economic Development, 1978). John Hekman, "What Are Businesses Looking For?" this *Review*, June 1982.

¹⁰Fantus Company, *Comparative Business Climate Study* (Chicago: Illinois Manufacturers Association, 1975). Alexander Grant and Company, *A Study of Business Climate of the Forty-Eight Contiguous States of America* (Chicago: Conference of State Manufacturer's Associations, 1979).

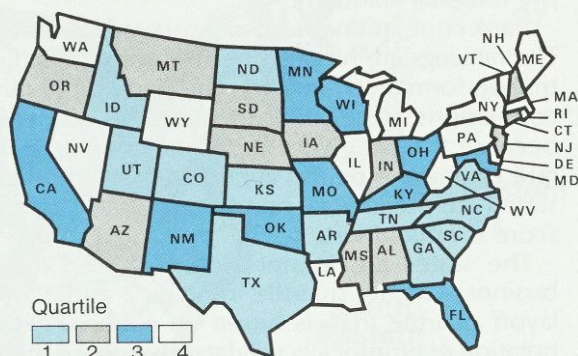
¹¹L.P. Singer, Letter to the Editor, *Wall Street Journal*, October 15, 1979, p.25.

¹²R.D. Norton and J. Rees, "The Product Cycle and the Spatial Decentralization of American Manufacturing," *Regional Studies*, 1979, Vol. 13, No. 2. James E. McConnell, "Foreign Direct Investment in the United States," *Annals of the Association of American Geographers*, 1980, Vol. 70, No. 2. Robert M. Ady, "Shifting Factors in Plant Location," *Industrial Development*, 1981, Vol. 150, No.6. Jeffrey S. Arpan, "The Impact of State Incentives on Foreign Investors' Site Selections," *Economic Review*, Federal Reserve Bank of Atlanta, 1981, Vol. LXVI, No. 8.

Map 2. Manufacturing Performance
by Business Climate Quartile



Map 3: Layoffs
by Business Climate Quartile



Southern business climate fares better for both manufacturing performance and layoffs than do North Central and Northeastern states.

climate fares better for both industrial performance indicators than do North Central and Northeastern states. Other things being equal, weighted business climate indicates that, especially in the short term, aggregate industrial performance should approximate this pattern.

State Business Climate and Industry Groups

The derived weights for all industries examined are listed in Table 6. In nine of the eighteen industry groups, the Life factor had the strongest weight. In all cases the weight is negative, with the exception of transportation equipment, where its mean value is zero. The generally strong and negative weights on the Life Factor, in light of their derivation, tend to suggest a shift toward a more service-oriented economy.

The Life factor has been interpreted by Hanink as a welfare indicator and especially associated with areas of mature economies and high income levels.¹³ If correct, the factor may then be considered as part of a larger milieu interpreted by decision makers as unfavorable for long term investment; therefore, the negative weighting on the performance measure.

In general, the second most important business climate factor is Income-Education. Only three of the industry groups have residual growth associated with positive scores on this factor, and in these cases the weights are very low. The generally negative weights on this factor indicate a trend towards higher growth rates in states with relatively low wage and education standards. The Labor factor is less important than expected, although still relatively significant. As in the case of the Life and Income-Education factors, the signs of the weights on the Labor factor are generally negative. The magnitude of the weights, however, is generally intermediate.

The factors of Crime-Transfer, General Taxation, and Income Tax Revenue exhibit relatively small importance in the overall relationship between state business climate and performance in the industrial groups. The weights on these three factors are of fairly low magnitude and their signs are mixed. The minor importance given to General Taxation and Income Tax Revenue as state business climate factors is unexpected but con-

¹³Dean M. Hanink, "An Empirical Investigation of the Relationship Between Business Climate and State Economic Growth," Ph.D. dissertation, University of Georgia, Athens, Georgia.

Table 6. Mean Weights for Business Climate Factor Scores

SIC ¹ SIC ¹	Industry Group	Crime- Transfer	Income Education	General Taxation	Labor	Life	Income Tax Revenue
20 ^b	Food and kindred products	-.067	-.065	-.046	-.078	-.133	-.030
22 ^b	Textile mill products	.051	-.231	.204	-.079	-.301	-.075
23 ^a	Apparel and related products	.098	-.239	-.139	-.113	-.165	-.017
24 ^b	Lumber and wood products	-.071	.031	-.017	.039	-.115	.088
25 ^b	Furniture and fixtures	-.113	-.117	.071	-.122	-.252	-.052
26 ^c	Paper and allied products	-.065	-.060	-.098	-.052	-.149	.095
27 ^b	Printing and publishing	.007	-.017	-.104	-.034	-.157	.033
28 ^c	Chemical and allied products	.081	-.158	-.045	-.139	-.109	-.070
29 ^c	Petroleum and coal products	.043	.035	.014	.004	-.023	-.111
30 ^c	Rubber and plastic products (n.e.c.)	.006	-.007	-.026	-.090	-.077	-.030
31 ^c	Leather and leather products	-.067	-.140	.036	.040	-.154	-.012
32 ^c	Stone, clay, and glass products	.027	-.095	-.032	-.115	-.017	-.043
33 ^a	Primary metal industries	-.055	-.105	.017	.017	-.122	-.077
34 ^c	Fabricated metal industries	-.035	-.058	-.037	-.013	-.115	-.043
35 ^c	Machinery, except electrical	-.030	-.023	.021	-.109	-.036	.027
36 ^a	Electrical machinery	-.024	-.144	.032	-.017	-.162	.066
37 ^c	Transportation equipment	-.048	-.088	.072	.110	.000	.042
38 ^b	Instruments and related products	.076	.019	.037	.018	-.143	.051

^aOne year lag, ^btwo year lag, ^cthree year lag.

¹Residual employment change used as the dependent variable.

sistent with other findings.¹⁴ High taxes alone are either positively, or not at all, associated with economic growth. They did find, however, that the proportion of tax revenues going into transfer payments is negatively correlated with economic growth. The Crime-Transfer factor does not appear to have strong influence, but that is not necessarily inconsistent with this finding. Certain elements of transfer payments are found in the Income-Education factor, which is shown to be relatively important and negative in association with residual growth in the industrial groups.

The calculated rank correlations between state rankings on both unweighted and weighted mean business climate and state rankings on mean industry group performance are shown in Table 5. An increase in the value of the rank correlation using weighted business climate scores compared to that calculated with unweighted scores, indicates that the weighting system is superior. The 13 industry groups which exhibit this relationship may be placed in one of three groups in which the use of weighted mean business climate scores in comparison with the use of

unweighted sources:

- (a) Increases the rank correlation to a significant level, or
- (b) Increases an already significant rank correlation, or
- (c) has no significant impact on an already insignificant correlation.

Thirteen of the eighteen industry groups examined have a statistically significant relationship between their recent performance and business climate as measured at the state scale.

How Business Climate Affects Industrial Performance During Recessions: A Hypothesis

The data in Table 7 provide the basis for a hypothesis concerning the role of state business climate during periods of national economic recession. The hypothesis suggests that business climate may explain at least partially the uneven effects of recession on various regions. The table lists the annual multiple correlations between state business climate factor scores and industrial performance measures, and national measures

¹⁴Romans and Subrahmanyam

Table 7. Annual Multiple Correlations (R) Between Business Climate and State Industrial Performance Indicators and Annual Measures of National Economic Performance

Layoffs			Manufacturing Employment		
Year	Mean Layoff Rate ¹	R ³	Year	Growth Rate ²	R ³
1970	17.5	.516	1970	0.94601	.607
1971	15.7	.607	1971	0.94225	.630
1972	11.6	.593	1972	1.00780	.536
1973	10.2	.497	1973	1.04370	.527
1974	15.4	.576	1974	0.99201	.197
1975	19.1	.707	1975	0.90889	.267
1976	11.6	.600	1976	1.01640	.301

Source: Calculated by the authors.

¹Reporting states only.

²Regression coefficients, x , from $EM_{jt} = y + xEM_{jt-1} + e_j$

³Three year lag.

of mean annual layoff rate and manufacturing employment growth rates.

There appears a dichotomy concerning the very high correlation between state business climate and layoff rates, and the very low correlation between state business climate and change in manufacturing employment during the deep recession year of 1975. This relationship is not evident during the recession of the early 1970s. It becomes more subtle if the secondary role of business climate is considered in the context of a national recession due in part to external forces. A key difference in the two indicators should also be emphasized. Layoffs can be considered an active response to economic conditions while declining manufacturing employment can result from more passive responses, such as the allowance of attrition in a firm's employment.

The 1974-1975 recession affected the entire nation, and in general its impact was initially distributed evenly. The lowest correlation between business climate and residual change in manufacturing employment occurred in 1974, the first year of the recession. The low level of this correlation indicates that there was no regional concentration of passive response to recession during this first year. The correlation between state business climate and the rising layoff rates of 1974 was about average. In 1975 the secondary

impact of business climate was realized. The correlation between residual change in manufacturing employment and business climate rises, while that between layoffs and business climate is the highest in the series. The more passive response to the recession in 1974 gave way to the more active response of high layoffs in 1975. Further, these layoffs were strongly related to state business climate attributes.

Initially, response to the recession was more general. But in the second year, as the recession deepened and response became more active, business climate became an important variable. The more severe impact of the recession on the labor force apparently occurred in states with certain types of business climates. The secondary role of business climate is underlined in its somewhat delayed impact. In a sense it was brought into play during the second round of response to the recession. These suggestions are not inconsistent with, or meant as an alternative to, the type of regional cyclical fluctuations dependent on industrial or urban growth patterns. Without firm control of the role of industrial structure, however, this interpretation must remain guarded. The role of business climate can be viewed perhaps as that of a steering current to geographic economic impulses. Business climate may provide a partial explanation of some of the

uneven regional impacts of national economic recession.

The data in Table 7 indicate that this hypothesis does not hold for the earlier recession. This may be attributable to the more moderate nature of the first recession and, more importantly, in the much greater uncertainty of the second recession caused by sharp increases in the price of oil. Ironically, the directly unmeasurable "good" business climate may serve as insurance in periods of great uncertainty, such as 1974-1975. Perhaps lower levels of regional or state uncertainty can serve as a counterweight to great uncertainty in the national economy. It is too early to determine if evidence from the current deep recession supports this hypothesis. Considerable uncertainty does appear in the national economy, as in the 1974-1975 period, although this uncertainty concerns innovative federal policy rather than external shock.

State Business Climate and Regional Industrial Change in the United States

Our major concern has been an empirical assessment of the spatial association between state business climate and industrial activity. We now consider briefly the implications of differences in state business climate for the regional pattern of industrial activity in the United States.

The weights derived for several industries provide supportive evidence for the product cycle approach to understanding regional development. Product cycle theory postulates stages of product development that are technologically based and geographically separated.¹⁵ In the final of three product cycle stages the importance of high technology diminishes greatly as the product becomes standardized and production is shifted to areas where lower general production costs prevail. Low cost labor is especially important when the product is in the standardization stage. Specific evidence is provided by textile and apparel which can be generally considered in the standardized production stage. Their performance has a strong negative association with the Income-Education factor of business climate. The case

for the product cycle's applicability to regional trends in the United States is weakened, however, by the mixed rather than totally positive association of the Income-Education and Labor factors with performance in the high technology industries.

Conclusion: Business Climate and the Geographic Evolution of the American Economy

The first phase of modern American industrialization began in the 1860s and extended through World War II—a period that witnessed the evolution of the American industrial coreland. During this period manufacturing spread westward from the Northeast, but simultaneously formed massive concentrations with distinctive industrial structures within the coreland. The periphery experienced a lag in economic evolution. Though a limited population and resource base may account for lags in portions of the periphery, the same argument cannot be extended to the southern segment. The South developed a relatively high population density, but sustained itself with a distinctive agrarian economy. That eventually contributed to a widening disparity between coreland and periphery in industrialization, urbanization, education, housing and income levels. During this first phase, business climate was an insignificant factor in the industrial growth of the coreland. However, the last several decades of this period witnessed the development of a foundation for business climate which was to become of major importance. The rise of politically powerful labor movements in the industrial coreland clearly signaled the arrival of attitudes which now give character to that business climate. The time at which this initial phase of regional development ends cannot be precisely dated; however, it seems that the 1940s and 1950s were clearly a transition period which culminated in a distinctive second phase of the American economy's geographic evolution.

The second phase in the evolution becomes evident in regional development during the post World War II years, though its roots are evident much earlier. This second phase is one in which the industrial coreland experienced continuous comparative decline in manufacturing status (although not absolute), while the

¹⁵R. Vernon, *Metropolis 1985* (Cambridge, Massachusetts: Harvard University Press, 1960).

periphery gained. The absolute losses were probably avoided because of the region's ability to continue functioning as a seedbed where new high technology and capital intensive industries offset closures.¹⁶ The conventional location factors retained significance for some industries, fostering industrial growth. Also, the returns to factors of production remained high enough so as not to totally discourage new investment.

Ultimately innovative capacity diminished and absolute losses occurred in the coreland. While the periphery has experienced comparative growth, the American industrial coreland has matured to a point where its once certain supremacy over other regional economies is being lost. The coreland's seedbed function or capability to generate industry replacements (innovation) is rapidly being diminished.¹⁷ The evidence is seen in industrial employment losses and the spread of high-technology industries to peripheral regions.

Regional business climate distinctions may only have become succinct enough to emerge as a location factor during the past two decades. However, the forces generating these environments have long been present. Recently, business climate has been cited to explain differences between the economically stagnating Northeast and the more vigorous Southeast of the 1970s. In a developed and democratic region with a mature level of economic development, organized interest groups emerge to a level of power and influence which inhibit, even if not intentionally, economic growth on

the producer side.¹⁸ The negative impact may take the form of denying new entrants, delaying innovation and efficiency moves (spatial or others), and reallocating of resources. Differences in regional development, however, permit variation in the strength of organizational interests which might inhibit economic growth. The South is relatively free of such institutional barriers, partially explaining current southern growth in the face of near stagnation elsewhere. Environmental differences reflect variations in population growth rates, attitudes toward industry and commercialism, labor legislation, unionization levels, tax levels, social welfare legislation, and organized interest groups. The very nature of business climate is then related to the length of time a region has served as an industrial coreland and to the power of the region's special interest groups.

Business climate is a product of evolutionary forces, and as such is not likely to be altered by quick fixes. The strengthening of industrial recruitment efforts through financial incentives, in the form of industrial revenue bonds or tax abatements, may be effective in luring several individual firms. However, such measures do little to alter business climate and are always subject to competitive reaction from other states. States with declining industrial bases should instead emphasize their positive attributes. Characteristics such as skilled labor forces and large markets are still powerful factors in the location of industry and they are not subject to erosion through political activity in competing states.

—James S. Fisher and
Dean M. Hanink

Fisher is Professor of Geography at the University of Georgia; Hanink is Professor of Geography at the University of Connecticut at Storrs.

¹⁶Norton and Rees.

¹⁷Norton and Rees.

¹⁸M. Olson, "The Causes and Quality of Southern Growth," *The Economics of Southern Growth*, edited by E. Glaine Liner and L.K. Lynch (Durham, North Carolina: The Southern Growth Policies Board, 1977).

APPENDIX

The weights are calculated as the partial regression coefficients derived in lagged multiple regressions of an industry performance variable (IP) on the six business climate variables (factor scores). It should be noted that these regressions were not conducted in the interest of inferential treatment and, in any case, derived estimates are possibly biased and lack precision. The regressions were used primarily to derive the weights for the business climate factor scores. Lagged regressions were considered more appropriate to avoid direct relationship between the employment-based industrial performance variable and parts of the independent business climate variables, for example transfer payment levels. The use of a lag in the regressions does not eliminate this bias, but instead relegates it to a less direct trend. The length of the lag (three years) was selected because it was found to be meaningful in a related study by Genetski and Chin (1979). The performance measure (IP) in each year 1970-1976 was regressed on the business climate variables for each year 1967-1973 in the three year lag system.

State rankings on weighted mean business climate for the years 1967-1973 are correlated with state rankings on mean industrial performance as measured by an aggregate indicator's mean value for the years 1970-1976. The assessment of the relationship between state business climate and industrial performance is ordinal. This does not require the interval scaling of state business climate and so simplifies the analysis.

Two important points must be considered in assessing the empirical results. First, the results are conditioned by the definition of the various business climate dimensions. The choice of the original business climate variables, despite the ensuing factor reduction, provides an element of subjectivity in the determination and composition of the salient business climate factors. The fact that the original variables used in this study are generally consistent with those used in the Fantus and Grant studies indicates, however, that the variables were selected by suitable criterion. Second, there is a degree of interrelatedness between business climate and industrial structure. This interrelatedness has not been controlled for in the following analysis. Conventional growth and location factors, such as the market and labor costs also have not been firmly controlled. However, the results are sought more in the interest of investigation and hypothesis generation than in firm conclusion and hypothesis testing.

Weights of mean business climate factors are shown in Table 5. The signs are positive in relation to layoff rates, with the exception of Income Tax Revenue, and are all negative in relation to the state manufacturing employment residual. This is consistent because a high layoff rate indicates poor performance in the manufacturing sector while a high employment residual indicates a good performance. In both cases, the closer a weight is to zero the smaller its impact, and the less importance given to that business climate factor.

