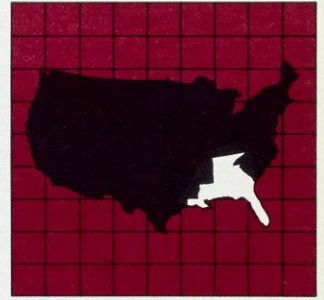


Economic Review

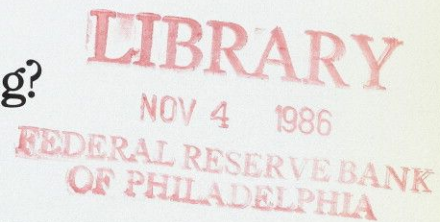


FEDERAL RESERVE BANK OF ATLANTA

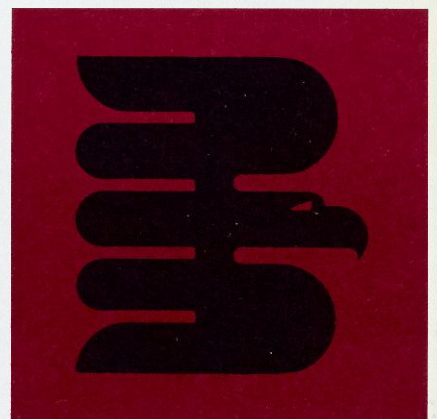
AUGUST/SEPTEMBER 1986

THE RIGHT MIX Monetary and Fiscal Policy

BANK PROFITS Who's Gaining?



EMPLOYMENT Two Different Measures



Economic Review

President

Robert P. Forrestal

Sr. Vice President and Director of Research

Sheila L. Tschinkel

Vice President and

Associate Director of Research

B. Frank King

Financial Institutions and Payments

David D. Whitehead, Research Officer

Larry D. Wall

Robert E. Goudreau

Macropolicy

Robert E. Keleher, Research Officer

Thomas J. Cunningham

Mary S. Rosenbaum

Jeffrey A. Rosensweig

Joseph A. Whitt, Jr.

Regional Economics

Gene D. Sullivan, Research Officer

William J. Kahley

Joel R. Parker

W. Gene Wilson

Visiting Scholars

Russell Boyer

William Hunter

Public Information and Publications

Bobbie H. McCrackin, Director

Public Information

Larry J. Schulz,

Public Information Coordinator

Linda Donaldson

Editorial

Harriette Grissom, Publications Coordinator

Melinda Dingler Mitchell

Ann L. Pegg

Graphics

Eddie W. Lee, Jr.

Typesetting, Word Processing

Cheryl B. Birthrong

Belinda Womble

Distribution

George Briggs

Vivian Wilkins

Ellen Gerber

The **Economic Review** seeks to inform the public about Federal Reserve policies and the economic environment and, in particular, to narrow the gap between specialists and concerned laymen. Views expressed in the **Economic Review** are not necessarily those of this Bank or the Federal Reserve System. Material may be reprinted or abstracted if the **Review** and author are credited. Please provide the Bank's Research Department with a copy of any publication containing reprinted material. Free subscriptions and additional copies are available from the Information Center, Federal Reserve Bank of Atlanta, 104 Marietta Street, N.W., Atlanta, Ga. 30303-2713 (404/521-8788). Also contact the Information Center to receive **Southeastern Economic Insight**, a free newsletter on economic trends published by the Atlanta Fed twice a month. The **Review** is indexed online in the following data-bases: ABI/Inform, Magazine Index, Management Contents, PAIS, and the Predicasts group.

ISSN 0732-1813

Table of Contents



The Monetary and Fiscal Policy Mix

4

James Tobin

This analysis contends that a mix of tight monetary and easy fiscal policy will cause problems in the long run.



Profits in '85: Large Banks Gain While Others Continue to Lag

18

Larry D. Wall

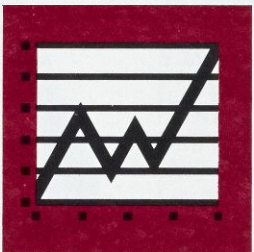
Higher profit figures overall mask continuing declines among smaller banks.



Economic Brief

32

Two Measures of Employment:
What Can They Tell Us?



Statistical Summary

40

General, Employment, MSA, Construction

Editor's Note: This article, based on a lecture delivered by Professor James Tobin in May 1986, inaugurated the Atlanta Federal Reserve Bank's distinguished lecturer series. Those attending included both professional economists and the general public. The lecturer sought to present macroeconomic analysis familiar to many economists for a lay audience. The views expressed are Professor Tobin's, not those of the Federal Reserve Bank of Atlanta.

Professor Tobin analyzes the macroeconomic impacts of monetary and fiscal policies. Within limits, the same short-run paths of gross national product (GNP) and employment can be achieved by different "mixes" of the two policies. But a mix of high real interest rates and large budget deficits, though it temporarily dampens inflation, has adverse long-run consequences. Carried to the extremes of recent U.S. policies, such a mix if continued would lead to unending rises in the ratio of public debt to GNP, in interest rates, and in "crowding out."

Aggregate Demand and Supply

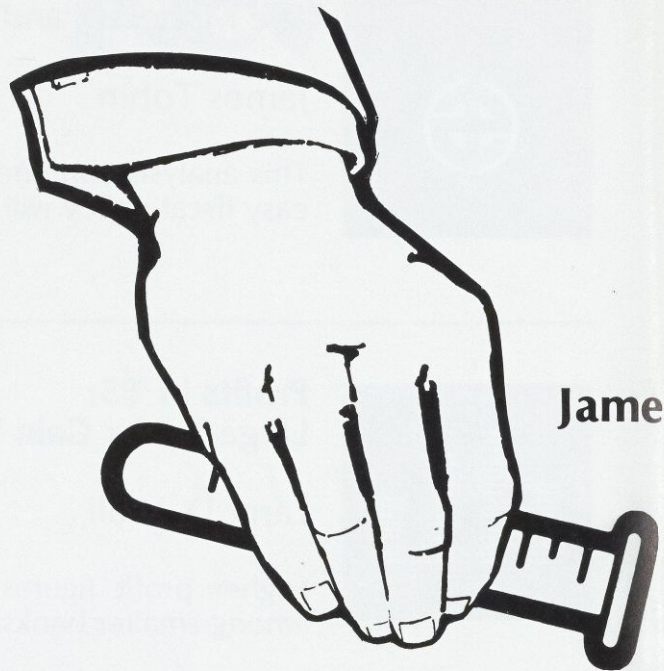
In this lecture, I shall discuss the strategy of what economists call *demand management*—the policies of the government, including the Federal Reserve, that affect the aggregate spending of the population on goods and services and so act upon the economy. I refer to the economy as a whole, not to particular products or markets.

I distinguish *demand* from *supply* in the following sense: During business cycles the economy is not always constrained by its capacity to produce, its supply potential. Cyclical fluctuations reflect variations, for one reason or another, in the overall demand for goods and services, and thus for workers to produce them. In the long run, however, the output of goods and services in the country is clearly limited by the capacity of the economy to produce.

"Supply-side" economics concerns the growth of productive capacity. "Demand-side" economics, my main focus in this lecture, has to do with the management of the economy, not for

The author is Sterling Professor of Economics at Yale University and 1981 winner of the Nobel Memorial Prize in Economic Science.

The Monetary and

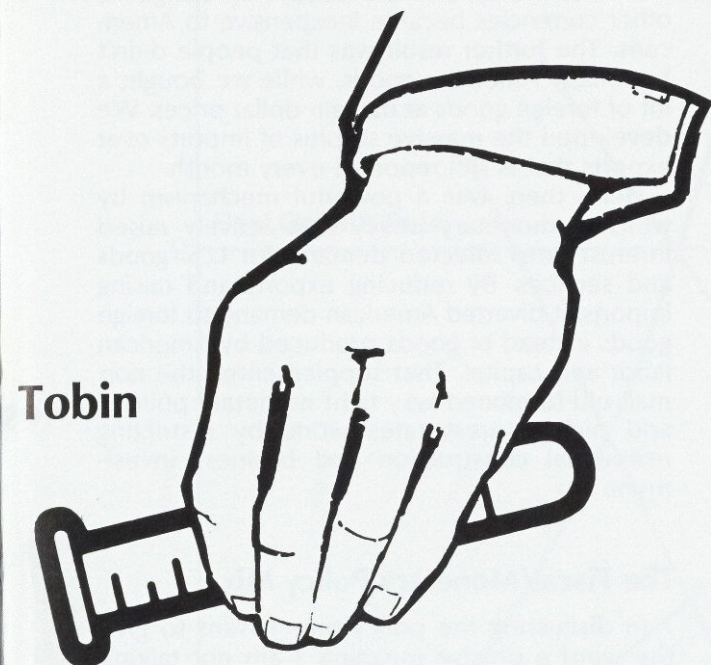


James

accelerating its long-run capacity growth, but for stabilizing the business cycle and avoiding excesses of unemployment on the one hand and inflation on the other. The two "sides" are, however, related in a way that I will be discussing and trying to describe. Some strategies of short-run demand management are better for long-run growth than others.

In recent years, I think it is fair to say, the capacity of the economy to produce goods and services—potential output—has not been the binding constraint on the real output of the United States economy. Rather, the constraint has been the adequacy of aggregate demand to purchase the output of the economy. This has been true since 1980, when we fell into the first of two recessions that occurred in rapid succession. We began recovering from the second

Fiscal Policy Mix



Tobin

one at the end of 1982, but we haven't yet fully recovered. For more than two years the rate of utilization of the economy's potential has been flat; only 80 percent of industrial capacity has been utilized, recently even less. Normal capacity utilization in our economy in prosperity has been at 85, 86, or 87 percent. The unemployment rate of workers has been stuck for more than two years at 7 percent of the labor force, plus or minus a couple of tenths, more often plus than minus. There is no evidence that 7 percent is as low an unemployment rate as we can have today without setting off inflation. It's hard to find any bottlenecks or scarcities or shortages in this economy, or any tendency for wages to accelerate. The inflation rate has been extremely well-behaved, even after the end of the deep recession of 1981-82. This

means that ever since 1979, demand management, or short-run stabilization policy, which is the main business of the Federal Reserve, has been the decisive determinant of unemployment, capacity utilization, and the growth of real GNP.