Migration: Changing Faces of the South

A close examination of interregional migration patterns in the last two decades reveals some significant changes in the South's traditional demographic profile.

An important turnaround in South-to-North migration took place in the 1970s. The Census "South"¹ lost population through internal migration in each of the first six decades of the 20th Century and most southern states continued to experience out-migration through the 1960s. In the 1970s, however, net migration losses from most southern states were reversed. Today, the region is attracting a burgeoning number of people from other parts of the country and more southerners are "staying home."

¹This region includes Delaware, Maryland, D.C., Virginia, W. Virginia, N. Carolina, S. Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

This article reviews the magnitude and reasons for the dramatic turnaround in South-to-North migration and points out some little-known changes in southern migration patterns which seem to have emerged in recent years. Some highlights are:

- The South is attracting more than 350,000 people each year compared to only 130,000 annually in the late sixties.
- Migration is now adding more women than men to the South's population.



- For the first time, inter-regional migration is adding to the South's black population.
- Experienced workers are becoming a more dominant force in the South's migration gains.
- The South is now gaining workers in all occupations; in the late 1960s only white collar workers and skilled craftsmen flowed into the South.
- The South has benefited from a North-to-South "brain drain" as a result of recent migration.
- Recent migration has helped to lower the incidence of Southern poverty.

These newcomers, drawn by the rise of the "New South," are also changing the South. We will discuss how they are changing the South and also look forward to the likely course of migration streams in coming years.

Changing Opportunities Have Caused the Migration Turnaround

The northern and western trek of southerners for most of this century is linked to the nation's pattern of economic development. Until recently, industries concentrated in the Midwest and Northeast as the country raced to world leadership in manufacturing production. Meanwhile, the South lagged behind the rest of the nation in adapting to technological change and industrialization; as a consequence, job seekers surged out of the region. The 1930s depression and, later, mechanization of farming also pushed numerous low-income farmers to better opportunities outside the region. (Of course, the South was growing before the 1970s, but it still had surplus labor.)

The population shift to the South actually traces to the decade of the 1960s as southern out-migration slowed, in-migration to the South increased, and return migration of southern-born picked up.² But most southern states continued to lose population then through migration. Population gains were heavily concentrated in a few states, like Florida and Texas, which have gained from migration throughout this century.

Most of the South's newcomers in recent years have been white. Blacks continued their

exodus through the 1960s. However, in the 1970s the black out-flow was also reversed and by the end of the decade the South's black migration gain was accelerating. As the 1980's began, the decades-long tide from South to North and West had not only ebbed, but sizable white and black flows back into the region were adding to the South's population (see Box 1).

The migration balance now shows the South far out in front among the nation's regions. In the 1970s, the South gained 3.6 million residents from interregional migration, while the West gained 1.6 million, the industrial Northeast lost 2.8 million and the North Central lost 2.4 million.³ The reversal of the South's tide of out-migration is even more remarkable because so many Southern states have participated in the turnaround (see Box 2). Furthermore, the importance of migration gains is increasing; to gain population now, when natural increase is low, a region must keep its native-born and attract new residents from other regions.⁴

Why has the South recently been so successful in retaining its native population and in attracting Northerners and others to the region? Although a variety of complex forces are at work, a basic answer is that changes in the structure of the U.S. economy and the lifestyle of its people now favor production growth in the region. And production of goods and services, "robotics" aside, requires people!

The rise of the New South is partly related to the nation's shift away from reliance on heavy manufacturing industries toward "high tech" and service industries. New or expanded plants and firms in these industries are following the labor-intensive and low-wage industries (textiles, apparel) and natural resource industries (forest products, oil and gas, chemicals) which located here after World War II. These businesses and people are gravitating to the South because of "push" factors—high taxes and labor unionization elsewhere—as well as "pull" factors—the availability of lower-cost resources here.

The South's generally favorable business climate is bolstered by a mild-weather climate

³The data used in this study are from the 1970 Census of Population and the March 1980 round of the Current Population Survey. It is important to note that, because the CPS is a sample survey, apparent changes or differences noted in this article could be due to sampling error.

⁴International migration, in addition to natural increase and interregional migration, is the third possible source of population gain. Indeed, such states in the South as Texas and Florida have gained substantial population from this source in recent years. However, except for the data presented in Box 2, this article deals only with the magnitude and characteristics of interregional migrants.

²Larry H. Long and Kristin A. Hansen, "Trends in Migration in the South," *Demography*, 12:4 (November, 1975), pp. 601-614.

**BOX 1:
WHERE ARE MIGRANTS TO THE
SOUTH COMING FROM?**

Another way to view the turnaround in migration patterns from the late 1960s to the late 1970s is to examine how interregional migration patterns have changed.

In the period 1965-70, the South enjoyed a favorable migration balance against the rest of the nation (see Table A). Two-thirds of the net flow of people came from the Northeast which, in 1970, contained only 24 percent of the nation's population. In this period, the South still had a negative balance with the West. In terms of gross exchange, the South and North Central connection was, by far, the most significant for our region; over 2.3 million people crossed the borders between southern and North Central states.

There were two significant changes in these patterns by 1975-80. Migration between the South and West came to favor the South and the migration flows increased substantially from 1965-70. The Northeast continued its role as "loss leader" to the South and the North Central region continued to have the largest amount of interchange with the South.

The South's black population flowed out of the South to all of the other regions in the late 1960s. (See Table B). The North Central region was the big gainer with 107,000, while the Northeast gained 51,000 and the West gained 58,000. As with whites, the region with the largest gross black exchange with the South in the late 1960s was the North Central.

By the late 1970s, black migration had turned completely around so that the South now gained 142,000 from the Northeast, 27,000 from the North Central region, and 26,000 from the West. The black turnaround totaled 411,000, representing 37 percent of the increase in net migration to the South from 1965-70 to 1975-80. Clearly, this turnaround in the migration patterns of blacks is an important demographic event of the 1970s which will influence the economy of the South in coming years.

Table A. Total Migration To and From the South (Age 5 and Over) (thousands)

	1965-70			1975-80		
	To the South	From the South	Net Migration	To the South	From the South	Net Migration
Northeast	1,064	626	+438	1,452	589	+ 863
North Central	1,282	1,007	+275	1,688	950	+ 738
West	796	853	- 57	1,064	901	+ 163
TOTAL	3,142	2,486	+656	4,204	2,440	+1,764

Table B. Black Migration To and From the South (Age 5 and Over) (thousands)

	1965-70			1975-80		
	To the South	From the South	Net Migration	To the South	From the South	Net Migration
Northeast	69	120	- 51	192	50	+142
North Central	57	164	-107	121	94	+ 27
West	36	94	- 58	102	76	+ 26
TOTAL	162	378	-216	415	220	+195

and a comfortable and relatively low-cost life-style. These factors go a long way towards explaining the region's attractiveness to the growing pool of retirees. They also help explain the southward trek of an increasing number of footloose service industries created by the nation's shifting production structure.

These and other reasons account for the phoenix-like rebirth of the South. The enormous changes hold great promise for further growth of the region. But we must understand how the region is being affected by people flows to fully appreciate these changes. What are these migrants bringing to the party?

Migration adds workers, who then spend their wages on everything from homes to cars to ice cream for their children. As voters, they also demand that schools, roads, and hospitals be built with money from the public coffers. We know that migrants tend to be young and well educated; on the other hand, we also know that Florida has been a mecca for the elderly. Has the South's favorable migration balance changed the region's population composition in such a way as to add to, or subtract from, the public coffers? A careful comparison of late-1960s migrants and late-1970s migrants provides tentative answers to these questions and clues to other

important consequences of the recent migration turnaround.

The South Is Attracting Many Different Faces

Startling changes have occurred in the South's migration streams since 1965. The South's population gain from migration more than doubled from 130,000 per year in the 1965-70 period to over 350,000 per year in 1975-80. The rate⁵ of net migration to the South also has more than doubled over the same period, from 1.1 percent to 2.7 percent of the South's population. But this rate, it should be emphasized, is influenced by the tendency of people to migrate at different ages *and* by the number of people in the various age groups. As we will see, the high migration rate to the South in the late 1970s occurred partly because members of the large Baby Boom generation were reaching a time in their "life cycle" when they were most likely to move.

⁵"Rates" referred to in this article are not rates on an "at risk" basis (due to unavailability of data). Instead, they refer to the relevant number of migrants with a particular characteristic as a percentage of the relevant end-of-period resident population with the characteristic.

Table 1. Interregional Migration: 1965-1970 and 1975-1980
(Number in Thousands)

	North-east	North Central	South	West
1965-1970:				
In-migrants	1,273	2,024	3,124	2,309
Outmigrants	1,988	2,661	2,486	1,613
Net migration	-715	-637	+656	+696
1975-1980:				
In-migrants	1,106	1,993	4,204	2,838
Outmigrants	2,592	3,166	2,440	1,945
Net migration	-1,486	-1,173	+1,764	+893

Source: Bureau of the Census, **Geographical Mobility: March 1975 to March 1980**

Generally, the acceleration of the South's migration gain was caused by an increase in people moving into the South and a decrease in people moving out (see Table 1). In the process, the economic and demographic characteristics of the migrants have changed. For

Table 2: Percent Distribution of Southern Migrants by Selected Characteristics for Persons Age 5+

Age	Non-South U.S. Population		South Population		In-Migrants		Out-Migrants		Net Migrants	
	1970	1980	1970	1980	'65-'70	'75-'80	'65-'70	'75-'80	'65-'70	'75-'80
5-14	21.7	16.6	22.3	17.4	20.3	18.6	23.4	19.1	8.7	18.0
15-24	18.8	20.1	19.7	19.7	28.1	19.9	28.0	23.1	28.4	15.4
25-34	13.4	17.6	13.4	17.0	19.4	25.6	25.5	33.3	-3.6	14.8
35-44	12.4	12.3	12.3	13.0	11.2	12.2	11.4	10.6	10.5	14.3
45-64	22.8	21.8	21.8	20.9	13.3	16.3	8.9	9.5	30.3	25.8
65+	10.9	11.6	10.5	12.0	7.7	7.5	3.0	4.4	25.4	11.7
Total ('000)	128,630	136,473	57,426	65,742	3,142	4,204	2,486	2,440	656	1,764
Rate	—	—	—	—	2.4	3.1	4.3	3.7	1.1	2.7
Race										
% Black	7.4	8.2	18.6	17.9	5.2	9.9	15.2	9.0	-32.9	11.0
Total	9,462	11,252	10,686	11,785	162	416	378	220	-216	195
Black rate	—	—	—	—	1.7	3.7	3.5	1.9	-2.0	1.6
White rate	—	—	—	—	2.5	3.1	4.5	4.1	1.9	2.9
Sex										
% Male	48.4	48.2	48.5	48.4	53.2	49.5	51.8	50.2	58.8	48.6
Total	62,324	65,769	27,843	31,798	1,672	2,083	1,289	1,225	386	858
Male rate	—	—	—	—	2.7	3.2	4.6	3.8	1.4	2.4
Female rate	—	—	—	—	2.2	3.0	4.1	3.6	.9	2.4

**BOX 2:
CHANGING PATTERNS OF TOTAL
MIGRATION TO SOUTHERN STATES**

When detailed migration data from the 1980 Census of Population is released next year, it will allow us to examine effects of total migration—interregional and international—on individual southern states. In the meantime, estimates of total migration (but not the characteristics of international migrants) are available from other researchers. How have these migration patterns changed for individual states?

William J. Serow (Florida State University) and Dudley L. Poston (University of Texas) have estimated the components of population change for the nation, its regions, and southern states in the 1960-70 and 1970-80 periods. They estimate total migration gains for the states as the residual differences between the states' populations in 1970 and 1980 after adding births and subtracting deaths during the decade. Their results are shown in the table.

One of their major findings is that all southern states gained population from migration in the 1970s (the District of Columbia was the only area of the South to register net out-migration in the decade). In contrast, nine southern states lost population from migration in the 1960s. Serow and Poston also claim that "the singularly striking feature of migration trends in the 1970s" is this turnaround in many southern states' migration trends (including such Sixth Federal Reserve District states as Alabama, Louisiana, Mississippi, and Tennessee).

The dramatic turnaround from net out-migration to net in-migration in so many southern states, they say, explains why the South was the only region with a population growth rate higher in the 1970s than in the 1960s. The strong southern migration gain more than offset the falling rate of natural increase for the nation. Equally important, the changing migration streams point to the "emergence of the South as a region of broadly based growth."

Even though many more southern states are now gaining population from migration, two states' gains dominate the region. Florida and Texas together accounted for almost half the region's population increase in the 1970s. Fully 60 percent of the South's 7.5 million net migrants moved into these states. It is likely that these states received disproportionate numbers of immigrants from Latin America and the Caribbean, and, domestically, were favored by economic growth and federal spending on military installations. Florida, as noted elsewhere, also attracts numerous retired people.

Southern migration patterns changed sharply over the past twenty years.

(Thousands)

Net Migration

1960-70 1970-80

South Atlantic



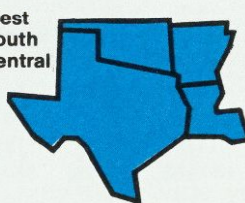
W.V.	-265	WV	111
MD	385	MD	57
DE	38	DE	8
DC	-100	DC	-150
VA	141	VA	351
NC	-94	NC	370
SC	-149	SC	269
GA	51	GA	440
FL	1,326	FL	2,716

East South Central



KY	-153	KY	205
TN	-45	TN	389
AL	-233	AL	178
MS	-267	MS	81

West South Central



OK	13	OK	295
AR	-71	AR	230
LA	-132	LA	187
TX	146	TX	1,761

Source: William J. Serow and Dudley L. Poston, "Demographic and Economic Changes in the South," *Texas Business Review*, January-February, 1982.

example, women have gained relative to men, and blacks have gained relative to whites (see Table 2). In addition, the age composition, educational levels, types of occupations, and poverty characteristics of the migrating and resident populations have changed.

Females and Blacks Have Increased Their Net Migration Shares

Migration to the South in the 1965-70 period tended to increase slightly the ratio of males to females. The population gain due to migration favored males by a ratio of six to four. Today, however, both sexes have the same odds of migrating; and, because women are more numerous than men, migration is increasing the proportion of women in the southern population.

There has been an even more pronounced change in black migration patterns. In the 1965-70 period black migration subtracted from the population of the South in all age groups (see chart 1) and lowered the black share of the region's population. In sharp contrast, by 1975-80 net migration of blacks of all ages turned positive. Net migration in 1975-80 amounted to 1.6 percent of the 1980 black southern population compared to -2 percent of the 1970 population in the earlier period.

In spite of the dramatic turnaround in the migration pattern of blacks, migration flows in the 1975-80 period still reduced the black share of the South's population. This was due

to the increased tendency of whites to migrate to the South and the fact that the white population was much larger than the black population. But given higher black fertility and the new migration trends, the black percentage of the South's population is likely to increase in coming years.

Baby Boomers Have Made Their Presence Felt

The age distribution of the South's newcomers changed significantly in the two periods. Most notably, the share of net migrants age 45 and over fell precipitously, from 55.7 percent in 1965-70 to 37.5 percent in 1975-80. Their share fell largely because the net migration rate of the Baby Boom generation increased. The net migration rate of the 25-34 population went up sharply, from -.3 percent in 1965-70 to 2.3 percent in 1975-80.

The changing age distribution of migrants, however, had little effect on the age distribution of the southern population in either period. The number and age distribution of migrants were dominated by the age distribution of the resident population. But for particular states in the South such as Florida, which attracts a large share of elderly migrants, the impact of migration on the age distribution was quite significant.

Changes in the age characteristics of those moving into and out of the South are also

Chart 1. Black Net Migration Rates Turned Around in All Age Groups

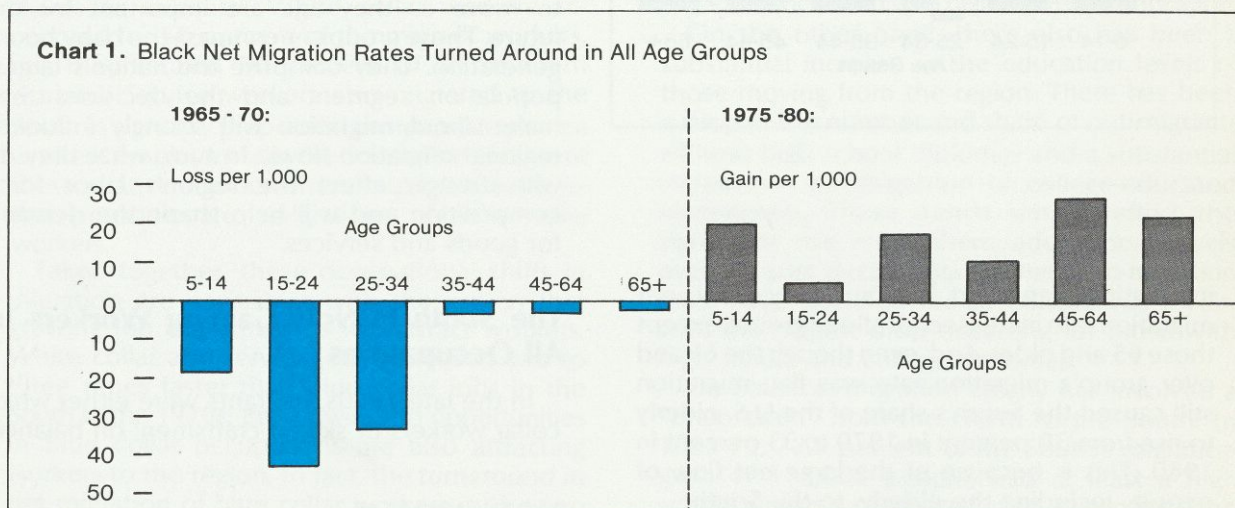
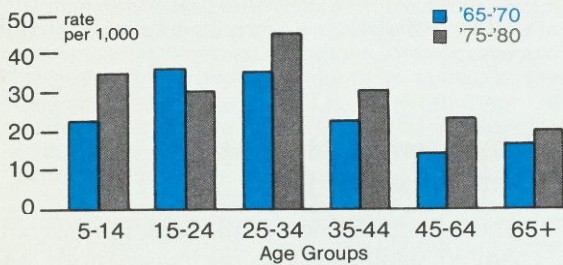
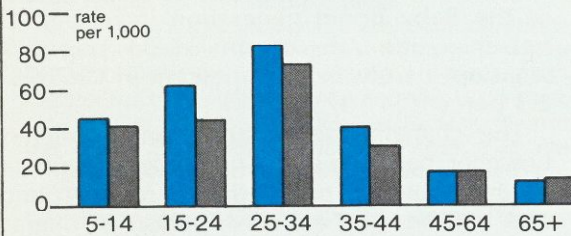


Chart 2.

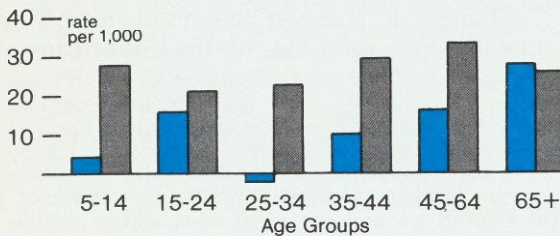
Since 1970, there has been an increasing tendency to move to South from outside and . . .



a decreasing tendency of southerners to move out of region . . .



thus contributing to the South's gain.



interesting (see chart 2). On balance, the net migration rate increased for all age groups except those 65 and older. And, even though the 65 and over group's migration rate was flat, migration still caused the South's share of the U.S. elderly to rise from 30 percent in 1970 to 33 percent in 1980. This is because of the large net flow of people, including the elderly, to the South.

Changes in the patterns of migration for those age 15-24 and 25-34 also seem startling. In the age group 15-24, the net migration rate increased slightly, from 16 per 1,000 to 21 per 1,000. The net gain, 85,000 is due entirely to the turnaround in net black migration, which amounted to -98,000 in 1965-70 but +13,000 in 1975-80. The number of movers age 15-24 into the South fell by 47,000 but black in-migration increased by 37,000; total moves out of the South fell by 132,000 with over half that decline attributable to the much smaller black population. Thus, the South in the 1970s began to keep its young, native black and to attract young blacks from other regions.

Changing migration patterns of blacks age 25-34 also contributed to the sharp increase in net migration of the 25-34 population. Southern net-migrants in this age group increased by 180,000, while black out-migration fell by 17,000. Viewed another way, the black population accounted for one-fourth of the turnaround of 286,000 in net migration and the black share of in-migrants rose from 5.9 percent in 1965-70 to 9.2 percent in 1975-80.

In fact, these sharp reversals are somewhat misleading. An important reason for the changes in these two young age groups is that in-migration of those age 15-24 in the 1965-70 period is exaggerated by those entering military service and being sent to southern bases. Similarly, out-migration of those 25-34 is exaggerated by personnel departing military service and returning to their home states.⁶

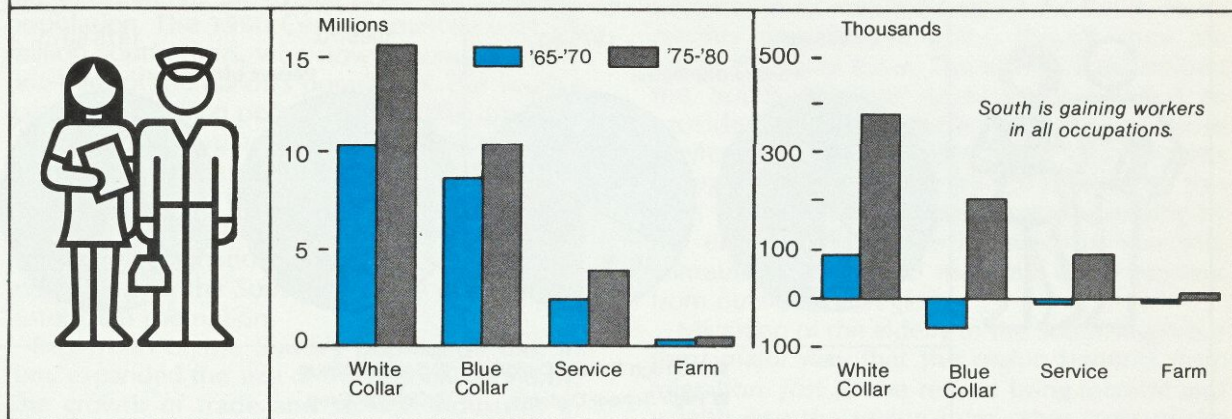
Today, in the absence of war, changes in the tendency of people in these two young groups to move as they age are important for the future. These groups encompass the baby boom generation. They comprise the nation's largest population segment and the decisions they make about migration will strongly influence regional migration flows. In turn, what they do will strongly affect the region's labor force composition and will help shape the demand for goods and services.

The South Is Now Gaining Workers In All Occupations

In the late 1960s, migrants were either white collar workers or skilled craftsmen; on balance,

⁶Long and Hansen, *op. cit.*

Chart 3.
OCCUPATIONS: of Resident Population



blue collar, service and farm workers flowed out of the region. In the 1975-80 period white collar workers still dominated the South's new arrivals, but the other occupational groups have begun to flow into the region as well (see chart 3).

The South's major employment shifts in the decade of the seventies were increases in the white collar and service workers' shares of employment. A comparison of the distribution of 1975-80 migrants' occupations with the occupational distribution of the South's resident population in 1980 shows that migration into the region helped white collar and service shares to increase. White collar workers accounted for 55 percent of the migrant workers, but they totaled 50 percent of all southern workers. Service workers also migrated to the South in a greater proportion compared to service workers' employment in the South. The flip side of these relative additions from migration was less-than-proportionate migration of blue-collar workers.

Taken together, these occupational shifts in migration are consistent with the notion that growing job opportunities will attract workers. White collar and service jobs increased two to three times faster than blue collar jobs in the South in the 1970s. But growing job opportunities in blue collar occupations are also attracting workers to the region. In fact, the *turnaround* in net migration of blue collar workers in the two

periods, 267,000, is almost as large as the 293,000 increase in white collar migrants.

The South has Benefited from a "Brain Drain"

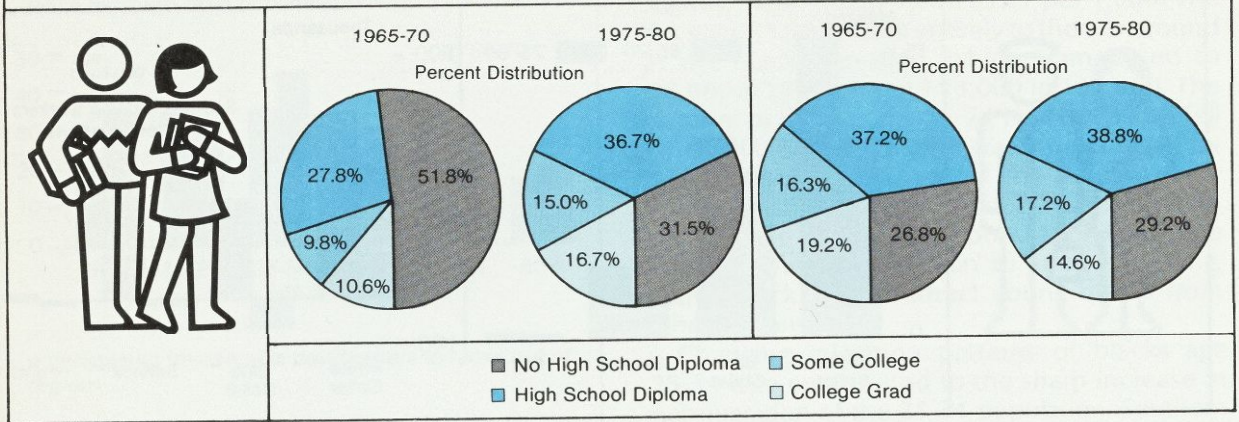
Roughly one-third of the people age 25-64 who entered the South in both periods had a high school education while the share of in-migrants with some college study or a degree increased over the two periods. Migration rates for all categories of educational achievement rose, partly because of the national increase in educational levels. The tendency to migrate to the South increased with higher levels of education.

On the other hand, there also has been a substantial increase in the education levels of those moving from the region. There has been a drop in the number and share of out-migrants without high school diplomas and a substantial increase in out-migration of college-educated southerners. These trends simply reflect the significant rise in southern educational levels over the past decade. Southerners' out-migration rates have declined for all educational levels, with the biggest drop occurring for those with high school and college diplomas.

On balance, migration clearly has involved a "brain drain" from the North to the South. In 1965-70, 72.7 percent of the South's migration gain, or 174,000 people, had at least a high school diploma, compared to 48.2 percent of the

Chart 4.
EDUCATION of Resident Population

of Net Migrants



South's resident population (see Chart 4). In 1975-80, migration added 833,000 people with at least a high school diploma to the South's population. In the latter period this group represented 70.6 percent of the South's migration gain; meanwhile, the South's resident population in this category rose to 68.5 percent. These data indicate that the relative education gain to the South has declined over the two periods.

This narrowing of the relative education gain to the South from migration is most evident in the data concerning college graduates. In the 1965-70 period, 19.2 percent of the net migrants possessed college degrees compared to 10.6 percent of the resident population. By 1975-80, the share of migrants with college degrees declined to 14.6 percent, or 2.1 percent less than this group's share of the South's resident population. However, *absolute* migration still added 172,000 people in this category to the South's population.

Migration has Helped Lower the Incidence of Southern Poverty

Southern migration gains have tended to lower the share of the South's population living in poverty in both five-year periods.⁷ But, like differences in educational levels, the poverty mix of migrants and the resident population has narrowed in the two periods. In 1965-70, some 12.9 percent of the net migrants were

poor compared to 20 percent of the southern population. By 1975-80 the share of the South's population which was poor dropped to 14.5 percent while the share of poor migrants declined only to 11.7 percent.

Among whites, newcomers with above-poverty incomes grew more than twice as fast as the number of poor migrants between the two periods. However, because of advances made against poverty in the South, the white migrant gain in both periods was proportional to the above-below poverty mix of the South's resident population. In the 1975-80 period, 90 percent were above-poverty compared to 85 percent in the earlier period.

Blacks, on the other hand, were net movers from the South in 1965-70; one-fifth of them were poor. This black migration lowered the overall share of net migrants who were poor compared to the South's overall poverty rate. On balance, poor blacks entered the South in the 1975-80 period. However, there were relatively fewer poor black migrants compared to the resident southern black population (26 percent versus 32.5 percent). Thus, migration has tended particularly to lower the poverty mix among southern blacks.

⁷The South's share of the nation's poverty population also dropped—from 46 percent in 1969 to 42 percent in 1979. Despite the South's relative improvement in reducing poverty, the South still had more poor persons in 1979 than any other region (10.6 million) and the highest poverty rate as well (15 percent). See Bureau of the Census, **Population Profile of the United States: 1980**, Current Population Reports, Series P-20, No. 363.

Consequences of Southern Migration

Generally, migration is playing a significant role in expanding the overall size of the southern population. The 1980 Census counted over 75 million southerners, who now account for fully one-third of the nation's population. The South's gain of 12.5 million people in the 1970s amounts to slightly more than half of the nation's total population increase. Changing migration patterns help explain the South's population growth of 20 percent in the 1970s compared to 11.4 percent for the nation; in the 1960s, before the migration shift, the South grew only one percent faster than the nation.

Expansion of the South's population has, in turn, expanded the size of the regional economy. The growth of trade and service industries in the South, for example, is largely the result of population shift to the South.⁸ The construction industry is also heavily dependent on population pressures to provide more housing, factories and highways. Equally dependent are the housing-related finance, insurance, and real estate, transportation, and public utilities industries.

Expansion of the region's economy via population shifts also can enhance the efficiency of producing for local or national markets. (Recall Adam Smith's dictum, ". . . specialization and division of labor is limited only by the extent of the market"). In addition, market-enlarging migration can lower the per capita cost of "social infrastructure" (like roads, schools, and hospitals). This is because a fixed expense is shared among a larger number of workers.

A second important way that migration has benefited the South is through the effect of the composition of migration on employment. There are several ways that migration should have had a favorable employment impact. Young trained workers have provided skills to fill local shortages or labor bottlenecks. Job opportunities have attracted engineers to Louisiana, Texas, and other parts of the South where the energy industry has burgeoned, and have brought computer scientists and programmers to such white collar areas as central Florida and Atlanta.

The addition of mature workers, increasingly a force in migration to the South, should also have helped employment and increased pro-

ductivity. Older workers bring skills and experience with them and have lower absenteeism than young workers. Perhaps surprisingly, the addition of retirees has helped the South make relative employment gains, though they are not in the labor force. The elderly have helped the South because workers are needed to provide services to them. Furthermore, these services are paid for with savings and pensions brought into the region by the retirees. In this way, "autonomous" migration and spending by the elderly (who come in search of sun and, sometimes, even surf) may pull other workers from outside the region.

Migration of the elderly to the South suggests a third major way that the region benefits from migration. Just as the retired bring income and wealth into the region from other parts of the nation, so, too, do young and mature workers. What the workers bring is "human capital," or skills, which have been developed and paid for by other regions where they were trained. It is even likely that skilled workers have complemented and increased the productivity of the relatively large pool of unskilled southern workers.⁹

On the cost side of the migration ledger, some potential losses from migration should be noted. Migration may foster cultural disagreements—the "Yankee-Confederate" clash is an example which comes to this migrant writer's mind. A more tangible example is the clash of migration-fed urban growth competing with nearby rural interests for scarce land. These localized density and/or cultural problems are examples of the general problem of environmental disruption which change usually brings. (In terms of the natural ecology, a similar example is salt intrusion into vital Florida water supplies.)

Migration can generate other possibly important problems associated with competing demands. For example, poor adults with families and more affluent singles may compete over housing or over providing schools for the young or hospitals for the elderly. But since trade-offs like these are present in all economies, the problem is one of degree and not kind. Fortunately, fast-growing economies like the South

⁸Philip L. Rones, "Moving to the Sun: Regional Job Growth, 1968 to 1978," *Monthly Labor Review*, 103 (March 1980).

⁹Migrants are not taking skilled jobs from southerners. Skilled labor demand is increasing faster than skilled labor supply, so that unemployment rates in the South are normally below national levels, and the southern income per capita is rising more rapidly than the nation's income per capita.

can generate more income throughout the economy. This offsets the need, in a stagnant economy, for someone to lose when another person gains. And the South has benefited doubly because newcomers have helped generate economic southern growth.¹⁰

The Future of Southern Migration

Recent migration to the South is almost surely positive in its impact on the well-being of the region's population. Migration helped increase per capita personal income from 86 percent of the national income level, \$3,945, in 1970 to 91 percent of the national income level, \$9,521, in 1980. But what about the future? Will migration continue and will it benefit the South?

There is some evidence that there has been a tendency for the characteristics of migrants and the resident population to become more alike. This fact suggests that the relative gain to the South of additional migration is declining.

The convergence should not really be all that surprising. For example, young college graduates are more likely to move than those with fewer years of education or those who are older. (Net lifetime benefits to these younger workers is likely to be higher than for older and less-educated people). Since the South's average level of educational achievement has lagged behind the rest of the nation, migration to the South promises to raise its average school years completed. However, because the educational gap between the South and other regions also has been narrowing, the educational characteristics of migrants and of the South's resident population should similarly narrow. If more education leads to greater productivity, then the narrowing of educational differences also means that the South is gaining relatively less from migration. But migration can still benefit

the South through enlargement of the market, for reasons discussed earlier. And the South still is gaining skills which were developed elsewhere.

A persuasive argument can be made that the convergence we have noted is coming about precisely because markets work to eliminate differences in costs and prices across markets. In this view, the benefits of migration should diminish eventually and, with them, migration itself—until differences in opportunities among regions again arise. In the meantime, the fact that strong migration to the South continues suggests that migrants and the region alike are still benefiting from the shift.

It is unlikely that the South's favorable migration balance will be reversed in this decade. For environmental and economic reasons it appears that capital and businesses are still flowing into the South from other regions. It is likely that firms looking to the region are finding the changing composition of the resident workforce—older and more educated—to be an attractive feature of the South. It should also be encouraging to firms that past business investments in the region have succeeded in attracting workers from outside the region.