Demand Management, Fiscal and Monetary

Two major instruments of demand management are available to the central government in the United States and other advanced economies: on the one hand, monetary policy and, on the other, fiscal policy. Reference was made in the introductions to my service in Washington on the President's Council of Economic Advisers. At that time we on the Council were doing a teaching job. We had an important student, the President of the United States, John F. Kennedy, who seemed not to have absorbed a lot of economics in his undergraduate training. He was a good student and able to learn fast, and we were good teachers, I must say. We knew we were getting somewhere one day when he said "I think I now know the difference between monetary policy and fiscal policy. Monetary policy begins with an "M," and the chairman of the Federal Reserve is [William McChesney] Martin, so that's monetary policy. What we do in the budget must be fiscal policy." These two instruments of demand management policy are the ingredients I refer to when I speak of "the mix."

How does the use of these two instruments work on aggregate demand? Fiscal policy involves spending money. When the government spends more money directly on goods and services—mainly armaments these days—or transfers money to the beneficiaries of Social Security and other programs, aggregate demand for goods and services increases. You may or may not like particular programs, but how the money is spent doesn't matter for our immediate purpose. What matters is the additional overall spending on goods and services. If you don't believe that defense spending is stimulating, I invite you to come to Connecticut or Massachusetts to see that economies supplying defense-related products do prosper. Tax reductions work the same way. People generally spend a large fraction of their tax savings. For example, in 1981 we had a mammoth reduction in income taxes under the Economic Recovery

Tax Act of 1981. To be sure, it was advertised by the Administration and in the press as a supply-side tax cut. Its philosophy was to increase incentives for working more, saving more, producing more, and taking more risk. Thus it was meant to be a policy to increase the capacity of the economy, its productivity, its potential output. In the immediate circumstances of the day, however, when the potential output of the economy was far above its actual performance, it worked to increase spending. The recipients of the tax cut didn't know that they weren't supposed to spend the proceeds, and so they spent them. Thus it worked as a demand-side stimulus.

Monetary policy generally works in ways that lower or raise interest rates and raise or lower market values of bonds, stocks, and other assets. Through these effects, monetary policy stimulates or restrains spending for investment goods—for house building, business plant and equipment, and inventories.

Exchange Rates and Aggregate Demand

There is one other mechanism by which monetary policy works to expand or restrict demand, a mechanism fairly new in American experience—and in world experience. Recent events have given a striking demonstration of its power. It works through the balance of exports and imports in foreign trade. Because of the floating exchange rate regime in which the United States and other countries have been operating since 1973, along with the amazing international mobility of funds, immense amounts of money can move rapidly across the exchange rates from, say, dollar assets into yen assets or vice versa, or into and out of pound-sterling, deutsche mark assets, or others. Recently we have had a textbook example of this mechanism, which, I must say to the credit of us economists, was well understood in theory before it actually occurred with such remarkable fidelity.

In the 1980s, thanks to our monetary and fiscal policies, interest rates in the United States were high, even higher than interest rates in other advanced economies. They attracted funds across the currency exchanges into dollar assets, often U.S. Treasury bills and bonds but into the whole range of dollar-denominated assets as well. Likewise, they

deterred Americans from lending funds overseas. The result was a big demand for dollars relative to other currencies, which bid up the price of a dollar in yen and other major currencies. The dollar became costly to foreigners; other currencies became inexpensive to Americans. The further result was that people didn't buy many American goods, while we bought a lot of foreign goods at bargain dollar prices. We developed the massive surplus of imports over exports that is still reported every month.

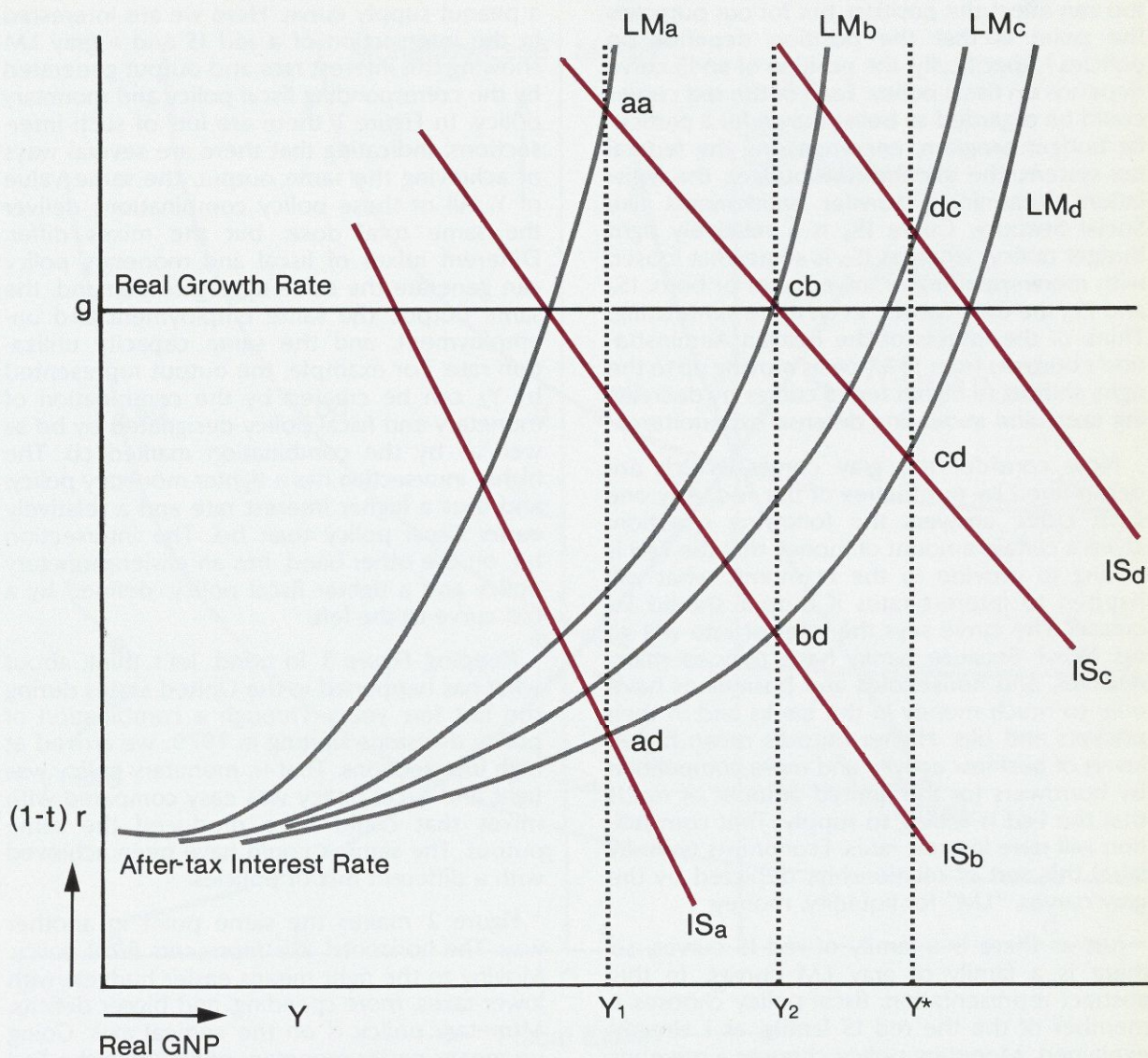
Here, then, was a powerful mechanism by which a monetary policy that actively raised interest rates affected demand for U.S. goods and services. By reducing exports and raising imports, it diverted American demand to foreign goods instead of goods produced by American labor and capital. That supplemented the normal, old-fashioned way tight monetary policies and high interest rates work, by restricting residential construction and business investment.

The Fiscal/Monetary Policy Mix

In discussing the policy *mix*, I want to give the word a precise meaning. I am not talking about a mix-up between the two policies, although that may often occur. I am not referring to the two policies in a general way. I make a precise distinction between the total stimulus administered by the two policies and the relative contributions of each of the two policies to that total. It's as if you have two types of medicine: first you ask what is the total dose of the two medicines together; and second, how is the dose split between the two medicines. Right now I want to address the second question, how the dose is split between the two medicines—the mix.

Figure 1 relates the after-tax interest rate in the economy and the real (inflation-corrected) output of the economy. The horizontal axis represents output, real GNP, labeled "Y." The vertical axis is the interest rate after tax: $(1-t)r$, one minus the tax rate, that quantity times the interest rate. Red curves, "IS," for investment and saving, tell how the interest rate has to move for given monetary and fiscal policies in order to induce the amount of spending that would buy exactly the output measured on the horizontal axis. Each red curve is sloping down, because lower interest rates are needed to get

Figure 1. Policy Mixes, Interest Rates, and GNP



The diagram shows how the same GNP values, Y_1 or Y_2 or Y^* (full employment output), can be achieved by different mixes of monetary and fiscal policies. Fiscal policy determines which IS locus the economy is on; curves higher and to the right result from easier fiscal policies. Monetary policy determines which LM curve the economy is on; curves lower and to the right represent easier monetary policies. The horizontal line at g depicts the real growth rate of GNP. As discussed in the text, an after-tax interest rate above g means that federal debt grows explosively indefinitely.

people to spend more money. When interest rates are low, people spend more money on investment and borrow more for consumption as well. The down-sloping effect also comes through exports and imports, as I already explained. Lower interest rates mean the dollar is

cheaper, and that helps our exports relative to our imports. All these effects together make an IS curve slope down, as shown.

This figure shows a whole family of red IS curves. Some are higher than the others and further to the right. The position of a curve

depends on government policies. (Other things too can affect the position, but for our purposes the point is that the position depends on policies.) Specifically, the position of an IS curve depends on fiscal policy. Each of the red curves could be regarded as being drawn for a particular budget program, encompassing the federal tax system, the expenditure budget, the legislation determining transfer entitlements like Social Security. Curve IS_a is a relatively tight budget policy, whereas IS_b is somewhat looser, with more spending or lower taxes or both. IS_c and IS_d are even looser, even more stimulating. Think of the effects of the Reagan Administration's budgets from 1981 on as moving up to the right, shifting to higher red IS curves by decreasing taxes and increasing defense expenditures.

Now consider the gray curves, which are determined by our friends of the Fed. Any one such curve answers the following question: given a certain amount of money that the Fed is willing to provide to the economy, what will happen to interest rates if output should increase? The curve says the interest rate will go up. Why? Because banks have only so many reserves, and households and businesses have only so much money in the banks and in their pockets and tills. Higher outputs mean higher levels of business activity and more competition by borrowers for the limited amount of funds that the Fed is willing to supply. That competition will raise interest rates. Economists typically label this sort of relationship, depicted by the gray curves, "LM" for liquidity, money.