Two major demographic events are likely to affect migration flows to the region in the 1980s—the falling rate of natural increase for the nation and the aging of the baby boom generation. The low rate of natural increase, combined with changes in the age structure of the population, will slow the growth of the migration pool. If the migration tendencies of the late seventies hold through this decade, the South's yearly migration gains will also hold steady. Further, the aging of the baby boomers suggests that the average age of migrants will rise as older workers should continue to follow business to the South, joining the migration stream of the elderly who are moving to their place in the sun.

—William J. Kahley

¹⁰This point can be made another way. Suppose income of in-migrants is relatively high compared to the resident population. Then consumption, saving, and investment can be higher than in the absence of migration. The higher investment, in turn, generates expansion of the ability of the regional economy to produce, thereby "paying for" the migrants' initial spending which generated the "conflict."

UNEVEN GROWTH:

Southern Population Change at the County Level

I. Southern Growth Trends

The Southeast has undergone remarkable growth and change in recent decades. Strong population gains made the 14-state South, as defined by the Southern Growth Policies Board*, the most populous region in the U.S. by 1980. Even though southern families were having fewer children, massive immigration from other parts of the country offset declining birth rates.

Yet this migration into the 14-state South, estimated at over 4.2 million in the 1970-1979 period alone, was unevenly distributed. Half of the gain was into Texas and Florida, but each of the other states enjoyed a net inflow of migrants.

*Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

Although this state-by-state gain is important in its own right, it also marked the end of a century of net outmigration. That turnaround began in the 1960s, even though the 12 states other than Florida and Texas still experienced a net loss of 1.2 million people over that decade. In the 1970s this turned into a net immigration of over 1.5 million for the same 12 states. Also in the 1970s, for the first time since the Civil War, more blacks moved into the South than left the region. To take a closer look at this uneven growth, we examined population changes at the county level.

Any study of the South's population changes, however, should be viewed in the context of a related trend: a major restructuring of the region's economy. As late as 1958, agriculture remained the South's leading employer. Today

trade, manufacturing, services and government each employ substantially more people than agriculture.

Not only did the South industrialize, but the trade and service sector of the economy developed simultaneously, bringing the region's employment structure more in line with that of the nation. Southern manufacturing, traditionally heavy on labor-intensive and low-wage industry groups, underwent substantial diversification with jobs growth being led by machinery, electronics, plastics, metals and chemicals industries. By contrast, the textile industry lost employees while the apparel and furniture industries had only modest growth. Non-durable goods industries expanded slowly, with losses in textiles, while the durable goods industries grew much more rapidly.

The economic restructuring and rapid population growth had many implications:

(1) Income levels continued to rise faster than those in the nation as a whole. Between 1970 and 1980, income per capita rose from 84 to 89 percent of the U.S. mean. This, coupled with population gains, increased total personal income even more. While still significantly behind national averages, these incomes are a far cry from the 1930s when they attained no more than half the national level. This means not only improved well-being for the individual, especially if living costs are lower, but also stronger markets for various goods and services. In addition it means enhanced tax revenues for state and local governments to invest in the social capital historically deficient in the South.

(2) The shift from farm to factory and service jobs meant that the geographic focus of employment shifted from rural areas to the cities. Urban areas, especially the larger ones, experienced major expansions in the 1960s and the South moved toward becoming as urbanized as the rest of the nation. In the 1970s higher growth rates shifted more to the smaller and mid-sized cities.

(3) There was a major exchange of the population. With the decline of agricultural employment many rural Southerners left the region altogether. Early in the 20th Century, outmigrants were both white and black; but in the 1960s and early 1970s they were predominantly black. By contrast the immigrants, who often moved from a northern city to a southern urban area, were skilled, more affluent and better educated. They were predominantly white, many of them college graduates.

Table 1. Variables in Discriminant Analysis of County Growth Categories

Rank	Variable	Relationship
1	Percent Population, Black, 1970	Very high positive with loss counties Very high negative with growth counties
2	Public Assistance Payments, 1972	Positive with loss counties Negative with growth counties
3	Manufacturing Payrolls(\$), 1972	Positive with loss counties Negative with growth counties
4	Bank Deposits, 1976	Negative with loss counties Positive with growth counties
5	Per Capita Money Income, 1974	Negative with loss counties Positive with growth counties
6	Percent Persons 18 Years and Over, 1970	Positive with loss counties Negative with growth counties
7	Percent Land in Farms, 1974	Positive with loss counties Negative with growth counties
8	Median School Years Completed, 1970	Negative with loss counties Positive with loss counties
9	Retail Sales Per Capita, 1972	Positive with growth types Negative with loss counties
10	Percent Employed in Manufacturing, 1970	Weak all types
11	Rural Farm Population, 1970	Weak relationship all types

This favorable exchange has diminished as more low-income people are moving into the South and as the massive outmigration from the rural South generally has bottomed out.

The improvement of incomes, growth of cities and restructuring of the population occurred in a context of often spectacular growth. New or expanded businesses benefited from enlarged markets, lower operating and construction costs and more favorable business climates. New residents enjoyed lower living costs, a mild climate, a varied recreational environment and an appealing lifestyle.

II. Internal Patterns

A major shortcoming of most population and migration studies is that they deal with the South as a unit or, at best, with the individual states. Such high levels of aggregation necessarily mask dynamic intra-state changes, especially those which occur in sub-areas that cut across state lines. This study analyzes the patterns of population change between 1970 and 1980 in the 680 counties and parishes that make up the states all or partly within the Sixth Federal Reserve District—Alabama, Florida, Georgia, Louisiana, Mississippi and Tennessee—plus the two Carolinas. We used percent change in total population as the measure, since the more discerning measure, net migration, is not yet available from the 1980 census.

We studied population patterns in several ways. First, we grouped counties by population growth rates. This was especially helpful in identifying probable similarities between major environmental regions. Including metropolitan area boundaries made it possible to visualize the urban-rural aspects of population patterns.

We then divided the counties into four growth categories: (1) loss; (2) below national average growth, 0 to 11.4 percent; (3) growth higher than the national rate but below that for the region, 11.4 to 22.1 percent; (4) growth greater than the regional rate of 22.1 percent.

Table 2. Categories of Population Change 1970-1980
(Number of Counties)

	Loss		Gain		Total
	0-11.4%	11.4-22.1%	11.4-22.1%	>22.1%	
Metropolitan	3	22	42	81	148
Metro Core	2	15	26	19	62
Metro Suburbs	1	7	16	62	86
Non-Metropolitan	42	172	186	132	532
TOTAL	45	194	228	213	680

Source: U.S. Census

Note: Metropolitan counties are those included in the Standard Metropolitan Areas (SMSA). Core counties are those that contained the cities for which the SMSA is named. Metropolitan suburban counties are the counties that make up the rest of the SMSA. SMSA definitions current in the late 1970's, prior to the 1980 Census, are the ones used in this study.

Table 3. Population Change 1970-1980

County Type	1970	1980	% Chg.	No. of Counties
Metropolitan	18,935,212	23,830,240	25.9%	148
Metro Core	15,416,189	18,825,315	22.1	62
Metro Suburbs	3,519,023	5,004,925	42.2	86
Non-Metropolitan	13,341,697	15,590,814	16.9	532
TOTAL	32,276,909	39,421,054	22.1%	680

Source: U. S. Census

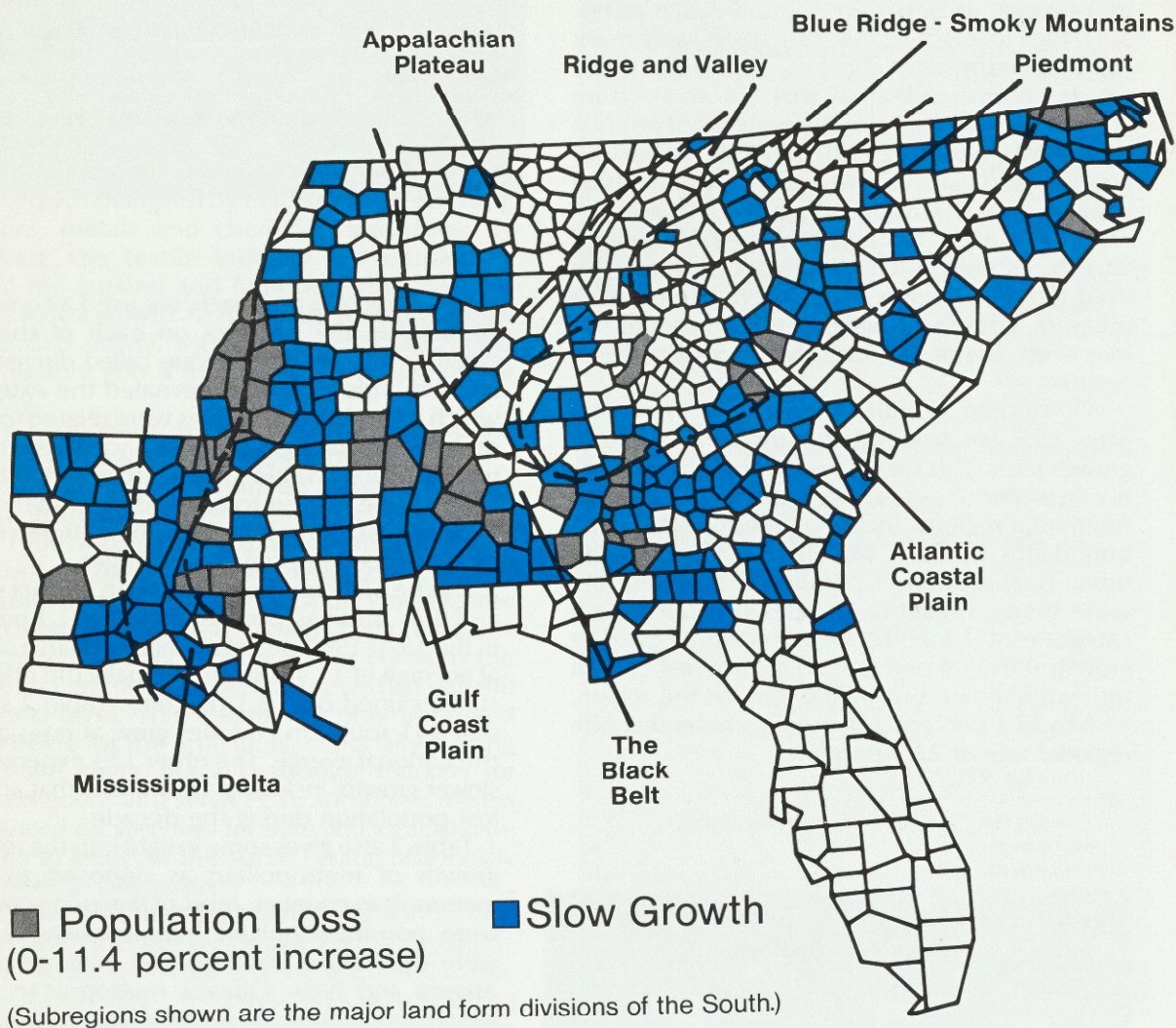
In the second approach, we used a computer to analyze key statistics on each of the 680 counties through a technique called discriminant analysis. This technique revealed the extent to which a number of variables were related to each other in explaining, statistically, variation in population change. Table 1 summarizes the variables found to be related to population growth rates. In statistical terms, they explained 80 percent of the variance in population changes.

For the 680 counties in the Sixth District states and the Carolinas, population grew 22.1 percent in the 1970-1980 period, compared with a national average of 11.4 percent (actually the other 42 states gained only 9.3 percent). Table 2 shows that 441 southern counties grew at rates above the national average. The other 239 experienced slower growth, including 45 counties that actually lost population during the decade.

Table 2 also gives some insight into the relative growth of metropolitan as opposed to non-metropolitan counties. Most of the losing counties were non-metropolitan but, significantly, two were the central counties and parishes of the Atlanta and New Orleans metropolitan areas which rank among the region's largest cities. The other 60 metropolitan core counties gained population, suggesting that the central city losses so typical of "Frostbelt" cities were not characteristic of their southern counterparts.

Table 3 demonstrates that aggregate population change for metropolitan core counties was equal to the regional average. However, suburban counties of metropolitan areas grew well above the regional rate, gaining nearly 1.5 million people during the 1970s. Thus, while central city loss is not yet evident in the eight states, a trend toward suburban sprawl is present. Further, dispersion of growth is indicated by the 16.9 percent increase in the non-metropolitan counties. Even

Map 1. Pockets of slow growth or declining population occurred in some rural and urban counties, 1970-80.



though this growth rate is below the region's average, it is much greater than the national rate of change. Furthermore, it stands in marked contrast to more widespread losses in the 1960s, especially in rural areas.

III. Loss and Slow Growth Areas

A county or parish that loses population typically is experiencing outmigration so strong that it offsets the normal excess of births over deaths. When a county loses population over a decade, it means that people are "voting with their feet" to live elsewhere.

The counties that lost population (Map 1) generally can be characterized as having low incomes, low educational levels, high public assistance payments, large numbers of children, low bank deposits, and low per capita retail sales. As Map 1 shows, most of those counties were rural. However, the 45 counties were not all small, having an average population of 41,754. Much of that population is attributable to the two largest units in the group, the core areas of Atlanta and New Orleans. If their populations were removed from the group, the remaining 43 counties averaged just over 17,000 people.

A somewhat surprising feature of the counties that lost population is that they have significant levels of manufacturing. This cannot be explained by the inclusion of the large Atlanta and New Orleans counties, because their manufacturing employment was proportionately small—less than 20 percent. Overall, in the 45 loss counties 22.4 percent of the civilian labor force worked in factories in 1970. Many were older industrialized areas highly specialized in textiles. These were concentrated in Alabama, Georgia, Tennessee and the Carolinas. Manufacturing proportions were lower in the counties or parishes losing population in Louisiana and Mississippi, where farming tends to predominate.

Loss counties display a distinct tendency to cluster in the inner Gulf Coastal Plain, including portions of the Black Belt of Alabama and the Mississippi Delta region that follows the river as far north as Memphis. They form an "Infertile Crescent" that still reflects stereotypical Deep South sharecropper cultivation of cotton. The small tenant farm has been replaced by large commercial operations in many cases, but the area has benefited least from the dramatic changes that have swept through most of the South.

Slow growth is defined as less than the national average of 11.4 percent. Except for immigration from other countries, the national gain is created by the excess of births over deaths—natural increase. Growth rates below the national average in most cases involve situations where natural increase is great enough to offset net outmigration. Therefore, even though these counties are recording growth, more people are moving out than moving in. The implication is that the county lacks the economic strength to provide jobs for all the people who would like to live there.

Counties that experienced modest population growth during the decade are dispersed throughout the South (Map 1). A high proportion lie within the Atlantic and Gulf Coastal Plain areas, with particularly heavy concentrations in south Georgia, Alabama, Mississippi, Louisiana and west Tennessee. Some also are found in the Piedmont area of the Carolinas and Georgia. Generally, these counties share the same characteristics as the loss counties—not surprising since most continued to experience population outmigration.

Yet our analysis revealed these characteristics to be less strong than in the loss counties. The proportions of blacks in the population were

above average but not pronounced. Income levels were somewhat below average, as were educational levels. Manufacturing was present to a significant degree even though farming was above average as a land user. Banking and retailing were not strong.

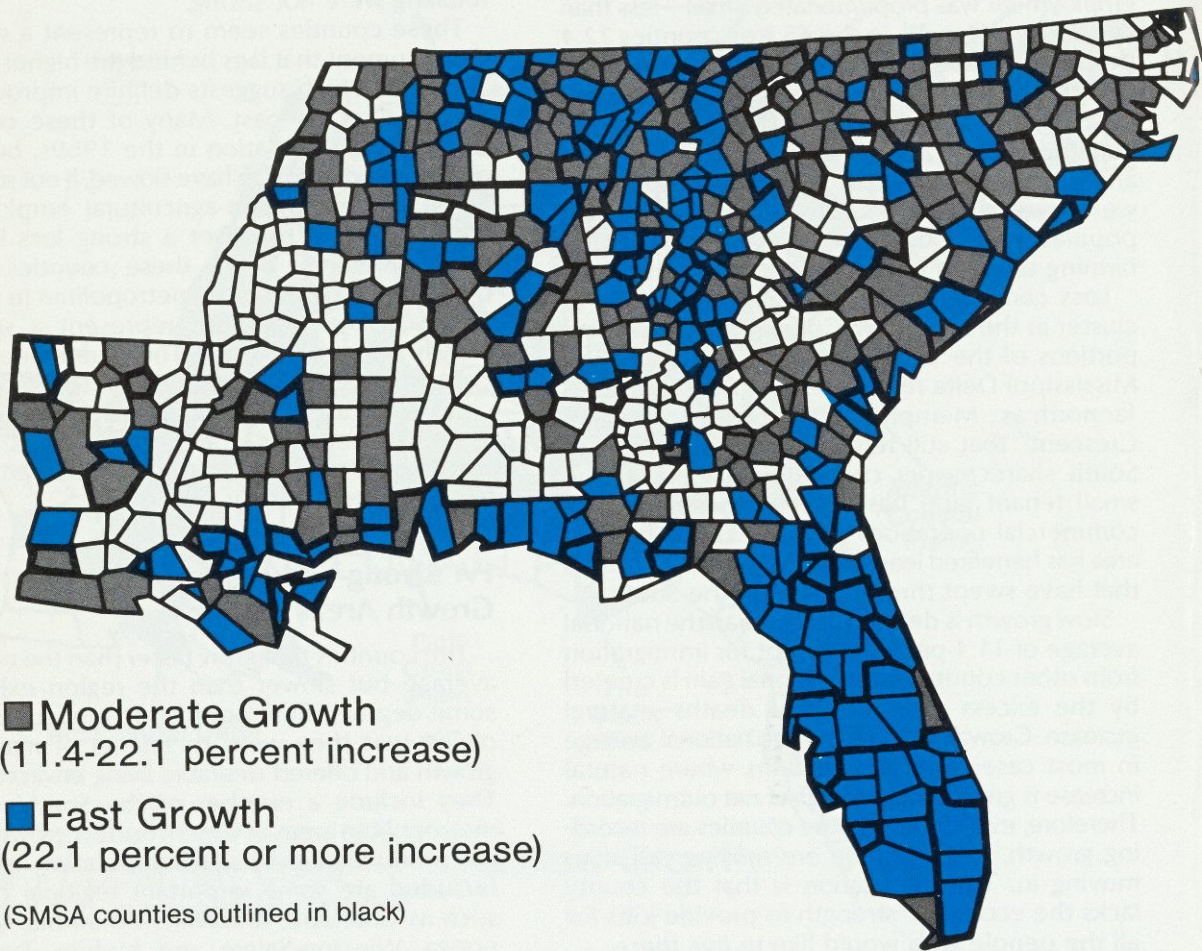
These counties seem to represent a stage of development that lags behind the higher growth areas but which suggests definite improvement over the recent past. Many of these counties were losing population in the 1960s, but their outmigration seems to have slowed, if not stopped. Some degree of non-agricultural employment has developed to offset a strong loss in farm employment. In short, these counties are in transition. Most are non-metropolitan in nature. Those in the Piedmont represent a specific, heavily industrialized case. The Piedmont counties contain either a string of older mill towns or larger cities such as Gastonia, Greensboro and High Point. Those cities, traditional centers of the textile or furniture industries, have been somewhat slow to diversify.

IV. Strong and Moderate Growth Areas

The counties that grew faster than the national average but slower than the region exhibited some degree of net population immigration, implying that they were recipients of major job growth and offered desirable living environments. They include a number of the South's major metropolitan areas in which modest growth rates still produced a substantial population increase. Included are some important regional centers such as Charlotte, Knoxville, Columbia, Chattanooga, Winston-Salem and Mobile. Typically, growth rates were much higher than during the 1960s (Map 2). Others in this category are recently industrialized growth centers along the Atlantic Coastal Plain, throughout the upper south of North Carolina and Tennessee and energy rich areas of Mississippi and Louisiana.

Our analysis did not permit us to draw a clear distinction between these counties and those which grew more slowly. However, even though the two groups have similar statistical averages, the higher growth group has more of the South's higher income banking and retail trade centers. Their modest population growth probably reflects a maturing of development and suggests more orderly growth. They are less likely to be over-

Map 2. Many suburban counties and most of Florida experienced moderate or fast population growth, 1970-80.



whelmed by the phenomenal increases being experienced elsewhere.

The high-growth counties were characterized by high incomes and educational levels, low black proportions of their populations and high levels of retail trading and banking. They were not characterized by economies specialized in manufacturing. Many, in fact, are suburban bedroom communities housing retirees or people who commute to jobs in adjacent urban counties. Their economies are strongly oriented toward serving their residential population or

toward white-collar office jobs. Manufacturing is apt to be newer, higher technology factories often clustered in industrial parks.

This group could be termed the "Florida Plus" category. Florida, a state whose population grew more than 43 percent in the 1970s, naturally counts many high-growth counties. In somewhat similar fashion, a string of coastal and mountain counties elsewhere experienced rapid growth that was attracted by their recreational advantages. Not uncommonly, these recreation areas' high growth rates involved small total populations

and the actual gain in population was small.

East coast beach areas and the Blue Ridge Smoky Mountains, offering outdoor sports opportunities to an affluent population, were especially affected by this recreation-oriented growth. Even if relatively few people were added to the population, they still had a major impact on the counties themselves. The Gulf Coast grew in response to the region's recreational attractions, but primarily its growth was based on petroleum and the related petrochemicals industry. The mercurial growth of the Gulf Coast area seems vulnerable to decline once its energy resources are depleted.

More than half of the South's metropolitan areas, including the core counties, also exhibited high growth. Florida's urban areas experienced a disproportionate share of this strong growth, and many suburban counties of metropolitan areas throughout the South enjoyed vigorous growth. This included most of Atlanta outside its core county. Suburban ring counties around Memphis, Nashville, Charlotte, New Orleans and Birmingham, to name a few, also recorded strong increases (Map 2).

V. Conclusions

It is evident that growth has been distributed rather unevenly throughout the South. As expected, the more rural agricultural areas have been left behind by much of the region's recent growth. Reliance on manufacturing alone—especially a dependence on traditional industries—as the sole means of economic development has not produced the expected population growth. Instead of growth, a longstanding specialization in labor-intensive manufacturing appears more likely to be associated with either loss or slow growth that masks net outmigration. Moderate and high growth areas are also experiencing industrial growth, but they have already achieved more diversified urban economies characterized by trade and finance. Thus, manufacturing does not show up as a specialization.

Many of the South's comparative advantages in terms of living, production and energy costs have begun to diminish, suggesting that future growth will be at more modest rates. A potential slowing of growth holds important implications for the different growth areas. A continued shift away from labor-intensive industry to more high-technology industry will focus on the more diversified urban regions with their better devel-

oped infrastructures, labor supplies and amenities. The areas that emerged more recently from agricultural backgrounds will find it difficult to attract such industry unless they are on the fringes of urban regions.

High energy costs, inadequate labor supplies and a lack of water and sewage treatment facilities are apt to discourage both business and residential development in more truly rural areas, perhaps ending a recent trend that has favored rural industrialization. Higher operating costs have already driven many labor-intensive manufacturers to shift production facilities to Latin America, Ireland and parts of Asia rather than to the rural South.

Counties that are losing population or growing slowly will continue to be important as agricultural producers and, given the favorable growing climate of the South, this role may take on added significance.


The high-growth areas, on the other hand, are threatened by too much growth that could destroy the very advantages that attracted people in the first place if growth does not soon diminish. One sobering finding of this study is that the South's metropolitan areas are experiencing the same kind of suburban sprawl that characterized earlier urban growth in the Northeast and Midwest. This, coupled with evidence from the Census Bureau that more poor people are now moving into the South than are leaving, means the South soon may be faced with problems of decaying inner cities, fragmentation of tax bases and general sprawl that now plague many of the nation's older cities.

Moderate growth areas seem to be positioned most advantageously with diversified economies that can continue to develop in a balanced manner without being threatened by runaway growth.

The South of today is a radically different place from that of 25 years ago in some important respects. But now, as then, it is a region of considerable diversity and to approach it as a homogeneous area risks a serious misunderstanding of its growth trends.

—James W. Clay
and Alfred W. Stuart

Clay is professor of geography and director of the Urban Institute at the University of North Carolina at Charlotte; Stuart is chairman and professor of geography and earth sciences at UNCC.



THE NEW FEDERALISM

Assessing the Fiscal Health of State and Local Governments in the Southeast

An era of fiscal austerity is clearly in the offing for many state and local governments. All across the nation, people and businesses appear likely to feel the pinch as spending is curtailed and new taxes are levied. Fiscal stress has already been evident in lower bond ratings for some municipalities. Erosion of revenue bases has prompted intense efforts by state legislators, governors, city council members, and mayors to trim spending and raise taxes. After adjusting for inflation, real outlays for highways, wastewater treatment, and maintenance of such facilities as dams, roads, bridges and sewers have been falling. Since federal aid constituted more than a fifth of state

and local revenues in 1981, the scheduled reduction in these funds over the next three years could lead to a significant cutback in state and local services and shelve plans for capital improvements. Therefore, many state and local elected officials will be confronted with major political and fiscal challenges in the years ahead.

These issues are certainly of utmost importance for state and local governments and for the nation in general. What is the fiscal position of the state and local governments providing public services to the 30 million or so residents in the Southeast? Since they have above average population growth, a higher concentration of low-

Despite rapid population and economic growth, states and localities in the Southeast are in a more favorable position to cope with loss of federal funding than are those elsewhere.

income and elderly residents, and greater reliance on the federal government, are southern states, cities, and towns more likely to be adversely affected by public sector austerity than higher-income northern cities and towns? Or are south-eastern state and local governments better able to cope with federal budget cutbacks scheduled for the next four years than their counterparts elsewhere?

Measuring Stress¹

Many indicators can be used to assess a government's fiscal condition. The Advisory Commission on Intergovernmental Fiscal Relations (ACIR) suggests several warning signs of future financial trouble. Among the more important are:

(a) a consistent pattern of current expenditures exceeding current revenues,² (b) an excess of current operating liabilities over current assets, (c) short-term operating loans outstanding at the end of the fiscal year, (d) a high and rising rate of property tax delinquency, and (e) an abrupt and substantial rise in the assessed value of property.

The list of potential candidates is almost endless. Rapidly rising state and local tax rates, change in the level of population, growing inequalities of per capita income among communities, current account deficits and the need of the government to borrow, particularly short term, have all been found to be useful indicators of impending fiscal squeeze.

In measuring stress, however, most public finance experts consider long-term debt an appropriate way to finance long-term capital projects for which benefits accrue over a number of years. Tax anticipation notes can be an effective means of raising cash to smooth out seasonal fluctuation in receipts and expenditures. However, projections of future revenues are not infallible. Errors in revenue

forecasts will be reflected in high debt-service burden of the local government in question. Thus, an unanticipated proportion of current revenues will be used to service debt, leaving a smaller portion of revenues to provide public services. Debt service includes the amount of current revenue used to retire long- and short-term debt, as well as interest payments required to service debt. Therefore, the ability of state and local governments to service debt depends upon their ability to carry it. Thus, a first approximation of fiscal conditions of a government is the ratio of debt service to revenue from its own sources (taxes, charges, etc.). A high and increasing ratio signals potential problems. A low and declining ratio (compared to other state and local governments) suggests relative fiscal strength.³

Today, when intergovernmental aid has reached unprecedented proportions, limiting capacity to revenues from own sources could significantly understate the debt-carrying capacity of state and local governments and thereby overstate fiscal stress. It is therefore imperative that any measure of capacity be broadened to include intergovernmental revenue. Intergovernmental transfers, however, are not considered as certain as revenues from own sources, especially in light of federal budget cutbacks. It is therefore important to measure debt burden in relation to revenue from own sources (as well as to total general revenue).

However, mounting fiscal pressure may not be readily apparent even if debt-service payments are measured in relation to both measures of

¹For a discussion of the relative merits of using these measures, see J. Richard Aronson and Arthur E. King, "Is There a Fiscal Crisis Outside of New York?" *National Tax Journal*, (June, 1978) p. 153. Also see Edward Gramlich, "New York: Ripple or Tidal Wave? The New York City Fiscal Crisis," *American Economic Review* (Papers and Proceedings, May 1976).

²Unconstitutional in many jurisdictions.

³Many states have either constitutional or statutory limits on either the absolute or relative amount of debt they are allowed to issue. Rhode Island, for instance, dates as far back as 1842. Alabama 1867, and Georgia 1877. Borrowing to finance long-term capital projects, however, is often an exception. Heins, for instance, argued that "innovations in state finance have enabled states to borrow for almost any purpose regardless of constitutional provisions. It is reasonable to conclude that debt restrictions are no longer accomplishing that which they were originally intended to accomplish." But regardless of whether states are more financially sound owing to legal debt restriction or more prudent management of public resources, the relative fiscal health of these governmental units is unaltered. See A. James Heins, *Constitutional Restrictions Against State Debt*, the University of Wisconsin Press, Madison 1963, p. 27.

Table 1. Fiscal Report Card of State and Local Governments by Region, 1979-80:
General Revenue from Own Sources
(millions of dollars)

	Long-term Debt Retired	Interest Payments on General Debt	Gross Burden	General Revenue from Own Sources	Relative Burden	
					1979-80	1974-75
United States	17,404.3	14,746.8	32,151.1	299,293.0	10.7	10.9
Southeast	2,593.5	2,586.2	5,179.7	55,229.7	9.4	10.2
Alabama	230.5	168.9	399.4	3,833.8	10.4	11.2
Florida	548.3	436.6	984.9	10,494.3	9.4	8.4
Georgia	196.3	206.9	403.7	6,100.9	6.6	8.4
Louisiana	261.7	306.2	567.9	5,362.0	10.6	12.1
Mississippi	109.9	99.9	209.8	2,389.5	8.8	16.1
Tennessee	298.0	229.2	527.2	4,301.9	12.3	11.4
Mideast	5,470.0	4,834.8	10,304.8	65,618.7	15.7	15.1
New England	1,216.7	996.2	2,218.9	15,618.0	14.2	14.4
Great Lakes	3,213.8	2,281.9	5,495.7	53,166.1	10.3	9.0
Southwest	1,434.3	1,022.3	2,465.6	25,586.1	9.6	11.5
Plains	1,130.4	807.0	1,937.4	22,130.3	8.8	8.6
Far West	1,967.5	1,832.4	3,799.9	52,181.5	7.3	8.4
Rocky Mountains	308.5	315.5	623.9	8,853.3	7.0	7.1

Source: **Governmental Finances in 1979-80**, U.S. Department of Commerce, Bureau of the Census, GF-80, No. 5.

capacity. State and local governments confronted with rising debt-service pressure may respond by raising tax rates and other charges. The result would be a constant or even declining debt-service burden. In this case, rising tax rates rather than debt-service ratios tend to be more telling of financial stress. Our approach to this problem is to relate debt-service payments to yet a third measure of capacity—personal income in the state. A situation characterized by constant or even declining debt-service burden with rising ratios of debt-service payments to personal income implies increasing effective tax rates.

The above three measures are conventional debt service ratios. They indicate the amount of funds needed for annual long-term debt retirement and interest payments that must come out of revenue from own sources, total revenue (including intergovernmental transfers), and the state's personal income. However, each of the measures limits debt service to long-term debt. In contrast, short-term debt is becoming more frequently used by local governments. In recognition of this growing trend, the conventional ratios of debt service have been broadened to

include the amount of short-term debt outstanding at the end of the fiscal year. Together, with the three conventional ratios, the inclusion of short-term outstanding debt in the three indications gives us six measures of fiscal conditions (see Tables 2 and 3 and Chart).

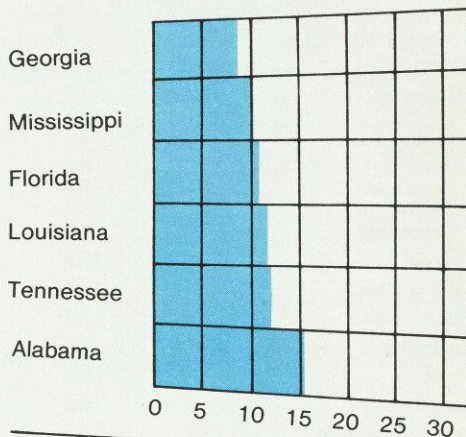
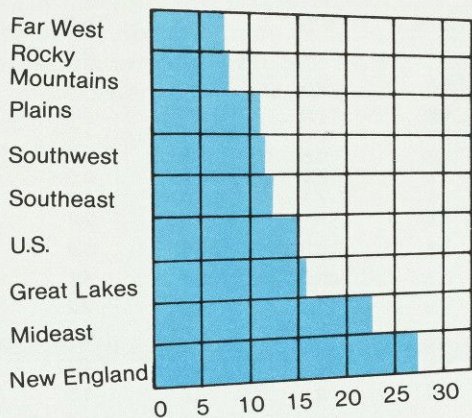
A seventh measure of fiscal stress relates the government's short-term debt outstanding to its cash and security holdings. A high and rising ratio over time may be a particularly sensitive indicator of impending financial problems. Should anticipated revenues fall short of actual expenditures, there will be greater reliance on short-term debt and/or drawing down on cash balances in order to finance current operations. This measure can therefore be viewed as a rough proxy of short-term solvency of the government. Those governments with sharply rising ratios are considered to be nearing financial collapse. Those with very low ratios are viewed as financially sound.

It isn't possible to predetermine the level of any of the above measures which indicate fiscal danger or impending financial difficulty. In general, increasing values of several of these ratios over a period of years can indeed be interpreted as

Fiscal Report Card

Relative Debt Burden, 1979-80
(including short-term debt outstanding)

The South scores well.



Lower the share, higher the grade.

Source: Governmental Finances in 1979-80, U.S. Department of Commerce, Bureau of the Census, GF-80, No. 5

signs of increasing fiscal pressure. Moreover, our understanding of relative financial conditions can be considerably enhanced by comparing the levels of these indicators between state and local governments. By doing so, we can at least determine if some governments are in more financial trouble than others.