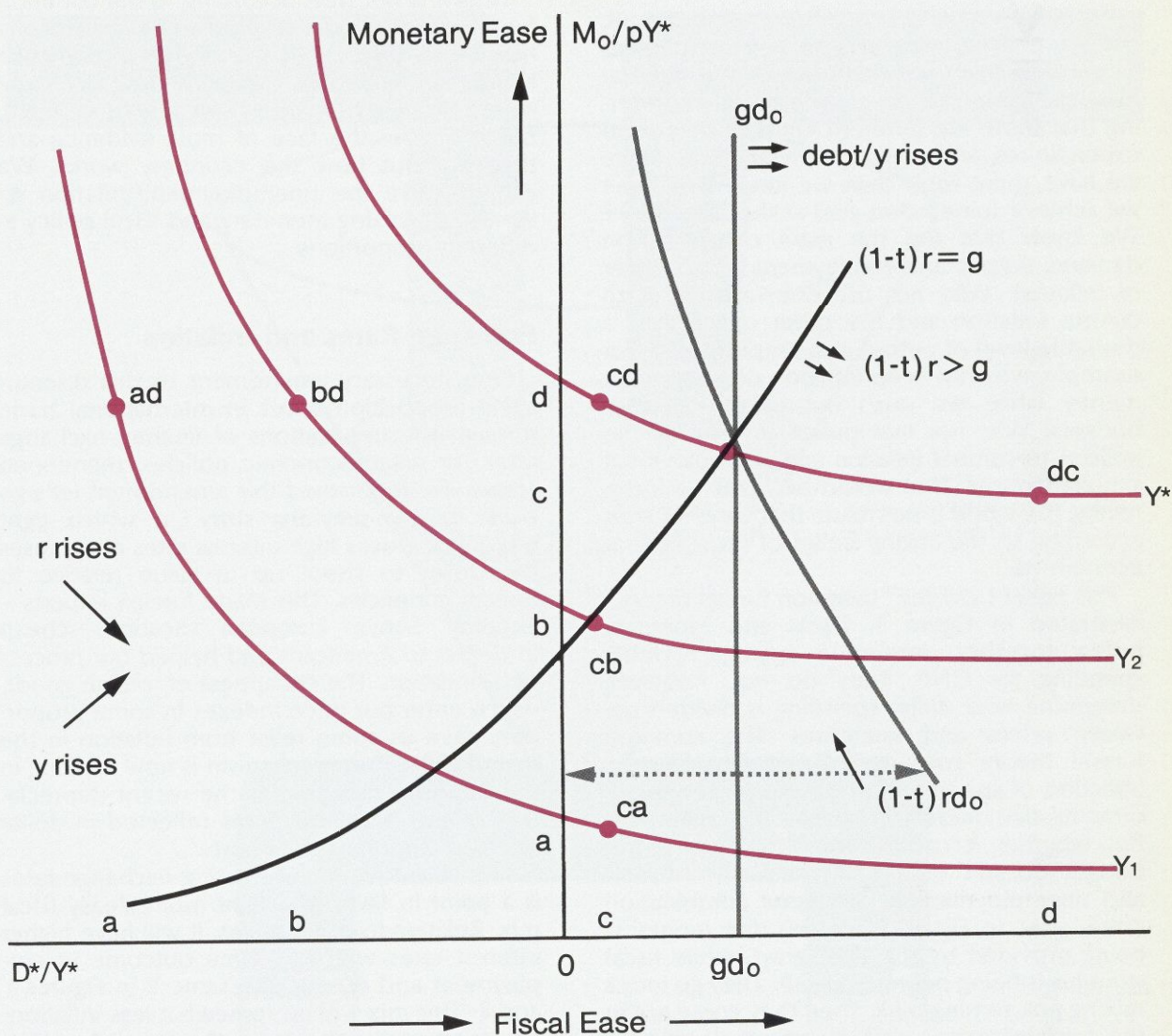
Just as there is a family of red IS curves, so there is a family of gray LM curves. In this abstract representation, fiscal policy chooses a member of the the red IS family, as I already explained. Monetary policy chooses a member of the gray LM family. If the Federal Open Market Committee, which meets every five or six weeks in Washington, decides to be more generous to the economy in the amount of money it provides, it will move to a gray curve further to the right and down; any given output of income will be associated with a lower interest rate. Easier monetary policy moves the economy's LM curve to the right, and tighter monetary policy moves it to the left. As all economics students know, economists like intersections of curves, such as those that show the price of peanuts and the quantity bought

and sold where a peanut demand curve crosses a peanut supply curve. Here we are interested in the intersection of a red IS and a gray LM showing the interest rate and output generated by the corresponding fiscal policy and monetary policy. In Figure 1 there are lots of such intersections, indicating that there are several ways of achieving the same output, the same value of Y . All of these policy combinations deliver the same total dose, but the mixes differ. Different mixes of fiscal and monetary policy can generate the same aggregate demand, the same output, the same employment and unemployment, and the same capacity utilization rate. For example, the output represented by Y_2 can be created by the combination of monetary and fiscal policy designated by bd as well as by the combination marked cb . The higher intersection has a tighter monetary policy, and thus a higher interest rate and a relatively easier fiscal policy than bd . The intersection bd , on the other hand, has an easier monetary policy and a tighter fiscal policy, defined by a red curve to the left.

Keeping Figure 1 in mind, let's think about what has happened in the United States during the last few years. Through a combination of policy decisions starting in 1979, we arrived at high intersections. That is, monetary policy was tight and fiscal policy was easy compared with mixes that could have produced the same output. The same Y could have been achieved with a different mix of policies.

Figure 2 makes the same point in another way. The horizontal axis represents fiscal policy. Moving to the right means easier budgets with lower taxes, more spending, and bigger deficits. Monetary policy is on the vertical axis. Going up means easier monetary policy, with the Fed providing more money relative to total output. The red curves in this diagram are called isoquants (same quantity). All the points on one of the red curves are different ways of getting a given output Y_1 . All the points on the next red curve Y_2 represent combinations that produce the common result Y_2 . The two Y_2 mixes we singled out in Figure 1 are both shown here, too, as cb and bd . One of them has easy fiscal policy and tight money and the other has tight fiscal policy and easy money. Then there is Y^* , which represents full capacity output—not the forced economic mobilization that occurred

Figure 2. Fiscal and Monetary Policies and GNP Outcomes



The information of Figure 1 is presented here in a different way. Monetary policy is measured by the ratio of the monetary base, in real terms, to potential output pY^* . Isoquants—combinations of the two policies that yield the same real GNP—are pictured for Y_1 , Y_2 , and Y^* . Points of intersection in Figure 1 are placed here also and labeled the same (ad , bd , etc.). The vertical line gd_0 tells how big a deficit will keep the debt-GNP ratio at d_0 , given GNP growth at rate g . The downward sloping curve $(1-t)r d_0$ is the interest cost of the existing debt d_0 . The upward sloping curve $(1-t)r = g$ is the boundary between stable (above) and unstable (below) debt-GNP ratios, as explained in the text.

during World War II but the highest output a peacetime market economy can expect without having a resurgence of accelerating prices, rising inflation. (I don't know how large that is nor do I know what the corresponding lowest

inflation-safe unemployment rate is. I was arguing with the local Fed people this morning about whether that figure is closer to 7 or to 6 percent or even lower than that now. As I said earlier, I am sure it's not as high as 7 percent.)

Prices vs. Quantities: The Common Funnel Theory

If our objective is just to determine output, our two policies evidently give us more degrees of freedom than we really need. We have at least two instruments—maybe more, considering that there are different kinds of taxes and expenditures, and several monetary tools. Since we have more tools than we need, why can't we achieve some other goal at the same time? We know that the main constraint on demand, output, and employment is the danger of inflation. Why not use one instrument to control inflation and the other one to get a desirable level of output and employment? For example, why not keep inflation down by tight money while we push output up by easy budgets? Why not manipulate the mix of the policies to combat inflation and unemployment simultaneously? That would be ideal. Unfortunately, the world is not made that way—at least according to the strong belief of most macroeconomists.

This belief I call the "common funnel theory," illustrated in Figure 3. Fiscal and monetary policy together determine aggregate dollar spending for GNP. They do not, however, determine how dollar spending is divided between prices and quantities. The common funnel theory goes as follows: Consider an injection of spending in dollars into the economy. Its size matters for prices and quantities. But whether it comes from the Fed or the budget doesn't matter; it produces inflation and unemployment in the same combination either way. In Figure 3 we see that money is being provided by the Fed (gray), while fiscal stimulus is being poured in (red). They go into a mixing pot, turning pink. Then they come out in the form of prices and quantities. It doesn't matter from what source they came in, whether in red or gray, whether from fiscal stimulus or the Fed; they come out in the same proportions in changes in prices and changes in quantities.

Those proportions do depend on the state of the economy. If the economy is tight in terms of capacity utilization, then most of the demand goes into prices and little into quantity. If it is slack in term of capacity utilization and labor employment, then the injections will show up mostly in quantities and only slightly in prices. The price/quantity outcome depends on the state of the economy, not on the sources of the

demand or the policies that generated the demand.

Thus it is not true, according to the common funnel proposition, that the Fed has a particular handle on prices and the budget a particular handle on quantities. Some people in Washington thought that in 1981 or at least said that, but it flies in the face of most evidence and theory about how the economy works. We cannot solve the unemployment/inflation dilemma by mixing monetary and fiscal policy in different proportions.

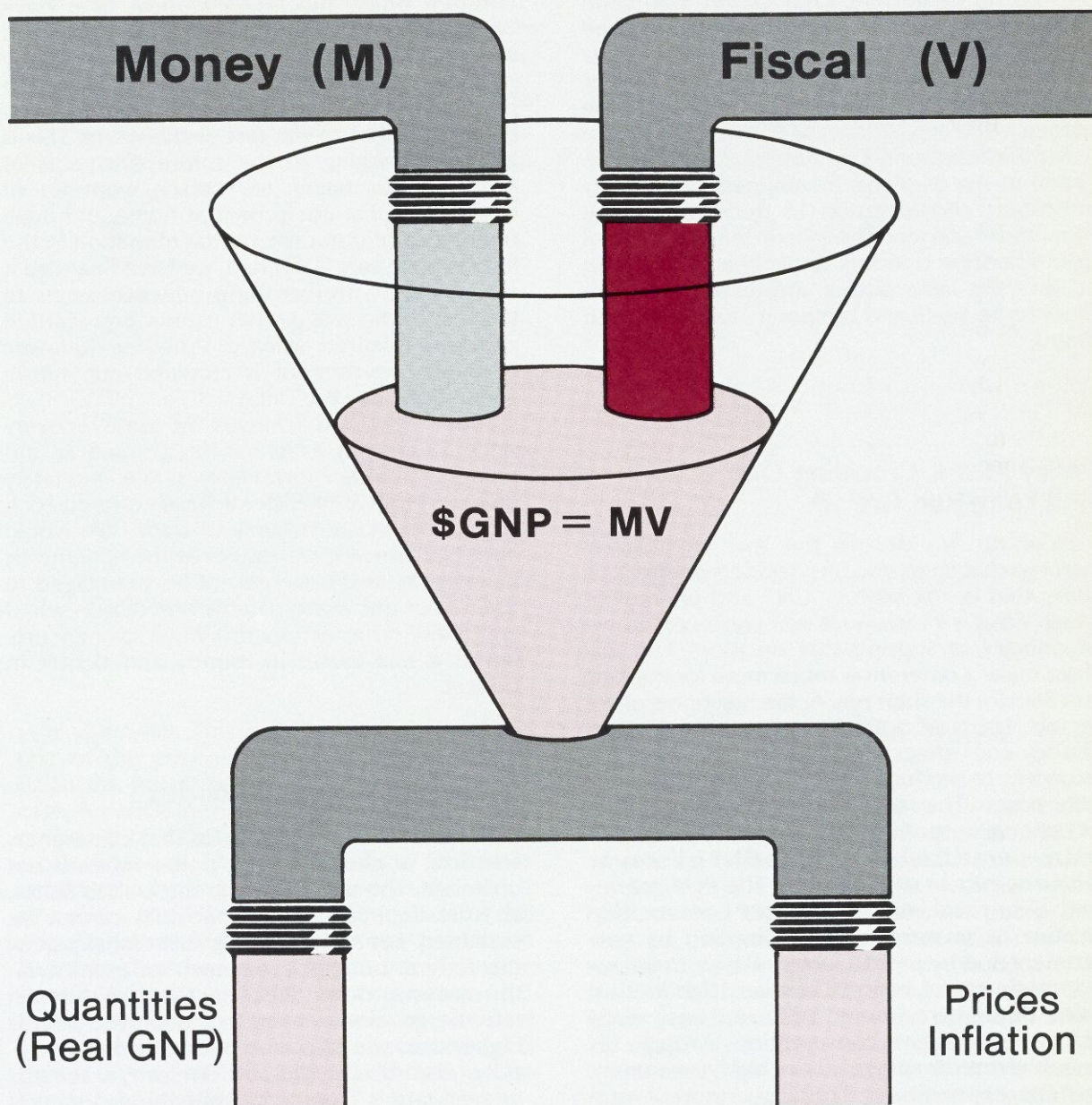
Exchange Rates and Inflation

One necessary amendment to this discouraging proposition arises in international trade through the implications of floating exchange rates for macroeconomic policies, mentioned above. To understand this amendment let's go back to my previous story, in which tight money produces high interest rates and causes the dollar to shoot up in value relative to foreign currencies. This made foreign imports—Toyotas, Sonys, European vacations—cheap in dollars to Americans and helped our process of disinflation. The cheapness of foreign goods, which enter our price indexes in some proportion, gave us some relief from inflation in the early 1980s. That mechanism is now working in the opposite direction as the recent depreciation of the dollar becomes reflected in dollar prices of imports and exports.

This consequence of floating exchange rates is a point in favor of a tight money/easy fiscal mix. Relative to other mixes, it will have higher interest rates with the same outcome in employment and output, the same Y in Figures 1 and 2. This mix will be somewhat less inflationary, or more disinflationary, than a mix in which low interest rates are the result of easy money combined with a tight fiscal budget.

But there is a catch, as we are now learning: A high exchange rate obtained through higher interest rates is only temporary. We can't live with massive import surpluses forever. At some point—a point we recently reached in the United States—the exchange rate has to go down again, the dollar has to depreciate. As that happens, we have to give back the price reductions we earned earlier by artificial appreciation of the currency. After all, the same movements of exchange rates that made things

Figure 3. The Common Funnel Theory



This schematic diagram illustrates the point that the mix of price/quantity outcomes is independent of the sources of aggregate dollar demand. Monetary policy affects the supply of money and fiscal policy its circuit velocity. It is the product MV (money supply times circuit velocity), which is equal to dollar GNP, that represents demand for goods, services, and labor and induces output and price responses from businesses and workers.

cheap for us made things dear for other countries. This game is not one that all countries can play at the same time. One reason that Japan and Germany objected to the high value of the dollar is that it made not only American imports but also oil, which is also invoiced in dollars, much more expensive in yen and deutsche marks.

For these reasons, I do not regard this qualification to the common funnel theory as a really important consideration in deciding on the monetary-fiscal mix. The gains in inflation control from choosing one mix rather than another to achieve the same output and employment are likely to be small and temporary for the United States.

Policy Mixes, Crowding Out, And Long-Run Growth

How do we decide the mix of policies? Assume that someone has decided on the total dose, that is, the path of GNP and unemployment. What is a socially rational choice of the mix of policies to support that decision? The mix does make a difference, much more for the long run than for the short run. At the beginning of the lecture, I pointed out that demand management strategy does affect the long-run capacity of the economy to produce. The policy mix makes that connection. The reason is that the *composition* of national output will be different with a different mix, even though aggregate GNP is the same with one mix as with another. The tight money and easy fiscal mix emphasizes consumption relative to investment—consumption by government and by private sector relative to future-oriented uses of national output. High interest rates deter investment, while an easy fiscal stance encourages consumption through tax cuts, high transfer payments, or high government current expenditure. True, government purchases are not always for consumption; if the government were running deficits to accumulate public capital that would enhance the productivity and capacity of the economy over the long run, this characterization would not be valid.

Recently the federal government has been financing current expenditures by deficit spending and the Federal Reserve has countered the expansionary effects of this fiscal policy by

high interest rates. The result is a larger consumption component of output than with a different policy mix. High interest rates have "crowded out" some domestic investment and a spectacular amount of foreign investment. By running big trade deficits, we are spending the overseas capital we previously acquired and going into debt to the rest of the world. This is just as damaging to the future prospects of Americans as failing to replace worn-out or obsolete capital equipment at home. Although our record of domestic capital formation in the last several years is not bad, we have financed it essentially by mortgaging productive assets to the rest of the world. That cannot be regarded as future-oriented activity. Whether domestic or foreign investment is crowded out, future generations pay the price.

Suppose we had achieved the same recovery since 1982 with a tighter budget and an appropriately easier, lower-interest-rate, monetary policy. Then we would not have suffered such big deficits in our balance of trade. We would have had as much, perhaps even more, domestic investment, and it would not be mortgaged to the rest of the world. That is one reason why I and many other economists have strongly preferred a mix easier in money and tighter in budget.

Stable and Unstable Policies

There is another reason for that preference. Freedom of choice among policy mixes is not unlimited. The mix chosen in the United States, at least until recently, is one that cannot be sustained. Let me explain: A substantial part of the federal budget is payment of interest on the national debt. Suppose that the interest rate the government has to pay on the debt is higher than the rate of economic growth. Suppose, realistically, that the Treasury's average interest rate is 7 percent, while the economy is growing in current dollar GNP at 6 percent per year, with 3 percent inflation and 3 percent real growth. Even if the budget is otherwise balanced, this disparity alone will make the debt grow by 7 percent while GNP will be growing by only 6 percent. As the debt grows faster than GNP, the interest burden will grow further, so that the deficit and debt become still larger relative to GNP. This accelerating process will continue

Table 1. Federal Fiscal History and Projections

	(As percent of GNP)				(Percent Per Year)		(Percent)
	(1) Debt Beginning of Period	(2) Primary Deficit	(3) Total Deficit	(4) Real Deficit	(5) Net Real Interest Rate Assumed	(6) Growth of Real GNP	(7) Equilibrium Debt/GNP Ratio
1952-57	65	-0.6	0.3	-1.0	-0.7	2.8	-17
1958-66	48	-0.5	0.1	-0.8	-0.7	3.4	-12
1967-74	36	0.3	1.1	-0.5	-2.8	3.8	5
1975-79	23	1.4	2.5	-0.8	-2.8	3.5	22
1980-85	22	2.6	4.5	2.7	0.3	1.9	45
1986	38	2.7	5.2	4.0	3.4	3.0	Unstable
1991 A	35	-1.9	0.0	-1.4	1.5	3.0	-126
1991 B	35	-0.7	1.4	0.0	2.0	3.0	-70
1991 C	35	0.2	2.5	1.1	2.5	3.0	35

1991 A Balanced Budget, G-R-H.

1991 B Balanced Budget, Correcting Interest for Inflation (4%).

1991 C Stabilizing Debt Relative to GNP.

Source: Author's calculations. Before 1980, originally presented in *Towards a Reconstruction of Federal Budgeting*, The Conference Board, 1983, pp. 51-59.

year after year. This would be true even if the rest of the government budget were exactly balanced, but of course that has not been the case. A deficit in the "primary" budget—that is, exclusive of debt service—makes the process more explosive. The ratio of debt to GNP rises indefinitely, faster and faster, as does the deficit as a share of GNP. An even larger share of the population's saving is diverted from productive investment, at home or abroad, into financing the federal government. As "crowding out" becomes more and more severe, the interest rate itself rises. The policy mix becomes a still tighter money, easier budget combination. The circle is really vicious.

Note the black line or curve on Figures 1 and 2. These depict the boundary I have just been discussing; crossing it leads to the vicious circle just described. The black boundary traces the limit at which the interest rate becomes the same as the growth rate. If you go to mixes tighter in monetary policy and looser in fiscal policy, you enter the unstable territory of exploding debt.

The Policy Mix in the United States Today

Table 1 presents some data on the United States' federal debt and deficits since 1952. It shows the ratios of federal debt (to the public) to GNP at the beginning of each of several periods. In 1952, for example, the public debt was 65 percent of one year's gross national product. As the Table shows, the ratio declined until 1980, to about 22 percent. The debt-GNP ratio actually started declining right after World War II, which had raised the ratio to 120 percent. While many people think the federal government has been following profligate fiscal policies continuously, as long as anyone can remember, at least since the Great Depression, the Table shows that this charge is far from true. The debt grew more slowly than GNP from 1946 to 1980.

Things changed radically in the 1980s. In the last five years the debt to GNP ratio has risen to 38 percent. That is a big increase, though 38 percent is still not a disastrously high number.

We have had higher numbers before without disaster; nonetheless, in the 1950s and 1960s the ratio was declining, while in the 1980s it has been rising.

Table 1 also shows the primary deficit in percent of GNP. This is the deficit we would have had if there had been no outstanding debt at the beginning of the period. For example, in the first period, 1952 to 1957, the primary budget showed an average surplus of 0.6 of one percent of GNP. It continued in surplus or close to balance in all periods through 1974. In 1986 prior to Gramm-Rudman, however, the primary deficit would have been 2.7 percent of GNP, the largest ever in peace time. The next column shows the total deficit, including interest payments on the debt, again in percent of GNP. The total deficit, which was very close to zero in the 1950s and 1960s, has risen to about 5 percent of GNP. Most of the increase occurred after 1980. Much of it, as the Table shows, is due to the tight money/easy fiscal mix, which brought high interest rates and in turn a tremendous surge of interest payments compared to the years before 1980.