Findings

We examined levels as well as recent trends in seven measures of financial stress at the state and local levels for the 50 states and the District of Columbia in 1974-75 and 1979-80. Regardless of the particular measures used, the results were basically the same. Table 1 shows the basic empirical results using debt service relative to revenue from own sources. By this measure, which does not differ markedly from the five other measures shown in Tables 2 and 3, New York's state and local governments were in the worst fiscal condition, a carry-over from the near bankruptcy of New York City in the mid-70s. States with the lowest ratios were located in the West and South. California had a

ratio of less than 6 percent, only a third as high as New York's state and local governments.

The fiscal status of state and local governments in the Southeast is remarkably better than for state and local governments in general. The low ratio of debt-service payments to revenue from a government's own sources clearly supports this view. Many of these governments are in a better position to absorb federal spending reductions than are state and local governments elsewhere. The highest burden was in Tennessee at 12.3 percent, the lowest in Georgia at 6.6 percent. The average for all state and local governments in the Southeast was 9.4 percent, well under the 10.7 percent nationwide. Florida's relative debt burden was the same as the southeastern average of 9.4 percent.

So, state and local governments around the Southeast are in better shape fiscally than governmental units elsewhere. This does not suggest, however, that elected officials in the Southeast had no difficulty reconciling receipts and expenditures in the last legislative session. As our research indicates, fiscal conditions

Table 2. Fiscal Report Card of State and Local Governments by Region, 1979-80, 1974-75

	Gross Burden Relative to:				Gross Burden Including Short-Term Debt Relative to:			
	Total General Revenue		Personal Income		Total General Revenue		Personal Income	
	79-80	74-75	79-80	74-75	79-80	74-75	79-80	74-75
United States	8.4	8.6	1.7	1.7	11.9	17.3	2.4	3.9
Southeast	7.1	7.7	1.4	1.4	9.4	10.6	1.8	2.0
Alabama	7.5	8.1	1.5	1.6	11.2	11.4	2.2	2.2
Florida	7.4	6.9	1.3	1.1	8.6	8.6	1.5	1.4
Georgia	5.0	6.3	1.0	1.2	6.6	9.5	1.3	1.9
Louisiana	8.1	9.4	1.8	2.1	8.9	10.4	2.0	2.3
Mississippi	6.1	7.2	1.4	1.6	7.1	9.6	1.6	2.1
Tennessee	9.0	8.6	1.6	1.6	15.1	15.0	2.8	2.7
Midwest	12.4	12.8	2.7	2.8	18.3	32.6	3.9	6.9
New England	10.2	11.4	2.0	2.2	20.9	30.8	4.1	5.8
Great Lakes	8.6	7.3	1.5	1.3	13.2	14.7	2.2	2.6
Southwest	7.7	9.0	1.4	1.6	9.2	10.6	1.7	1.7
Plains	6.1	6.9	1.3	1.3	8.8	10.1	1.7	1.9
Far West	5.8	6.8	1.2	1.5	6.6	8.6	1.5	1.8
Rocky Mountains	5.4	5.4	1.2	1.1	6.1	6.7	1.3	1.4

Source: **Governmental Finances in 1979-80**, U.S. Department of Commerce, Bureau of the Census, GF-80, No. 5.

Table 3. Scoreboard of State and Local Governments, 1980 and 1975

1980 Ranking	State	1980 LISO*	1975 LISO*	1980 Ranking	State	1980 LISO*	1975 LISO*
1	Connecticut	33.7	49.1	28	Louisiana	11.8	13.4
2	Rhode Island	29.0	29.0	29	Washington	11.3	15.9
3	New York	27.5	55.6	30	Nevada	11.1	12.4
4	Massachusetts	26.6	40.3	31	Florida	10.8	10.5
5	New Hampshire	23.5	30.2	32	Michigan	10.4	14.1
6	New Jersey	22.0	28.6	33	Wyoming	10.4	11.8
7	Delaware	21.5	24.0	34	Arizona	10.4	9.8
8	Ohio	21.2	25.7	35	Alaska	10.3	31.8
9	Tennessee	20.6	19.9	36	Mississippi	10.3	13.4
10	Vermont	20.4	22.8	37	North Carolina	10.0	12.2
11	Illinois	20.2	21.7	38	Oklahoma	9.8	15.5
12	Pennsylvania	18.9	22.4	39	New Mexico	9.5	14.6
13	District of Columbia	17.9	40.5	40	Indiana	9.4	9.0
14	Nebraska	17.6	15.0	41	North Dakota	9.2	7.3
15	Maine	17.1	17.5	42	Missouri	8.8	11.7
16	Kentucky	16.5	15.2	43	Georgia	8.7	12.7
17	Hawaii	16.3	19.5	44	South Dakota	8.6	4.8
18	Oregon	15.9	14.7	45	Montana	8.4	7.6
19	Alabama	15.4	15.1	46	Arkansas	8.2	13.5
20	Maryland	14.9	16.3	47	Colorado	7.6	10.6
21	Virginia	14.6	18.6	48	Idaho	7.4	6.6
22	Minnesota	13.6	16.5	49	Utah	6.8	1.0
32	Kansas	13.6	15.2	50	California	6.5	8.7
24	West Virginia	12.9	17.0	51	Iowa	5.8	7.9
25	Wisconsin	13.4	11.9				
26	South Carolina	12.2	11.3				
27	Texas	12.1	13.9				

Source: **Governmental Finances in 1974-75 and 1979-80**, U.S. Department of Commerce, Bureau of the Census, GF-80, No. 5.

*Long-term and short-term debt outstanding + interest payments on all debt relative to revenue from own sources.

deteriorated somewhat in Florida and Tennessee, the two states in our region that do not tax wage income. It is, therefore, important to look beyond general measures of fiscal condition to see how difficult it has been to set a budget for the upcoming fiscal year. Our choice of Florida is far from arbitrary. The most populous state in the Sixth Federal Reserve District, Florida's population and industrial growth have placed unprecedented demand on its fiscal resources.

Population growth has helped Florida to take great strides in increasing its economic base. The challenges imposed by that growth are small compared to the benefits accrued. The real challenge for the state is to devise a means of taxation which will generate enough revenues, but at the same time not discourage healthy economic growth. State officials have so far resisted pressures to levy a personal income tax, fearing that such a tax would inhibit the flow of business and people to the state.

—Charlie Carter

Florida and the New Federalism

When the Florida Legislature met in January, it planned only to act on a state budget and to reapportion itself and the state's congressional districts. The last thing it wanted to do in an election year was to raise taxes.

But as other states across the nation considered increases in state income tax, Florida was able to escape that political thorn by turning to other means of taxation.

Before the end of the regular session in late March, Governor Bob Graham, the House of Representatives and the Senate had all come to the same conclusion—the state's 4 percent sales tax must be raised by one percent, and it must be done this year. The tax increase is relatively painless for Florida residents, since 20 percent of the increased revenue will come from taxes on the heavy tourist expenditures. In an extended session later on, the Legislature finally passed the hike, half the proceeds of which will go to local governments and half to the state treasury.

The reasons for the tax increase were many and varied, but they revolved around one central fact—the federal government, after five

decades of helping states and local governments solve their knottiest social and financial problems, is getting out of the business. Barring some dramatic change of heart among politicians and the public, the states and cities will have to fend for themselves to a greater degree from now on.

A change of heart, incidentally, is unlikely. A recent nationwide poll showed that 54 percent of the public supports what President Reagan has come to call the New Federalism, the wholesale transfer of authority over and responsibility for federal programs to the states and local governments. And the public does not naively expect that transfer to mean less taxes, either. A 64 percent majority thinks that under the New Federalism, their combined state and federal tax burden will actually increase.

Thus, the states will no longer be able to depend so totally upon Washington to finance such basic assistance with their infrastructure as federal aid for highways and sewers and airports or for help in supporting social programs. Therefore, the choice for state legislatures increasingly will be to choose between raising

taxes or doing without the programs. Like other states across the District, Florida has begun to do both—eliminating the programs it feels it can live without and raising taxes to support the rest, while seeking to reduce waste and inefficiency. But Florida is better able to cope than most states since incomes, consumer spending, and property values are rising faster than many areas of the country.

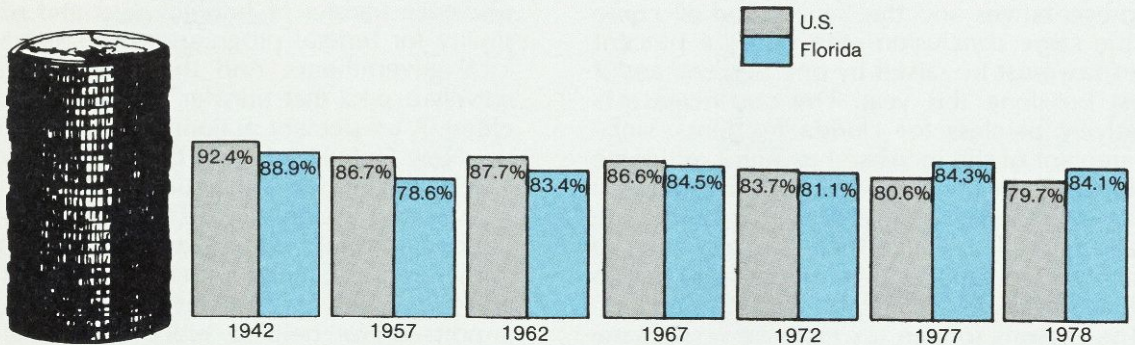
How deep will the federal cuts in grants-in-aid go? The National Governors' Association recently studied the effects on the states of the proposed 1982-83 Reagan administration budget and concluded it falls short by 16.6 percent of the federal aid needed to keep 41 state-administered programs at their present level, assuming a 7 percent inflation rate. That impact varied somewhat, however, from state to state. In Florida, the study reported, the impact would be deeper than for the nation as a whole—cutting off 18.5 percent of the money needed to maintain the programs. In Tennessee, the state government would lose 20 percent. For the other states in the Sixth District, Alabama would lose 19 percent; Georgia, 16.9 percent; Mississippi, 16.1 percent; and Louisiana, 15.9 percent.

And that is only the beginning of the Reagan administration's New Federalism plans. In his State of the Union message to Congress in January, the President proposed what he described as an even swap—complete federal funding of the Medicaid program of medical

care for indigents in return for the states assuming total financing of food stamps and Aid to Families with Dependent Children, the nation's basic welfare program. Those three programs are now jointly financed by the federal and state governments. The President suspended that proposal in April, after encountering resistance from the states. Florida officials, for instance, complained that it wouldn't be an even swap for their state. Under the Reagan proposal, Florida budget officials concluded, the state would have paid \$455 million more annually, a figure that would increase each year with inflation. The administration has now agreed to retain food stamps as a federal responsibility, but as of press time was still trying to hammer out a compromise with the states on realigning responsibilities for other welfare and Medicaid programs.

Despite controversy over the swap plan, President Reagan has even more ambitious plans for shifting programs to the states. He has proposed that the states and local governments take over more than 40 education, highway and community programs that are presently funded with money from Washington. To ease the transition, he has urged Congress to establish a transitional federal trust fund, financed by excise taxes, that would continue funneling some money to the states and localities until 1991. By that time, state and local governments would be free to finance the programs out of their own pocketbooks—or do without them.

Chart 1.
Florida's Growing Dependence on Property Taxes
 Property Taxes as a Percent of Total Local Tax Collections



Source: Federal Advisory Commission on Intergovernmental Relations, October 1980.

If anything close to the administration's ambitious New Federalism plans is carried out, it means this year's session of the Florida Legislature is just a prelude to the challenging sessions to come. And it is a challenge that will be felt in statehouses and city halls all across the country.

While Florida faces difficulties with the New Federalism, it has many advantages which will make it easier to cope with the cutback in federal aid. The Sunshine State is still an amazingly fast-growing place, with its population soaring during the 1970s by 43 percent, to nearly 10 million. While that growth has many benefits, it also puts a strain on Florida's infrastructure—the network of sewers and streets and airports, not to mention its police, fire protection and social programs. That infrastructure is expensive for a state or local government to finance. It also includes many of the programs for which federal funding is difficult to justify. But social programs are not a major expense in Florida, compared to some southeastern states. Florida's fast growing job market reduces the need to pay out large amounts of unemployment compensation. The state ranks third lowest among states in percent of unemployment compensation paid per covered worker.

Some of the more visible problems Florida will have to tackle are building and repairing roads. One recent study estimated that of the state's 64,193 miles of paved roads, nearly half were substandard. More than a quarter of the state's primary highway system is in need of immediate repair or rebuilding, it added, and roughly the same proportion of bridges face either extensive repair or replacement. To top it off, Florida has the highest percentage of unfinished interstate highway segments in the nation.

To reverse the deterioration of the present road network and to build enough new roads and public transit systems to accommodate the state's burgeoning growth, most experts say the state must start spending at least \$300 million a year more than it is presently spending on transportation. And they add, that \$300 million addition must increase each year with the cost of construction. A suggested solution to this problem would be to raise the diesel and motor fuel tax to make the roads pay for themselves. The state's eight-cent gas tax has not changed since 1971. This would be another tax which would come substantially from the tourists who drive to and through Florida every year.

FLORIDA AND THE PERSONAL INCOME TAX

The most obvious gap in Florida's tax base is its lack of a personal income tax. Forty-four other states have such taxes, ranging in severity from Louisiana's scant \$338 levy on a \$50,000 income to Minnesota's stiff \$3,700 tax on the same amount. Neighboring Georgia and Alabama extract \$2,005 and \$1,344 respectively, from the same \$50,000 salary.

From a state government's point of view, such a tax has some charming advantages. It broadens its tax base, making it less dependent on only one or two major sources of revenue, and unlike the sales tax, income tax receipts are relatively stable. That is, they don't bounce up and down with economic conditions quite as much as sales tax receipts. That's an obvious advantage to budget planners.

So why no personal income tax in Florida? The biggest reason is that the state Constitution forbids one. To overcome that prohibition, three-fifths of the Legislature would have to approve an amendment and the voters would then have to approve the change. The chances of that happening, as Gov. Bob Graham, an opponent of the personal income tax, puts it "are somewhere on the other side of nil."

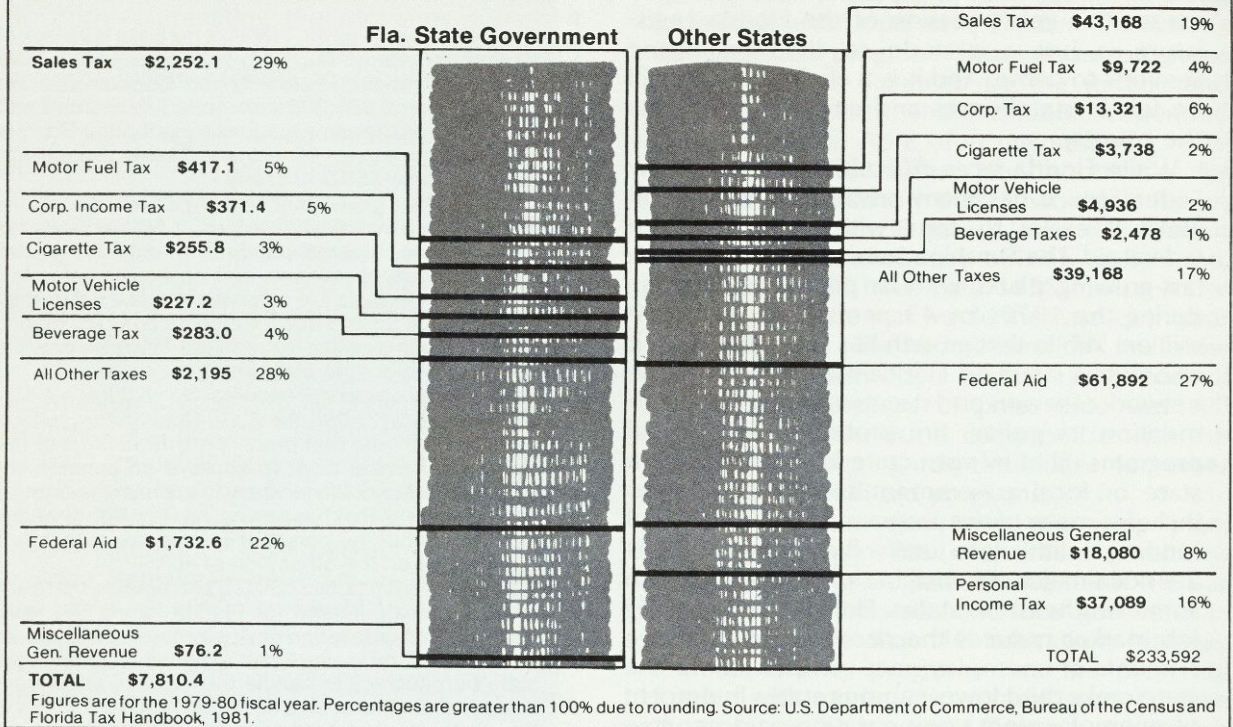
But aside from public opinion and politics, there are some good arguments for Florida taking the less-traveled road of taxation and not enacting a personal income tax. One is simply the expense of setting up a state bureaucracy to handle the massive paperwork and oversight that such a tax would require. Another is the certainty that Florida's rampant "underground economy"—drug smugglers and the like—would simply laugh off such a tax. Finally, there is the fear that an income tax would discourage economic development. The state's freedom from such a tax, business leaders say, has been a trump card in attracting companies and workers to Florida in the past.