Column 4 of Table 1 shows the "Real Deficit." Applying inflation accounting principles to the government budget and its debt means counting only real interest—the difference between the interest rate and the inflation rate—as a cost to the government. The implicit assumption is that the public's latent demand for government debt will cause people to save enough to maintain their holdings of the debt in real terms. In other words, people are assumed to understand that part of the high nominal interest they receive just pays for the loss in the real principal value of government securities due to inflation. Inflation accounting gives lower deficit figures, but the pattern shows a very sharp increase since 1980.

Columns 5 and 6 of Table 1 compare the real growth rate of the economy with the interest rate the government has to pay on its debt. I pointed out earlier the danger that confronts us if the interest that the Treasury has to pay (allowing for taxes) exceeds the growth rate of the economy. We were never close to that point until now; we crossed the line some time between 1980 and 1985. Before 1980 real GNP growth always exceeded interest cost by a wide margin—you get the same answer by comparing nominal interest rates and dollar

GNP growth. But since then the comparison turned the other way, and these circumstances produced the unstable vicious spiral I described. This mix of monetary and fiscal policy simply cannot be allowed to continue indefinitely.

The last column is a bit more esoteric. It addresses the question: Is there a value at which the debt-GNP ratio would settle down permanently, as long as the parameters of the budget and the economy remained constant? If so, what is it? The answers depend on the values of three parameters: the primary deficit in ratio to GNP, x ; the net (after-tax) interest rate $(1-t)r$; and the rate of growth of GNP, g . The answer to the first question is "yes," if $(1-t)r$ is less than g , as was true in every period except 1986. The answer is "no, unstable," if $(1-t)r$ exceeds g , as in 1986. When a numerical answer to the question exists, it can be calculated for each period from the parameters of the period. Those numbers are shown in column 7. The negative numbers are especially hypothetical. Their significance is that the debt-GNP ratio would rapidly decline and, in principle, would settle down only if and when the government became a creditor rather than a debtor.

Three possibilities are shown for 1991 in Table 1. All of them assume that through fiscal year 1990 deficits will be reduced according to the Gramm-Rudman-Hollings schedule, enough to lower the debt-GNP ratio to 35 percent. The first scenario, A, assumes the Gramm-Rudman-Hollings target of a balanced total budget by conventional accounting will be met in 1991 and ever thereafter. As the applicable row of Table 1 shows, this is a very austere regimen, requiring a primary surplus of 1.9 percent of GNP, about \$120 billion in 1991. A less austere policy would be to balance the budget calculated according to inflation accounting. The result is given in row B. The third possibility is to let bygones be bygones and be satisfied to maintain a 35 percent debt-GNP ratio. As row C shows, this could be approximated just by balancing the primary budget. The total deficit would then be 7 percent of the debt, 2.5 percent of GNP; the real deficit would be only 1.1 percent of GNP.

Table 2, borrowed from an article by Barry Bosworth in *Brookings Bulletin* of Winter/Spring 1986, offers additional relevant insights into our topic. Bosworth's numbers show for several periods national saving relative to net national

Table 2. National Saving and Investment as Percentage Shares of Net National Product, 1951-1985

	National Saving			Net Investment	
	Private	Government	Total	Foreign	Domestic
1951-60	8.4	-0.7	7.7	0.3	7.4
1961-70	9.2	-1.0	8.1	0.6	7.6
1971-80	9.7	-2.0	7.7	0.3	7.4
1981-85	8.6	-4.7	3.9	-1.3	5.2
1985	8.8	-5.4	3.4	-3.1	6.5

Source: Barry Bosworth, "Fiscal Fitness: Deficit Reduction and the Economy," *Brookings Bulletin*, Winter/Spring 1986, Table 1, p. 5.

product (NNP). (NNP is smaller than GNP by allowing for capital consumption.) National saving is composed of two parts, "private" (inclusive of state and local governments) and federal. In the 1950s private saving amounted to about 8.4 percent of NNP, but the government had a small deficit, and so national saving was 7.7 percent of NNP. Similarly in the 1960s and even the 1970s the national saving ratio was still close to 8 percent. Throughout these decades net national saving went both into domestic investment and, via trade surpluses, into increasing the nation's net claims against the rest of the world. Once again, the drastic change occurred in the 1980s. Federal dissaving offset more than half of private saving. Foreign investment, in consequence, turned strongly negative, and, even so, domestic investment fell relative to NNP.

These dismal outcomes are the result of the policy mix. The mix of fiscal and monetary policy we have drifted into in recent years is bizarre, extreme, and unprecedented. It has had very unfortunate consequences. This policy was meant, according to the rhetoric of 1981, to increase investment. It was supposed to be oriented toward using resources in ways that would increase productivity and long-term growth. The results are just the opposite. Fully 97 percent of the additional output the country has been able to produce since 1978 or 1979 has been consumed, either publicly or privately.

How did we manage to adopt such a bad policy mix? Tight monetary policies were used to bring down inflation after 1979, and real interest rates have never been the same. Then came the reckless budget policies of the 1980s—big tax cuts and rapid growth of defense spending.

Changing this policy mix is a high priority. We seem to be embarked upon a course that will tighten the budget under the gun of Gramm-Rudman. I do not myself believe Gramm-Rudman is a good way to correct our fiscal policy, and I think the target of balancing the conventional budget is overkill. I believe the federal government needs more tax revenue, but this is not the forum for arguing these points.

In any case, let me emphasize, fiscal correction is only half the needed remedy. The other half is up to the Federal Reserve, to whom I never fail to give advice, generally unheeded, when given the chance. As budget policy is tightened, monetary policy must be eased and interest rates substantially lowered. Otherwise, we will not achieve the same results in output and employment as under the present mix. Indeed, there is ample evidence now that the overall dose of stimulus from the two policies together is inadequate. It's not enough to keep the economy from outright recession. It needs to be rescued from stagnation. It is not enough

to keep the unemployment rate near 7 percent and capacity utilization at 78 percent. The economy can do better than that without courting renewed inflation. In the present circumstances fiscal policy obviously can make

no contribution to the resumption and completion of the recovery; it will instead be moving us the other way. Prosperity is the responsibility of the institution playing host to us today, the Federal Reserve System.

Appendix

The formulas used for the calculations reported in column 7 of Table 1 are as follows: Let d be the speed at which the ratio d is rising. The other symbols were defined in the text, p. 14. Then,

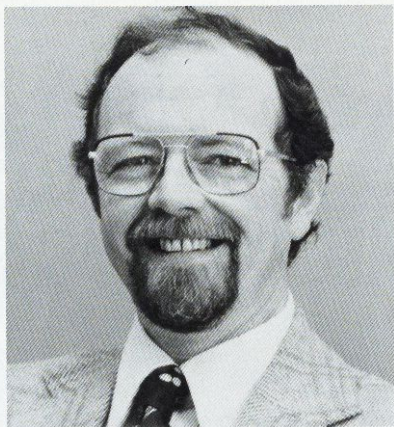
$$(1) \dot{d} = x + [(1 - t)r - g] d$$

This tells us immediately that d will be rising if neither x nor $[(1 - t)r - g]$ is negative and if one or both of them is positive. We can also see, by putting \dot{d} equal to zero,

that the equilibrium or stationary ratio d^* is $x/(g - r)$. Therefore,

$$(2) \dot{d} = [(1 - t)r - g] (d - d^*)$$

Equation (2) tells us that if $[(1 - t)r - g]$ is negative d moves toward its equilibrium value d^* . If $[(1 - t)r - g]$ is positive, however, it moves away from d^* , which is then an uninteresting unstable stationary point.



Distinguished Lecturer Series

**Sponsored by the
Federal Reserve Bank of Atlanta**

The Atlanta Fed continues its Distinguished Lecturer Series with a presentation by Canadian economist David E.W. Laidler on November 20, 1986, 2 p.m., at the Georgia World Congress Center in Atlanta. Author of *The Demand for Money* and *Essays on Money and Inflation*, among many other significant publications in the field of monetary economics, this noted scholar will speak on the transmission of monetary policy.

Dr. Laidler is professor of economics at the University of Western Ontario, President Elect of the Canadian Economics Association, and a fellow of the Royal Society of Canada. He is currently involved in research on the history of monetary economics through a grant from the Social Sciences and Humanities Research Council of Canada. He received his doctorate in economics from the University of Chicago and completed his undergraduate work at the London School of Economics.

If you would like additional information or wish to attend the lecture, please complete the form below or call Ellen Gerber at (404) 521-8764. The lecture is free of charge, but pre-registration is requested.

I would like to pre-register to attend the lecture by David E.W. Laidler.

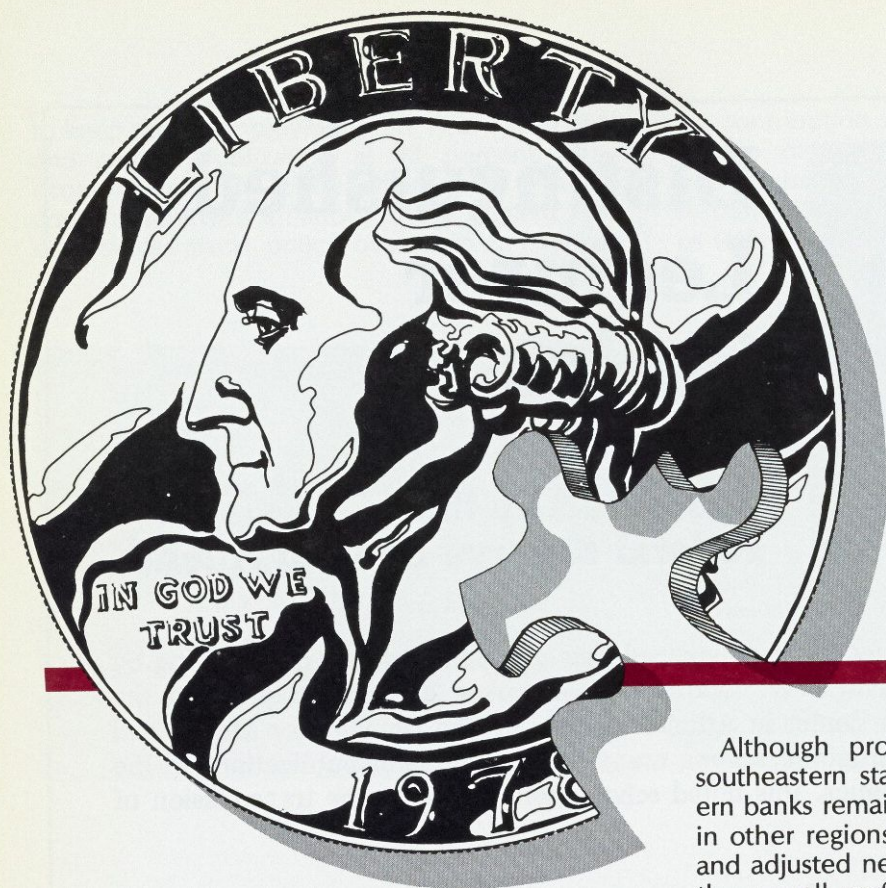
Name _____

Affiliation _____

Address _____

Telephone (Day) _____

Return to: Information Center, Federal Reserve Bank of Atlanta, 104 Marietta Street, N.W.,
Atlanta, Georgia 30303-2713.