Roads, however, are only the most visible of the state's infrastructure problems. Fast-growing Orlando, which with surrounding Orange County just opened a \$100 million advanced wastewater treatment plant, is rushing to build another similarly sized plant—this time without the promise of federal grant money. And even a second \$100 million plant won't solve Orlando's water treatment problems, officials say.

The city recently raised its fee for sewer hookups from \$125 to \$1,400 for single-family homes and faces the certainty of more increases. "The subsidized costs are now coming back to users," according to Mayor Bill Frederick. "In the absence of federal funding, the users are going to have to pay." If so, the cost of building new sewers alone could restrict growth—a belief the Florida League of Cities shares.

Chart 2.

Where the Money Comes From
(in millions of dollars)



And so the infrastructure problems go across the board—airports, ports, schools, jails, environmental problems—not to mention that the state faces a water-supply problem in drought-stricken South Florida.

At the same time the state faces capital-improvement problems, local governments are finding their primary source of revenue, the property tax, approaching the end of its usefulness.

For years, Florida's local governments were less dependent on real estate taxes than their counterparts around the country (see Chart 1). That changed during the mid-1970s, as cities and counties in the state increased their millage rates to keep pace with inflation and the demand for services caused by the flood of new residents. Partly for that reason—and partly because the state, in trying to reform the property tax, made it more difficult to raise millage rates—real estate taxes are practically a dry hole now for local governments in Florida.

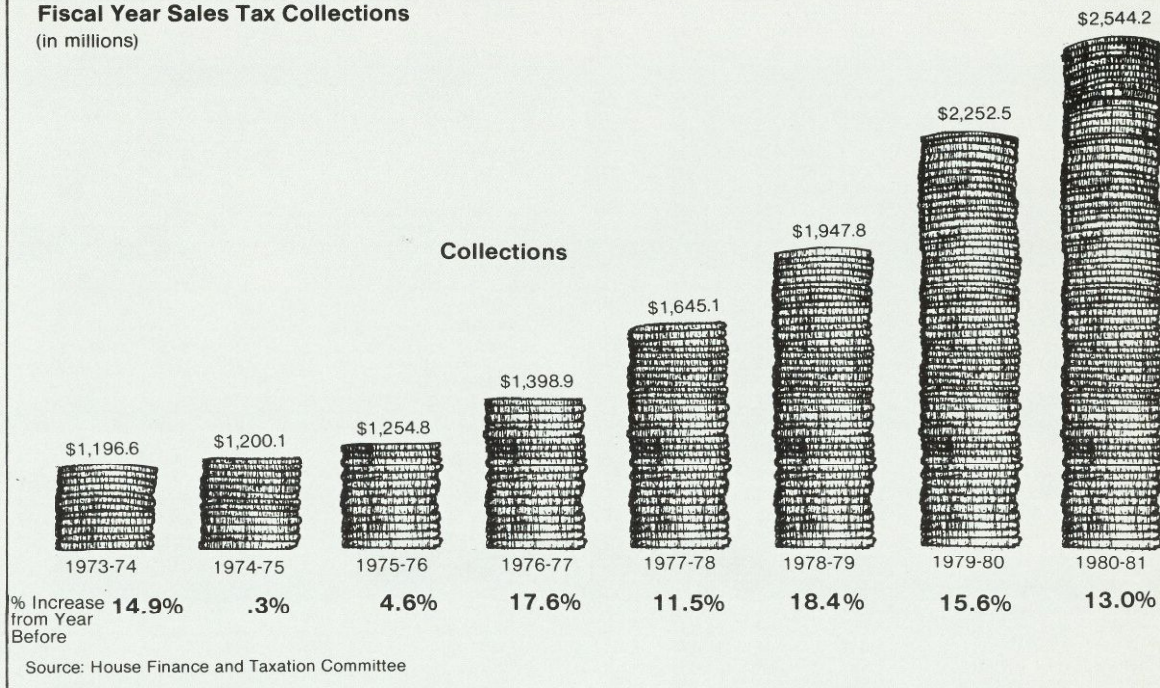
As a result, the state won't be able to pass the costs of infrastructure improvements and federal aid cutbacks down the ladder of government to

cities and counties. Quite the contrary, in fact. Mayors and county commissioners were at the forefront of the battle in the Florida Legislature this year to raise the state sales tax. They were able to persuade the legislators to give local governments half of the \$770 million in revenue from the additional 1 percent tax.

But even as cities and counties tap into the state's tax base, there is considerable evidence that Florida's state tax structure is less than perfect. As Chart 2 shows, Florida already depends more heavily on the sales tax for its revenues than do most states. Fully 29 percent of the state's total revenues in 1979-1980 came from people paying four cents in tax for a dollar's worth of goods, compared to 19 percent nationally—and that dependence was gradually growing, even before the recent tax hike. The main reason for that dependency is obvious. Florida does not assess a personal income tax, which supplies 16 percent of the revenue to the other states that charge such a tax. Every other Sixth District state except Tennessee charges such a tax.

The sales tax has been a good revenue source for Florida because it is "exportable," as tax

Chart 3.
Florida's Volatile Sales Tax:
Fiscal Year Sales Tax Collections
(in millions)



experts term it. That is, roughly 20 percent of the tax is paid in the tourist-oriented state by visitors who buy goods there.

At the same time, the sales tax is a volatile tax source, increasing more rapidly than the economy does during good economic years and more slowly during bad years. In fiscal year 1973-74, a good year, it produced 14.9 percent more revenue than the year before (Chart 3). But in the notoriously bad year that followed, the increase fell to a miserly 0.3 percent, as both tourists and residents stopped buying consumer goods with the gusto they exhibited in the past.

Even last year, that roller-coaster effect was evident. Sales tax revenues increased much more slowly than state revenue forecasters had predicted, prompting a scramble by Governor Graham and the state Cabinet to cut programs and shift state surpluses in an attempt to make up for an unexpected \$55.6 million shortfall in tax collections. Next year would have been worse had not the legislature increased the sales tax. In February, state economists predicted that, barring a tax hike, state tax collections would have been \$249 million less in 1982-83 than

they had thought a year ago. That is one reason the governor and the Legislature became convinced the state must raise its sales tax.

As local governments in Florida hitch their revenue wagons to the state sales tax, they almost certainly will be faced with ups-and-downs in their collections—a roller-coaster ride that will make rational planning as difficult at the local level as it is at the state level.

But there are few alternatives. Levying a personal income tax is both politically difficult (it would involve amending the state Constitution) and less efficient than raising the sales tax (see Box on page 57). And Florida, unlike Louisiana and Texas, does not have vast reserves of oil and gas to tax, although there is some sentiment to increase the severance tax on phosphate.

So when the bills come due on the New Federalism, Florida will have to search its own pocketbook to pay them. As the state Legislature has already learned, few things can be quite as hard as that.

—Otis White

White is a journalist and Florida business analyst. Additional material for this article was contributed by Delores W. Steinhauer, Federal Reserve Bank of Atlanta.



FINANCE

STATISTICAL SUPPLEMENT

\$ millions	APR	MAR	APR	ANN.		APR	MAR	APR	ANN.
	1982	1982	1981	% CHG.		1982	1982	1981	% CHG.
UNITED STATES									
Commercial Bank Deposits	1,129,424	1,107,194	1,005,081	+ 12	Savings & Loans				
Demand	295,672	286,559	291,798	+ 1	Total Deposits	530,219	524,289	513,629	+ 3
NOW	59,075	54,553	38,437	+ 54	NOW	9,853	8,666	4,753	+107
Savings	152,119	148,043	159,516	- 5	Savings	93,702	91,807	102,649	- 9
Time	652,106	647,252	541,298	+ 20	Time	427,260	424,398	405,226	+ 5
Credit Union Deposits	46,264	43,101	36,509	+ 27		FEB	JAN	FEB	
Share Drafts	3,106	2,772	1,839	+ 69	Mortgages Outstanding	507,137	508,349	496,610	+ 2
Savings & Time	39,637	37,668	32,506	+ 22	Mortgage Commitments	15,255	15,073	16,197	- 6
SOUTHEAST									
Commercial Bank Deposits	123,407	119,830	109,152	+ 13	Savings & Loans				
Demand	35,815	34,317	34,689	+ 3	Total Deposits	78,076	77,150	74,805	+ 4
NOW	7,784	7,169	4,889	+ 59	NOW	1,633	1,425	745	+119
Savings	15,108	14,711	15,874	- 5	Savings	11,937	11,708	13,166	- 9
Time	68,277	67,073	56,481	+ 21	Time	64,522	64,037	60,609	+ 6
Credit Union Deposits	4,388	4,225	3,313	+ 32		FEB	JAN	FEB	
Share Drafts	314	289	209	+ 50	Mortgages Outstanding	74,171	74,459	71,892	+ 3
Savings & Time	3,720	3,621	2,868	+ 30	Mortgage Commitments	3,430	3,340	3,505	- 2
ALABAMA									
Commercial Bank Deposits	13,942	13,511	12,328	+ 13	Savings & Loans				
Demand	3,610	3,420	3,392	+ 6	Total Deposits	4,455	4,412	4,394	+ 1
NOW	668	622	442	+ 51	NOW	83	74	38	+118
Savings	1,580	1,523	1,663	- 5	Savings	578	571	663	- 13
Time	8,520	8,389	7,122	+ 20	Time	3,820	3,791	3,697	+ 3
Credit Union Deposits	760	734	536	+ 42		FEB	JAN	FEB	
Share Drafts	63	56	46	+ 37	Mortgages Outstanding	3,983	3,979	3,967	+ 0
Savings & Time	635	625	486	+ 31	Mortgage Commitments	51	49	155	- 67
FLORIDA									
Commercial Bank Deposits	40,790	39,637	36,761	+ 11	Savings & Loans				
Demand	13,021	12,362	13,050	- 0	Total Deposits	47,445	46,917	45,438	+ 4
NOW	3,447	3,164	2,160	+ 60	NOW	1,146	998	547	+110
Savings	6,476	6,352	6,938	- 7	Savings	8,000	7,868	8,872	- 10
Time	19,069	18,681	15,373	+ 24	Time	38,194	37,958	35,740	+ 7
Credit Union Deposits	2,013	1,925	1,529	+ 32		FEB	JAN	FEB	
Share Drafts	174	162	116	+ 50	Mortgages Outstanding	45,347	45,557	43,434	+ 4
Savings & Time	1,582	1,523	1,190	+ 33	Mortgage Commitments	2,957	2,906	2,828	+ 5
GEORGIA									
Commercial Bank Deposits	16,991	16,352	14,441	+ 18	Savings & Loans				
Demand	6,165	5,837	5,953	+ 4	Total Deposits	9,792	9,657	9,539	+ 3
NOW	1,092	1,010	685	+ 59	NOW	170	146	65	+162
Savings	1,647	1,578	1,620	+ 2	Savings	1,206	1,166	1,397	- 14
Time	9,029	8,893	7,129	+ 27	Time	8,463	8,380	8,073	+ 5
Credit Union Deposits	796	778	564	+ 41		FEB	JAN	FEB	
Share Drafts	28	25	14	+100	Mortgages Outstanding	9,292	9,333	9,358	- 1
Savings & Time	725	720	536	+ 35	Mortgage Commitments	133	124	158	- 16
LOUISIANA									
Commercial Bank Deposits	22,208	21,605	19,348	+ 15	Savings & Loans				
Demand	6,279	6,194	5,906	+ 6	Total Deposits	7,683	7,577	7,043	+ 9
NOW	1,070	977	661	+ 62	NOW	100	88	38	+163
Savings	2,480	2,394	2,494	- 1	Savings	1,240	1,208	1,251	- 1
Time	12,948	12,716	10,753	+ 20	Time	6,357	6,298	5,757	+ 10
Credit Union Deposits	119	115	83	+ 43		FEB	JAN	FEB	
Share Drafts	9	9	4	+125	Mortgages Outstanding	7,175	7,180	6,835	+ 5
Savings & Time	111	107	77	+ 44	Mortgage Commitments	219	207	238	- 8
MISSISSIPPI									
Commercial Bank Deposits	10,218	10,002	9,045	+ 13	Savings & Loans				
Demand	2,415	2,362	2,314	+ 4	Total Deposits	2,403	2,382	2,356	+ 2
NOW	573	536	366	+ 57	NOW	45	40	17	+165
Savings	749	734	827	- 9	Savings	225	221	246	- 9
Time	6,710	6,635	5,740	+ 17	Time	2,148	2,136	2,092	+ 3
Credit Union Deposits	N.A.	N.A.	N.A.			FEB	JAN	FEB	
Share Drafts	N.A.	N.A.	N.A.		Mortgages Outstanding	2,198	2,199	2,188	+ 0
Savings & Time	N.A.	N.A.	N.A.		Mortgage Commitments	17	15	61	- 72
TENNESSEE									
Commercial Bank Deposits	19,258	18,724	17,229	+ 12	Savings & Loans				
Demand	4,325	4,143	4,074	+ 6	Total Deposits	6,297	6,205	6,035	+ 4
NOW	933	860	575	+ 62	NOW	88	78	40	+120
Savings	2,176	2,130	2,332	- 7	Savings	688	673	737	- 7
Time	12,001	11,758	10,364	+ 16	Time	5,541	5,474	5,250	+ 6
Credit Union Deposits	700	673	601	+ 16		FEB	JAN	FEB	
Share Drafts	40	37	29	+ 38	Mortgages Outstanding	6,176	6,211	6,110	+ 1
Savings & Time	667	646	579	+ 15	Mortgage Commitments	53	39	65	- 18

Notes: All deposit data are extracted from the Federal Reserve Report of Transaction Accounts, other Deposits and Vault Cash (FR2900), and are reported for the average of the week ending the 1st Wednesday of the month. This data, reported by institutions with over \$15 million in deposits as of December 31, 1979, represents 95% of deposits in the six state area. The annual rate of change is based on most recent data over December 31, 1980 base, annualized. The major differences between this report and the "call report" are size, the treatment of interbank deposits, and the treatment of float. The data generated from the Report of Transaction Accounts is for banks over \$15 million in deposits as of December 31, 1979. The total deposit data generated from the Report of Transaction Accounts eliminates interbank deposits by reporting the net of deposits "due to" and "due from" other depository institutions. The Report of Transaction Accounts subtracts cash in process of collection from demand deposits, while the call report does not. Savings and loan mortgage data are from the Federal Home Loan Bank Board Selected Balance Sheet Data. The Southeast data represent the total of the six states. Subcategories were chosen on a selective basis and do not add to total.

N.A. = fewer than four institutions reporting.