Overall, commercial bank profitability improved in 1985 for the first time since 1979. Banks gained according to two of three measures used to gauge bank profitability—return on assets (ROA) and return on equity (ROE). The third measure, adjusted net interest margin, registered a small decline.¹ The general trend in bank profits, however, masks some sharp differences across size categories and regions.

A closer look at the figures reveals that only those banks with assets in excess of \$1 billion showed an improvement in both ROA and ROE. Banks with assets below \$25 million, on the other hand, experienced a continuing decline in these two measures, both of which dropped to a mere one-third of their 1981 levels. At least 25 percent of the banks with assets below \$25 million had returns that at best barely exceeded the break-even level. These figures suggest that a significant number of small banks could fail or be forced into mergers.

The author is a financial economist in the Atlanta Fed's research department.

Although profitability at banks in the six southeastern states is down slightly, southeastern banks remained more profitable than banks in other regions, showing a higher ROA, ROE, and adjusted net interest margin.² Nevertheless, the overall performance figures for the Southeast also hide significant contrasts among banks. Those in Alabama, Georgia, Mississippi, and Tennessee showed notable improvements in profitability ratios. All four of these states experienced at least some economic growth. However, banks in Louisiana experienced markedly lower ratios, probably as a result of the sharp decline in energy prices. Florida banks had slightly lower returns in 1985 than they did in 1984, even though Florida is one of the fastest growing states in the region.

How Profitability is Measured

Three different profitability measures provide information about bank performance. Adjusted net interest margin is roughly similar to a business's gross sales margin and gauges the difference between the bank's interest income and its interest expense. This measure is calculated by subtracting a bank's interest expense from its interest revenue, net of loan losses, and dividing that result by its net interest-earning assets. The interest revenue from tax-exempt securities is adjusted upward according

Profits in '85: Large Banks Gain While Others Continue to Lag

Larry D. Wall

Bank profitability overall has increased for the first time since 1981, but only because profits at larger banks offset losses at smaller banks.

to the bank's marginal tax rate to yield a return consistent with that obtained from taxable investments. Loan losses are subtracted from interest revenue to place banks that make low-risk loans at low interest rates on a more equal footing with those that make high-risk loans producing greater interest income.³

The ROA ratio, obtained by dividing a bank's net income by its assets, gauges how well a bank's management is employing those assets. The ROE ratio is the most important figure for bank shareholders because it tells them how much the institution is earning on their investments. It is calculated by dividing a bank's net income by its total equity.

To distinguish these three ratios, the performance of Alabama banks can be compared with that of banks in Florida and Georgia. The adjusted net interest margins of banks in Alabama trailed those of banks in Florida in 1985, yet Alabama banks showed a higher ROA ratio than banks in Florida (Tables 13 and 17). Alabama's higher ROA can be traced to differences in non-interest revenues and non-interest expenses between the two states' banks, and changes in their securities gains or losses. Alabama's ROA of 1.19 percent was slightly lower than Georgia's ROA of 1.21 percent; however, Georgia banks posted an ROE of 18.49 percent, which is substantially greater than Alabama's ROE of 14.77 percent (Table 18). Georgia's higher ROE suggests that Georgia

banks have lower equity capital ratios than those in Alabama.

Banks' Adjusted Net Interest Margins Drop

Adjusted net interest margins dropped overall in 1985 due to an increase in the loan loss expense ratio. Lower adjusted net interest margin ratios affected all bank size categories except those banks with over \$1 billion in assets (Table 1). The tax-equivalent interest revenue and interest expense ratios both were lower in 1985, but expenses dropped more than revenues, producing a partial offset to the greater loan loss ratios experienced by most banks in 1985 (Tables 2 and 4).

Loan loss expense continued to increase as a percentage of interest-earning assets for banks in all six of the size categories (Table 3). Ordinarily loan losses would have peaked in the first year of the recovery and begun dropping. The continued rise in losses undoubtedly reflects distress in major segments of the economy, including agriculture, energy, and other industries facing foreign competition.

Substantial rises in loan loss expenses for all but the largest banks provide a major explanation for the drop in bank profitability ratios. Several size categories faced increases that

**Table 1. Adjusted Net Interest Margin as a Percentage of Interest-Earning Assets
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	4.10	5.43	5.11	4.93	4.74	4.76	3.49
1982	4.00	5.15	5.00	4.94	4.71	4.78	3.41
1983	3.86	4.90	4.74	4.73	4.62	4.69	3.30
1984	3.98	4.07	3.92	4.01	5.31	5.02	3.55
1985	3.95	3.83	3.80	3.79	5.21	4.86	3.62

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 2. Tax-Equivalent Interest Revenue as a Percentage of Interest-Earning Assets
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	15.89	13.65	13.61	12.44	13.81	14.23	17.45
1982	14.91	14.06	13.88	13.82	13.82	14.00	15.60
1983	12.61	12.76	12.58	12.46	12.35	12.52	12.70
1984	13.12	12.55	12.29	12.16	13.41	13.19	13.27
1985	11.77	11.81	11.54	11.35	12.45	12.22	11.64

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 3. Loan Loss Expense as a Percentage of Interest-Earning Assets
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	.34	.38	.32	.32	.32	.32	.36
1982	.52	.54	.49	.45	.51	.50	.54
1983	.60	.65	.58	.56	.51	.54	.64
1984	.69	.90	.75	.60	.53	.57	.73
1985	.78	1.19	.95	.88	.67	.79	.76

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

exceeded 0.20 percent of interest-earning assets. The smallest banks were particularly affected, with a loan loss to interest-earning assets ratio of 1.19 percent.

The gap between the interest expense of banks with assets below \$1 billion and banks with assets above \$1 billion continued to narrow in 1985. Although interest expense has historically increased with bank size (the 1981

interest expense figures shown in Table 4 are an example), deregulation of the interest paid on bank deposits has forced smaller banks to offer competitive rates on deposits, thus lessening the disparity. Based on 1980 to 1984 figures, last year's bank profitability study (Wall, 1985) suggested that the interest expense gap might stabilize at slightly greater than one percentage point. This year, however, the gap

**Table 4. Interest Expense as a Percentage of Interest-Earning Assets
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	11.45	7.83	8.18	8.32	8.75	9.15	13.59
1982	10.39	8.37	8.40	8.43	8.61	8.73	11.65
1983	8.15	7.22	7.26	7.17	7.23	7.29	8.76
1984	8.45	7.58	7.63	7.55	7.57	7.61	8.98
1985	7.04	6.79	6.79	6.69	6.57	6.57	7.26

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 5. Percentage Return on Assets
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	.76	1.20	1.16	1.08	.94	.88	.61
1982	.71	1.02	1.10	1.06	.86	.81	.57
1983	.67	.88	.98	.98	.88	.78	.54
1984	.65	.61	.79	.90	.91	.86	.54
1985	.71	.41	.74	.79	.91	.73	.67

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 6. Percentage Return on Equity
(Insured Commercial Banks by Consolidated Assets)**

Year	All Banks	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	13.15	12.81	13.70	13.43	12.83	12.99	13.17
1982	12.17	10.76	12.80	13.18	11.80	12.07	12.16
1983	11.32	9.06	11.34	12.06	12.13	11.59	11.10
1984	10.73	6.32	9.16	11.23	12.35	12.67	10.51
1985	11.49	4.21	8.50	9.80	12.34	10.41	12.55

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

shrank significantly: the largest difference (between banks in the two size categories with assets between \$100 million and \$1 billion and those with assets above \$1 billion) was down to 0.69 percent. The reduction may have resulted from smaller banks' paying rates that more closely approximate market rates. An alternative explanation is that large banks may be growing less reliant on market funds, possibly

in reaction to the funding difficulties of Continental Illinois, which demonstrated the danger of excessive dependence on purchased funds. The capital adequacy guidelines issued by federal bank regulators may also be discouraging asset growth at large commercial banks, so that in the largest banks below-market-rate deposits may be growing faster than assets, allowing the banks to reduce their use of

Table 7. Adjusted Net Interest Margin as a Percentage of Interest-Earning Assets (Insured Commercial Banks in the Southeast by Consolidated Assets)

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	5.41	5.54	5.39	5.35	5.13	5.42	5.76
1982	5.22	5.05	5.09	5.36	5.16	5.35	5.28
1983	5.07	4.86	4.94	4.96	4.97	5.27	5.23
1984	5.26	4.47	4.21	4.14	5.88	5.55	5.48
1985	5.03	4.51	4.22	4.01	5.82	4.87	5.10

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 8. Tax-Equivalent Interest Revenue as a Percentage of Interest-Earning Assets (Insured Commercial Banks in the Southeast by Consolidated Assets)

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	14.91	13.99	14.06	13.97	14.13	14.98	17.41
1982	14.35	14.25	14.13	14.22	14.04	14.53	14.83
1983	12.88	12.70	12.66	12.70	12.49	12.90	13.34
1984	13.44	12.68	12.41	12.30	13.85	13.67	13.81
1985	12.32	12.02	11.82	11.60	12.96	12.87	12.16

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 9. Loan Loss Expense as a Percentage of Interest-Earning Assets (Insured Commercial Banks in the Southeast by Consolidated Assets)

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	.41	.49	.42	.36	.36	.32	.51
1982	.52	.72	.57	.49	.51	.55	.47
1983	.54	.84	.59	.66	.52	.54	.45
1984	.54	.75	.64	.62	.48	.69	.46
1985	.72	.85	.82	.87	.64	1.17	.60

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

market-rate funds. Unfortunately, available data are inadequate to test these hypotheses due to the deregulation of deposit rates.

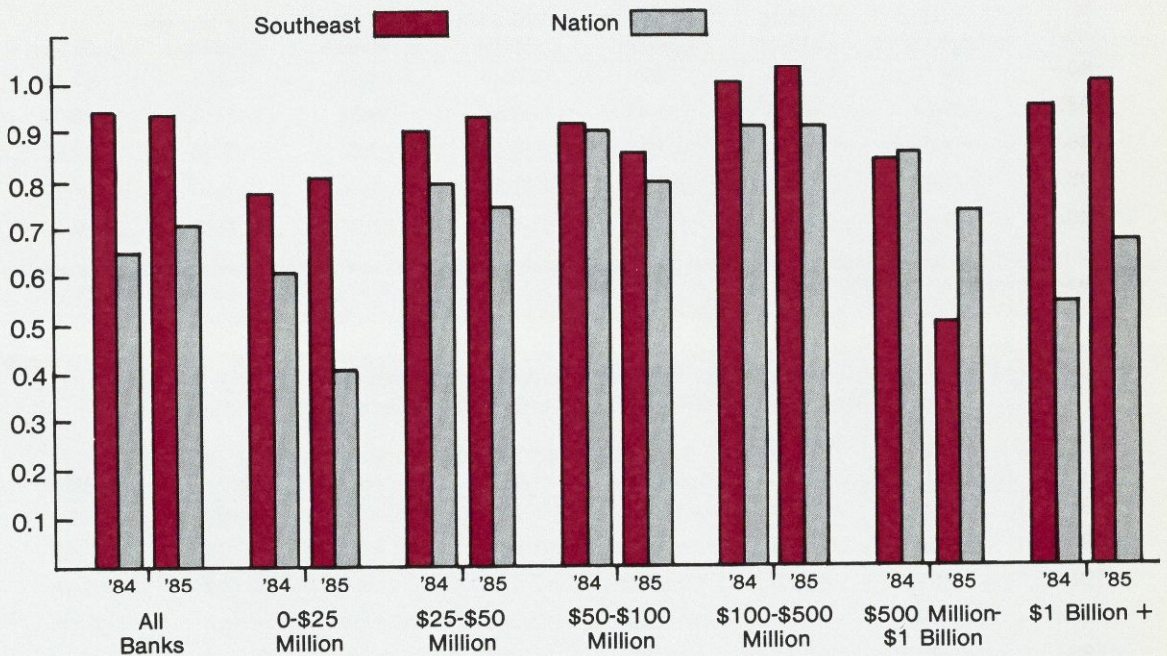
Table 4 also suggests that banks with assets between \$100 million and \$1 billion raised funds in 1985 at a lower interest expense than banks with assets below \$100 million. This is in sharp contrast to 1981 figures that showed smaller banks could raise funds at a lower rate

than large banks. If 1985 trends continue, small banks will face one more obstacle to their survival.

ROA Figures Mask Disparities

While overall ROA figures improved in 1985, it was only because profits at larger banks offset losses at smaller banks. The only category that

Chart 1. Bank Profitability in the Southeast and the Nation
(Based on percentage return on assets, 1984 compared with 1985)



Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks" 1980-1985.

actually showed an increase in ROA was that of banks with assets above \$1 billion (Table 5). The best ROA figure, 0.91 percent, was posted by banks with assets between \$100 and \$500 million. The worst figures by a substantial margin were for banks with assets below \$25 million, which recorded an ROA of only 0.41 percent. The ROA for the other categories ranged between 0.67 and 0.79 percent.

The change in ROE figures from 1984 to 1985 mirrors the change in ROA figures over the same period (Table 6). The highest ROE figures come from banks with assets above \$1 billion. Those with assets between \$100 and \$500 million post a relatively close second. Once again, the worst figures appear for banks with assets below \$25 million—a mere 4.21 percent return on equity.

Southeastern Banks Remain More Profitable

Southeastern banks showed higher adjusted net interest margins, ROAs, and ROEs than

their peers across the nation in every size category except banks with assets between \$500 million and \$1 billion (Chart 1). The figures for southeastern banks between \$500 million and \$1 billion are distorted by a small sample size (36 banks) and substantial losses at Park Bank of Florida and Fidelity National Bank in Louisiana.⁴ Although banks with assets below \$50 million showed lower ROA and ROE ratios than they did in 1981 and 1982, their profitability ratios improved in 1985, as distinct from those of their peers across the nation (Tables 11 and 12).

Overall adjusted net interest margin in the Southeast, like that for the entire nation, decreased in 1985 (Table 7). However, unlike the nation as a whole, the margins of banks with assets below \$50 million are wider in 1985 than in 1984. Interest expenses were down for all size categories, but the sharpest declines were registered at banks with assets above \$1 billion (Table 10). The largest southeastern banks now have interest expense ratios below those of smaller banks in the six states. This is in

**Table 10. Interest Expense as a Percentage of Interest-Earning Assets
(Insured Commercial Banks in the Southeast by Consolidated Assets)**

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	9.10	7.95	8.24	8.26	8.64	9.23	11.14
1982	8.61	8.48	8.47	8.37	8.38	8.64	9.09
1983	7.26	7.17	7.13	7.09	7.01	7.09	7.67
1984	7.65	7.46	7.56	7.56	7.49	7.43	7.87
1985	6.56	6.66	6.78	6.72	6.50	6.83	6.45

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 11. Percentage Return on Assets
(Insured Commercial Banks in the Southeast by Consolidated Assets)**

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	1.05	1.16	1.18	1.17	1.00	.99	.95
1982	.98	.90	1.08	1.16	.97	.92	.92
1983	.97	.70	1.01	1.01	.97	.94	.98
1984	.94	.77	.90	.92	1.00	.84	.96
1985	.93	.81	.93	.86	1.03	.50	1.00

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 12. Percentage Return on Equity
(Insured Commercial Banks in the Southeast by Consolidated Assets)**

Year	All Banks (SE)	0-\$25 Million	\$25-\$50 Million	\$50-\$100 Million	\$100-\$500 Million	\$500 Million-\$1 Billion	\$1 Billion +
1981	14.10	12.28	13.68	14.30	13.58	14.13	15.81
1982	13.45	9.57	12.36	14.16	13.17	13.26	15.27
1983	13.51	7.15	11.39	12.53	13.19	13.81	16.57
1984	13.42	7.64	10.16	11.38	13.62	11.84	16.59
1985	13.39	7.78	10.36	10.39	13.95	7.64	16.76

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

marked contrast to the national figures, which show that the largest banks have the greatest interest expense.

Loan loss expense as a percent of interest-earning assets for southeastern banks was up substantially in 1985 for all size categories (Table 9). However, southeastern banks continue to have lower loss ratios than their peers in every category except \$500 million to \$1

billion. The lower loan losses are probably due in part to the relatively greater economic stability of the Southeast.

A State by State Breakdown

Banks in the six southeastern states had higher adjusted net interest margins than other

**Table 13. Adjusted Net Interest Margin as a Percentage of Interest-Earning Assets
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	5.41	4.94	6.00	6.29	5.47	4.25	4.33
1982	5.22	4.69	5.87	5.57	5.52	4.01	4.28
1983	5.07	4.92	5.58	5.56	4.83	4.10	4.36
1984	5.26	4.99	5.74	5.36	4.82	4.86	4.93
1985	5.03	5.31	5.41	5.30	4.09	5.13	4.60

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 14. Tax-Equivalent Interest Revenue as a Percentage of Interest-Earning Assets
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	14.91	15.17	15.40	15.04	14.79	13.78	14.48
1982	14.35	14.12	14.65	14.12	14.47	13.65	14.44
1983	12.88	12.70	13.26	13.27	12.39	12.19	12.75
1984	13.44	12.90	13.79	13.40	13.14	13.25	13.56
1985	12.32	12.40	12.59	12.38	12.03	12.39	11.83

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 15. Loan Losses as a Percentage of Interest-Earning Assets
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	.41	.51	.33	.42	.40	.46	.45
1982	.52	.56	.37	.43	.55	.73	.75
1983	.54	.46	.41	.43	.70	.68	.74
1984	.54	.42	.47	.45	.83	.54	.57
1985	.72	.60	.65	.56	1.27	.61	.64

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

banks around the nation, and five of the six states also had higher ROA and ROE ratios. However, banks in Louisiana fared much worse than the national averages for ROA and ROE. Both ROA and ROE figures indicate increases over 1984 figures in four states: Alabama, Georgia, Mississippi and Tennessee.

Georgia banks once again had the highest ROA and ROE in the region (Tables 17 and 18).

The adjusted net interest margin (Table 13) for Alabama banks is slightly above Georgia's, and the ROA figure is slightly below Georgia's. However, as noted above, Alabama banks have a significantly lower ROE ratio.

Mississippi banks had a much higher adjusted net interest margin than banks in Tennessee, but Mississippi's ROA advantage is narrower. Tennessee banks obtained a higher ROE ratio,

**Table 16. Interest Expense as a Percentage of Interest-Earning Assets
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	9.10	9.72	9.07	8.32	8.92	9.07	9.70
1982	8.61	8.87	8.41	8.12	8.40	8.91	9.40
1983	7.26	7.32	7.28	7.21	6.86	7.42	7.64
1984	7.65	7.50	7.58	7.59	7.49	7.85	8.06
1985	6.56	6.48	6.53	6.53	6.67	6.65	6.59

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 17. Percentage Return on Assets
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	1.05	1.12	.96	1.26	1.24	1.02	.78
1982	.98	1.05	.98	1.12	1.20	.84	.64
1983	.97	1.12	.97	1.12	1.03	.83	.69
1984	.94	1.09	.91	1.14	.77	.91	.86
1985	.93	1.19	.88	1.21	.45	1.04	.99

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

**Table 18. Percentage Return on Equity
(Insured Commercial Banks in the Southeast by State)**

Year	All Banks (SE)	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee
1981	14.10	13.32	13.39	16.90	16.39	13.64	10.86
1982	13.45	12.77	14.06	15.38	15.60	11.41	9.25
1983	13.51	13.75	14.66	16.24	12.81	11.21	10.03
1984	13.42	13.58	14.34	17.23	9.52	12.34	12.60
1985	13.39	14.77	13.93	18.49	5.59	14.17	14.36

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

suggesting that Tennessee banks have less equity capital than banks in Mississippi.

Florida banks had the highest adjusted net interest margins, but their ROA and ROE figures rank fifth in the region. This suggests that Florida banks have relatively higher non-interest expenses and lower non-interest revenue, possibly because of the costs of growing to serve a larger population.