EMPLOYMENT

	MAR 1982	FEB 1982	MAR 1981	ANN. % CHG.		MAR 1982	FEB 1982	MAR 1981	ANN. % CHG.
UNITED STATES									
Civilian Labor Force - thous.	108,761	108,324	107,634	+ 1	Nonfarm Employment- thous.	90,255	89,964	90,720	- 1
Total Employed - thous.	98,471	97,946	99,364	- 1	Manufacturing	19,352	19,410	20,160	- 4
Total Unemployed - thous.	10,290	10,378	8,271	+24	Construction	3,780	3,705	4,048	- 7
Unemployment Rate - % SA	9.0	8.8	7.3		Trade	20,602	20,529	20,290	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	16,181	16,112	16,493	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	18,804	18,691	18,287	+ 3
Mfg. Avg. Wkly. Hours	39.1	39.2	39.9	- 2	Fin., Ins., & Real Est.	5,341	5,326	5,263	+ 1
Mfg. Avg. Wkly. Earn. - \$	327	327	311	+ 5	Trans. Com. & Pub. Util.	5,047	5,045	5,095	- 1
SOUTHEAST									
Civilian Labor Force - thous.	13,957	13,844	13,272	+ 5	Nonfarm Employment- thous.	11,481	11,460	11,410	+ 1
Total Employed - thous.	12,588	12,526	12,282	+ 2	Manufacturing	2,218	2,234	2,288	- 3
Total Unemployed - thous.	1,369	1,318	991	+38	Construction	685	680	692	- 1
Unemployment Rate - % SA	9.9	9.2	7.7		Trade	2,697	2,685	2,641	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	2,158	2,157	2,197	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	2,226	2,212	2,118	+ 5
Mfg. Avg. Wkly. Hours	39.1	39.4	40.2	- 3	Fin., Ins., & Real Est.	642	638	627	+ 2
Mfg. Avg. Wkly. Earn. - \$	283	285	270	+ 5	Trans. Com. & Pub. Util.	695	696	694	+ 0
ALABAMA									
Civilian Labor Force - thous.	1,690	1,671	1,663	+ 2	Nonfarm Employment- thous.	1,333	1,338	1,351	- 1
Total Employed - thous.	1,453	1,437	1,481	- 2	Manufacturing	345	353	359	- 4
Total Unemployed - thous.	237	234	182	+30	Construction	64	63	66	- 3
Unemployment Rate - % SA	13.6	13.4	10.6		Trade	271	271	266	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	295	293	302	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	213	212	210	+ 1
Mfg. Avg. Wkly. Hours	39.1	39.5	39.8	- 2	Fin., Ins., & Real Est.	59	59	59	0
Mfg. Avg. Wkly. Earn. - \$	282	287	273	+ 3	Trans. Com. & Pub. Util.	70	71	72	- 3
FLORIDA									
Civilian Labor Force - thous.	4,598	4,558	4,412	+ 4	Nonfarm Employment- thous.	3,830	3,816	3,740	+ 2
Total Employed - thous.	4,205	4,236	4,127	+ 2	Manufacturing	467	469	467	0
Total Unemployed - thous.	393	322	285	+38	Construction	262	264	281	- 7
Unemployment Rate - % SA	8.9	7.3	6.8		Trade	1,036	1,027	988	+ 5
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	618	622	633	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	922	915	864	+ 7
Mfg. Avg. Wkly. Hours	39.6	39.6	40.8	- 3	Fin., Ins., & Real Est.	284	280	269	+ 6
Mfg. Avg. Wkly. Earn. - \$	271	270	257	+ 5	Trans. Com. & Pub. Util.	229	229	227	+ 1
GEORGIA									
Civilian Labor Force - thous.	2,626	2,610	2,397	+10	Nonfarm Employment- thous.	2,160	2,161	2,186	- 1
Total Employed - thous.	2,424	2,397	2,259	+ 7	Manufacturing	498	505	522	- 5
Total Unemployed - thous.	201	213	138	+46	Construction	100	99	103	- 3
Unemployment Rate - % SA	8.0	8.0	6.1		Trade	494	493	501	- 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	438	439	441	- 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	365	361	356	+ 3
Mfg. Avg. Wkly. Hours	38.6	38.9	40.3	- 4	Fin., Ins., & Real Est.	114	114	113	+ 1
Mfg. Avg. Wkly. Earn. - \$	257	258	252	+ 2	Trans. Com. & Pub. Util.	142	142	143	- 1
LOUISIANA									
Civilian Labor Force - thous.	1,878	1,841	1,766	+ 6	Nonfarm Employment- thous.	1,630	1,627	1,603	+ 2
Total Employed - thous.	1,694	1,660	1,639	+ 3	Manufacturing	207	209	217	- 5
Total Unemployed - thous.	184	181	127	+45	Construction	136	135	135	+ 1
Unemployment Rate - % SA	9.9	9.4	7.3		Trade	371	370	360	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	313	311	307	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	295	295	283	+ 4
Mfg. Avg. Wkly. Hours	40.0	40.5	40.8	- 2	Fin., Ins., & Real Est.	76	76	76	0
Mfg. Avg. Wkly. Earn. - \$	370	373	342	+ 8	Trans. Com. & Pub. Util.	131	131	131	0
MISSISSIPPI									
Civilian Labor Force - thous.	1,074	1,062	1,049	+ 2	Nonfarm Employment- thous.	809	809	817	- 1
Total Employed - thous.	971	953	958	+ 1	Manufacturing	212	212	218	- 3
Total Unemployed - thous.	104	109	92	+13	Construction	41	40	41	0
Unemployment Rate - % SA	9.6	9.6	8.7		Trade	161	161	160	+ 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	188	188	193	- 3
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	122	121	121	+ 1
Mfg. Avg. Wkly. Hours	38.7	38.8	39.4	- 2	Fin., Ins., & Real Est.	33	33	33	0
Mfg. Avg. Wkly. Earn. - \$	247	247	235	+ 5	Trans. Com. & Pub. Util.	40	40	40	0
TENNESSEE									
Civilian Labor Force - thous.	2,091	2,102	1,985	+ 5	Nonfarm Employment- thous.	1,719	1,709	1,713	+ 0
Total Employed - thous.	1,841	1,843	1,818	+ 1	Manufacturing	489	486	507	- 4
Total Unemployed - thous.	250	259	167	+50	Construction	82	79	66	+24
Unemployment Rate - % SA	11.8	11.4	8.2		Trade	364	363	366	- 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	306	304	321	- 5
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	309	308	284	+ 9
Mfg. Avg. Wkly. Hours	38.3	39.2	39.9	- 4	Fin., Ins., & Real Est.	76	76	77	- 1
Mfg. Avg. Wkly. Earn. - \$	269	276	260	+ 3	Trans. Com. & Pub. Util.	83	83	81	+ 2

Notes: All labor force data are from Bureau of Labor Statistics reports supplied by state agencies.
 Only the unemployment rate data are seasonally adjusted.
 The Southeast data represent the total of the six states.
 The annual percent change calculation is based on the most recent data over prior year.

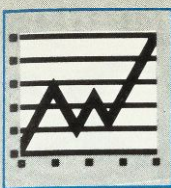


CONSTRUCTION

12-month Cumulative Rate	MAR 1982	FEB 1982	MAR 1981	ANN % CHG		MAR 1982	FEB 1982	MAR 1981	ANN % CHG
UNITED STATES									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	52,090	51,662	47,182	+ 10		37,575	38,554	46,453	- 19
Industrial Bldgs.	7,091	7,042	8,063	- 12	Residential Permits - Thous.				
Offices	15,374	14,929	10,967	+ 40	Number single-family	511.0	528.5	706.0	- 28
Stores	6,114	6,163	6,355	- 4	Number multi-family	391.3	395.8	475.6	- 18
Hospitals	1,659	1,674	1,377	+ 20	Total Building Permits Value - \$ Mil.	89,665	90,216	93,635	- 4
Schools	802	796	741	+ 8					
SOUTHEAST									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	6,626	6,627	6,838	- 3		7,434	7,700	9,751	- 24
Industrial Bldgs.	817	798	891	- 8	Residential Permits - Thous.				
Offices	1,371	1,356	1,211	+ 13	Number single-family	105.7	109.6	155.0	- 32
Stores	1,072	1,071	946	+ 13	Number multi-family	92.3	94.2	127.6	- 28
Hospitals	272	288	228	+ 19	Total Building Permits Value - \$ Mil.	14,060	14,327	16,589	- 15
Schools	85	91	155	- 45					
ALABAMA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	422	434	494	- 15		269	273	417	- 35
Industrial Bldgs.	75	75	90	- 17	Residential Permits - Thous.				
Offices	55	55	55	0	Number single-family	4.6	4.9	8.9	- 48
Stores	50	55	71	- 30	Number multi-family	5.2	5.1	8.1	- 36
Hospitals	31	37	61	- 49	Total Building Permits Value - \$ Mil.	691	707	911	- 24
Schools	7	6	14	- 50					
FLORIDA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	3,351	3,335	3,652	- 8		5,015	5,293	6,537	- 23
Industrial Bldgs.	389	367	388	+ 0	Residential Permits - Thous.				
Offices	584	572	522	+ 12	Number single-family	61.3	64.7	89.6	- 32
Stores	593	617	512	+ 16	Number multi-family	62.5	66.9	88.8	- 30
Hospitals	157	150	51	+208	Total Building Permits Value - \$ Mil.	8,366	8,628	10,189	- 18
Schools	21	20	20	+ 5					
GEORGIA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	1,050	1,065	1,140	- 8		1,040	1,025	1,233	- 16
Industrial Bldgs.	187	190	201	- 7	Residential Permits - Thous.				
Offices	255	258	315	- 19	Number single-family	20.6	20.2	27.1	- 24
Stores	113	121	107	+ 6	Number multi-family	9.7	8.5	9.7	0
Hospitals	30	34	21	+ 43	Total Building Permits Value - \$ Mil.	2,090	2,090	2,373	- 12
Schools	32	30	31	+ 3					
LOUISIANA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	905	903	776	+ 17		580	582	653	- 11
Industrial Bldgs.	90	91	113	- 20	Residential Permits - Thous.				
Offices	293	304	218	+ 34	Number single-family	9.4	9.7	11.6	- 19
Stores	166	128	92	+ 80	Number multi-family	7.9	7.5	8.2	- 4
Hospitals	27	42	56	- 52	Total Building Permits Value - \$ Mil.	1,485	1,485	1,429	+ 4
Schools	19	19	22	- 14					
MISSISSIPPI									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	173	175	198	- 13		145	146	277	- 48
Industrial Bldgs.	20	18	27	- 26	Residential Permits - Thous.				
Offices	44	44	39	+ 13	Number single-family	3.0	3.1	5.3	- 43
Stores	32	34	52	- 38	Number multi-family	1.9	1.7	5.1	- 63
Hospitals	6	6	5	+ 20	Total Building Permits Value - \$ Mil.	318	321	475	- 33
Schools	0.8	10	12	- 93					
TENNESSEE									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits Value - \$ Mil.				
Total Nonresidential	725	715	578	+ 25		385	381	634	- 39
Industrial Bldgs.	56	57	72	- 22	Residential Permits - Thous.				
Offices	135	123	62	+118	Number single-family	6.8	7.1	12.5	- 46
Stores	118	116	112	+ 5	Number multi-family	5.1	4.5	7.6	- 33
Hospitals	21	19	34	- 38	Total Building Permits Value - \$ Mil.	1,110	1,110	1,212	- 8
Schools	5	6	16	- 69					

NOTES:

Data supplied by the U. S. Bureau of the Census, Housing Units Authorized By Building Permits and Public Contracts, C-40. Nonresidential data excludes the cost of construction for publicly owned buildings. The Southeast data represent the total of the six states. The annual percent change calculation is based on the most recent month over prior year. Publication of F. W. Dodge construction contracts has been discontinued.



GENERAL

	MAR 1982	FEB 1982	MAR 1981	ANN. % CHG.		APR 1982	MAR (R) 1982	APR 1981	ANN. % CHG.
UNITED STATES									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	2,412.9	2,340.5	2,155.8	+12	Agriculture				
Retail Sales - \$ mil.- SA (APR)	88,310	87,128	86,263	+ 2	Prices Rec'd by Farmers Index (1977=100)	135	133	143	- 6
Plane Pass. Arrivals (thous.) FEB	N.A.	N.A.	N.A.		Broiler Placements (thous.)	83,782	82,723	84,541	- 1
Petroleum Prod. (thous. bls.)	8,687.8	8,684.4	8,618.5	+ 1	Calf Prices (\$ per cwt.)	62.60	61.90	70.70	-11
Consumer Price Index 1967=100	283.1	283.4	265.1	+ 7	Broiler Prices (¢ per lb.)	26.2	26.9	26.8	- 2
Kilowatt Hours - mils. (NOV)	162.1	168.7	162.2	- 0	Soybean Prices (\$ per bu.)	6.11	5.99	7.60	-20
					Broiler Feed Cost (\$ per ton)	215	207	234	- 8
SOUTHEAST									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	282.1	272.8	249.2	+13	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Prices Rec'd by Farmers Index (1977=100)	119	117	129	- 8
Plane Pass. Arrivals (thous.) FEB	3,980.8	3,941.8	4,026.1	- 1	Broiler Placements (thous.)	33,471	32,829	33,688	- 1
Petroleum Prod. (thous. bls.)	1,392.9	1,397.4	1,443.4	- 3	Calf Prices (\$ per cwt.)	60.56	58.80	66.65	- 9
Consumer Price Index 1967=100	N.A.	N.A.	N.A.		Broiler Prices (¢ per lb.)	24.6	26.0	25.6	- 4
Kilowatt Hours - mils. (NOV)	25.0	27.6	25.5	- 2	Soybean Prices (\$ per bu.)	6.35	6.20	7.50	-15
					Broiler Feed Cost (\$ per ton)	211	205	229	- 8
ALABAMA									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	32.4	31.4	29.1	+11	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	146	-	160	- 9
Plane Pass. Arrivals (thous.) FEB	91.6	139.6	96.4	- 4	Broiler Placements (thous.)	10,746	10,497	11,055	- 3
Petroleum Prod. (thous. bls.)	55.4	56.4	63.0	-12	Calf Prices (\$ per cwt.)	58.30	57.60	65.80	-11
Consumer Price Index 1967=100	N.A.	N.A.	N.A.		Broiler Prices (¢ per lb.)	25.0	25.0	24.5	+ 2
Kilowatt Hours - mils. (NOV)	3.5	3.9	3.8	- 8	Soybean Prices (\$ per bu.)	6.29	6.12	7.43	-15
					Broiler Feed Cost (\$ per ton)	225	225	240	- 6
FLORIDA									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	102.4	98.3	88.8	+15	Agriculture				
Taxable Sales - \$ mil. (APR)	67.4	67.3	60.7	+11	Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	533	-	507	+ 5
Plane Pass. Arrivals (thous.) FEB	2,177.5	1,999.3	2,187.9	- 0	Broiler Placements (thous.)	1,961	1,979	1,891	+ 4
Petroleum Prod. (thous. bls.)	80.5	84.0	117.4	-31	Calf Prices (\$ per cwt.)	63.90	61.20	70.10	- 9
Consumer Price Index - Miami Nov. 1977 = 100	MAR 155.1	JAN 155.2	MAR 140.0	+11	Broiler Prices (¢ per lb.)	25.0	26.0	25.5	- 2
Kilowatt Hours - mils. (NOV)	7.0	7.8	7.0		Soybean Prices (\$ per bu.)	6.29	6.12	7.43	-15
					Broiler Feed Cost (\$ per ton)	225	225	240	- 6
GEORGIA									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	48.7	47.6	43.7	+11	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	196	-	233	-16
Plane Pass. Arrivals (thous.) FEB	1,315.5	1,401.6	1,341.0	- 2	Broiler Placements (thous.)	12,873	12,546	13,098	- 2
Petroleum Prod. (thous. bls.)	N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	56.00	56.10	62.40	-10
Consumer Price Index - Atlanta 1967 = 100	FEB 279.8	DEC 282.2	FEB 263.0	+ 6	Broiler Prices (¢ per lb.)	23.5	25.6	25.5	- 8
Kilowatt Hours - mils. (NOV)	3.7	4.1	3.7	0	Soybean Prices (\$ per bu.)	6.22	6.07	7.39	-16
					Broiler Feed Cost (\$ per ton)	200	185	220	- 9
LOUISIANA									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	40.4	39.1	35.3	+14	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	169	-	154	+10
Plane Pass. Arrivals (thous.) FEB	247.1	248.5	252.1	- 2	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Petroleum Prod. (thous. bls.)	1,163.0	1,163.0	1,167.5	- 0	Calf Prices (\$ per cwt.)	61.00	60.10	69.90	-13
Consumer Price Index 1967 = 100	N.A.	N.A.	N.A.		Broiler Prices (¢ per lb.)	27.0	27.5	26.0	+ 4
Kilowatt Hours - mils. (NOV)	4.1	4.8	4.0	+ 3	Soybean Prices (\$ per bu.)	6.45	6.34	7.65	-16
					Broiler Feed Cost (\$ per ton)	255	250	245	+ 4
MISSISSIPPI									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	18.3	17.7	16.5	+11	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	247	-	211	+17
Plane Pass. Arrivals (thous.) FEB	28.6	27.9	29.4	- 3	Broiler Placements (thous.)	6,502	6,441	6,306	+ 3
Petroleum Prod. (thous. bls.)	94.0	94.0	95.5	- 2	Calf Prices (\$ per cwt.)	63.40	61.20	66.80	- 5
Consumer Price Index 1967 = 100	N.A.	N.A.	N.A.		Broiler Prices (¢ per lb.)	25.5	28.0	27.5	- 7
Kilowatt Hours - mils. (NOV)	1.6	1.9	1.6	0	Soybean Prices (\$ per bu.)	6.37	6.20	7.45	-14
					Broiler Feed Cost (\$ per ton)	197	195	215	- 8
TENNESSEE									
Personal Income-\$ bil. SAAR (Dates: 1Q, 4Q, 1Q)	39.8	38.8	35.8	+11	Agriculture				
Taxable Sales - \$ mil.	N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil. (Dates: JAN, JAN)	174	-	158	+10
Plane Pass. Arrivals (thous.) FEB	120.5	124.9	119.3	+ 1	Broiler Placements (thous.)	1,389	1,366	1,338	+ 4
Petroleum Prod. (thous. bls.)	N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	59.60	56.40	65.00	- 8
Consumer Price Index 1967 = 100	N.A.	N.A.	N.A.		Broiler Prices (¢ per lb.)	22.5	24.5	25.0	-10
Kilowatt Hours - mils. (NOV)	5.1	5.1	5.4	- 6	Soybean Prices (\$ per bu.)	6.34	6.18	7.50	-15
					Broiler Feed Cost (\$ per ton)	210	210	215	- 2

Notes:

Personal Income data supplied by U. S. Department of Commerce. Taxable Sales are reported as a 12-month cumulative total. Plane Passenger Arrivals are collected from 26 airports. Petroleum Production data supplied by U. S. Bureau of Mines. Consumer Price Index data supplied by Bureau of Labor Statistics. Agriculture data supplied by U. S. Department of Agriculture. Farm Cash Receipts data are reported as cumulative for the calendar year through the month shown. Broiler placements are an average weekly rate. The Southeast data represent the total of the six states. N.A. = not available. The annual percent change calculation is based on most recent data over prior year. (R) = Revised.

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