The adjusted net interest margin for banks in Louisiana fell sharply from 1984 to 1985. Louisiana banks' tax equivalent revenue as a percentage of interest-earning assets dropped in 1985, but the decrease was in line with diminished revenues for other states in the Southeast (Table 14). The interest expense ratio also fell, but less than for other banks in the Southeast. Louisiana banks went from having the lowest

Table 19. Percentage Return on Assets (Insured Commercial Banks With Assets Below \$25 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.71	1.27	.86
1982	1.59	1.17	.72
1983	1.51	1.07	.58
1984	1.36	.93	.35
1985	1.31	.85	.11

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 20. Percentage Return on Assets (Insured Commercial Banks With Assets Of \$25 Million to \$50 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.56	1.18	.82
1982	1.54	1.17	.80
1983	1.46	1.11	.73
1984	1.34	1.00	.60
1985	1.34	.99	.53

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 21. Percentage Return on Assets (Insured Commercial Banks With Assets of \$50 Million to \$100 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.45	1.09	.76
1982	1.47	1.11	.79
1983	1.41	1.09	.76
1984	1.32	1.02	.70
1985	1.35	1.04	.64

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 22. Percentage Return on Assets (Insured Commercial Banks With Assets of \$100 Million to \$500 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.30	.98	.67
1982	1.29	.97	.66
1983	1.27	.97	.67
1984	1.28	1.01	.73
1985	1.32	1.04	.75

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

interest expense ratio in 1984 to having the highest in 1985 (Table 16).

Another major reason for the weak performance of Louisiana banks is the sharp increase in the loan loss expense ratio to 1.27 percent of interest-earning assets (Table 15). Louisiana banks are not alone in posting higher loan loss ratios, however. Banks in all five of the other southeastern states also showed increased loan losses. The increase in Louisiana losses can easily be explained by declining oil prices. Losses in the other states may also reflect problems in particular industries such as agriculture.

Distribution of Bank Profitability

Banks in most size categories clearly have become less profitable in the past few years,

and smaller banks have experienced the greatest decline. However, these statistics provide no information on profitability within the size categories. For example, perhaps only the most profitable banks were unable to sustain their earnings, while the majority of banks were unaffected by the changing environment. Although slumping earnings would displease the owners and managers of highly profitable banks, somewhat reduced profitability at these banks poses no public policy problems. If, on the other hand, the least profitable banks suffered most of the decline in profitability, the number of problem and failed banks could increase. Growth in the number of troubled banks would concern the government regarding the safety and soundness of the banking system and would affect the Federal Deposit Insurance Corporation, which covers up to at least the first \$100,000 for each depositor.

Table 23. Percentage Return on Assets (Insured Commercial Banks With Assets of \$500 Million to \$1 Billion)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.13	.88	.62
1982	1.15	.91	.58
1983	1.10	.88	.61
1984	1.19	.91	.62
1985	1.21	.92	.66

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 24. Percentage Return on Assets (Insured Commercial Banks With Assets Over \$1 Billion)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	.95	.76	.53
1982	.95	.76	.51
1983	.98	.75	.46
1984	1.05	.86	.54
1985	1.10	.88	.59

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

One way of analyzing the distribution of bank profitability is to study the ROA figures at various profitability percentiles. We chose to look at the profitability of banks across the nation at the 25th, 50th, and 75th percentiles in ROA. (Twenty-five percent of the banks were less profitable than the banks at the 25th percentile, and three-quarters had lower profitability than the banks at the 75th percentile.) The ranking was done separately for each year, and so some banks shifted to different profitability ranges over the five years we analyzed.

Banks with assets below \$50 million show sharply lower profits since 1981 (Tables 19 and 20). The fall-off in profits at banks with assets below \$25 million is even greater than that for banks with assets between \$25 and \$50 million. The return on assets is only 0.11 percent at the 25th percentile for banks with assets below \$25 million.

ROA figures in 1985 are lower than in 1981 for all three percentiles of banks with assets between \$50 and \$100 million (Table 21). However, ROA levels improved from 1984 to 1985 for banks at the 50th and 75th percentile.

In contrast to the smaller banks, banks in the three size categories with assets greater than \$100 million showed improvement (Tables 22-24). Banks in all three categories (\$100 to \$500 million, \$500 million to \$1 billion, and greater than \$1 billion) showed their lowest ROAs in 1982 or 1983 and have improved every year since, and even banks at the 25th percentile

have higher ROAs in 1985 than they did in 1981.⁵

The decreased profitability of small banks, particularly banks at the 25th percentile, is a cause for some concern since 4,931 banks in our sample have assets below \$25 million and 11,432 have assets below \$100 million. (The total sample consisted of 14,026 banks.) Richard B. Schmitt (1986) suggests that small banks' profitability problems may be caused in part by the deregulation of interest rates and the economies of scale available with new technologies. Schmitt also suggests that small banks have higher loan losses, partly because they have taken on assets with higher returns and risks to offset the higher rates they pay for deposits. If Schmitt is correct, then many small banks are likely to be forced out of business.

Lynn Nejezchleb (1986) found that the primary cause of reduced profitability at banks with less than \$100 million in assets is higher loan losses. Banks in regions east of the Mississippi had only slightly lower profitability in 1985 than they did in 1981.⁶ However, the average ROA at small banks in the hard-hit regions west of the Mississippi (where farming and energy production are relatively more important) had fallen to less than one-half their 1981 levels. His findings suggest that small banks may be disproportionately affected by problems in the agriculture and energy sectors of the economy. Nejezchleb also found that new small banks (banks in operation for less

Table 25. Percentage Return on Assets (Insured Commercial Banks in the Southeast with Assets Below \$25 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.66	1.24	.76
1982	1.45	1.11	.61
1983	1.46	1.03	.56
1984	1.45	1.08	.51
1985	1.57	1.15	.61

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

Table 26. Percentage Return on Assets (Insured Commercial Banks in the Southeast With Assets of \$25 Million to \$50 Million)

Year	Percentile According to Profitability		
	75%	50%	25%
1981	1.58	1.26	.85
1982	1.55	1.20	.82
1983	1.52	1.16	.78
1984	1.48	1.09	.75
1985	1.55	1.19	.72

Source: FDIC, "Consolidated Reports of Condition for Insured Commercial Banks" and "Consolidated Reports of Income for Insured Commercial Banks," 1980-1985.

than seven years) were far less profitable than new banks were in 1981.

Nejezchleb notes that interest revenues minus interest expenses have remained relatively constant over his sample period, suggesting that deregulation of deposit interest rates is not one of the causes of small bank problems. He cautions, however, that falling market interest rates over the period from 1981 to 1985 could have helped banks maintain spreads. He suggests that small banks may have more interest-sensitive liabilities than interest-sensitive assets so that falling rates would improve spreads. If this analysis is correct, then small banks could face further problems in the future if rates stop falling or start increasing. An alternative explanation for small banks' ability to maintain spreads is that they passed the subsidy from lower deposit rates to their borrowers in the form of lower loan rates. If this explanation is true then small banks may be able to maintain their spreads when interest rates stop falling.

Nejezchleb's analysis of small bank problems appears to contradict Schmitt's suggestion that deregulation and economies of scale are significant causes of reduced profitability. Nejezchleb's finding that regional problems are the primary cause of weak profits at many small banks is supported by this study's finding that small southeastern banks are more profitable than their peers. However, aggregate figures on profitability could mask distressed situations at

large numbers of southeastern banks. Therefore, return on asset figures at the 25th, 50th, and 75th percentile were developed for southeastern banks with assets below \$50 million. The national figures for two size categories of banks with assets below \$50 million showed sharp deterioration in profitability at all three percentile levels and particularly severe problems for banks at the 25th percentile. Similar figures for southeastern banks, on the other hand, show that they are far more profitable at all three percentile levels (Tables 25 and 26). Even banks with assets less than \$25 million at the 25th percentile have shown improvements in recent years in the Southeast. Thus, recent experience in the Southeast supports the hypothesis that profitability problems at some small banks are due primarily to economic weakness in the communities they serve. Deregulation and economies of scale may be responsible for some reduction in the profitability of small banks, but existing evidence suggests that they are not major factors at this time.

Conclusion

The average ROA and ROE figures for all commercial banks in the United States increased in 1985 despite lower adjusted net interest margins. However, these average figures conceal considerable differences across banks. Only

banks with assets in excess of \$1 billion experienced improved ROAs and ROEs. Banks with assets below \$25 million experienced a sharp drop in profits due in part to higher loan losses.

Once again, banks in the Southeast outperformed their peers across the nation. Considerable differences in performance exist among the six states, however. Georgia banks experienced another year as the most profitable of the six states while profit ratios tumbled in Louisiana.

Examinations of bank profitability at the 25th, 50th, and 75th percentile revealed that

the problems of less profitable small banks continue to become more severe. At the 25th percentile, banks in all three asset size categories below \$100 million showed declines in ROA. The ROA for banks at the 25th percentile with assets less than \$25 million is a mere 0.11 percent. In contrast, all the three categories of banks with more than \$100 million in assets, whether at the 25th, 50th, or 75th percentile, experienced increased profits.

The author thanks Sherley Wilson for research assistance.

NOTES

¹The figures for adjusted net interest margin and for tax-equivalent interest revenue may differ from those presented in the *Economic Review* in prior years due to the correction of an error in the calculations in previous studies. (Previous editions of the articles in this series may be found in the July 1983, June 1984, and June/July 1985 issues of this *Economic Review*.) The error was in the adjustment to interest income for interest revenue from state and local governments that is exempt from federal taxation. This tax-exempt revenue is adjusted for each bank's marginal tax rate to place the revenue on a tax-equivalent status with other interest revenue. Other reports on bank profitability frequently assume that all banks face the same marginal tax rate. This study uses reported federal income tax payments to estimate each bank's marginal tax rate. Both methods of adjusting income suffer significant flaws, but the use of more than one marginal tax rate may better reflect differences in rates across banks. Previous studies in this series erred in that they underestimated the marginal tax rates of many banks. The effect of this error is to bias down the estimates of tax-equivalent interest revenue and adjusted net interest margin. None of the other ratios suffer from this error; however, the ratios presented in this study may differ slightly from those presented for comparable years in previous studies due to corrections of bank reporting errors.

²In this article the Southeast refers to the six states all or partially within the Sixth Federal Reserve District: Alabama, Florida, Georgia, Louisiana, Mississippi and Tennessee. The

outlook for the economies of these states was reviewed in the February 1986 issue of this *Economic Review*.

³For example, the interest rates on credit cards have been substantially higher than the rates on prime commercial loans, but the loan losses on credit cards have also been larger. Loan losses on credit cards were 1.25 percent of credit card volume in 1985 according to Michael Weinstein (1986).

⁴Fidelity National Bank was acquired by Hibernia Corporation in November 1985 and Park Bank of Florida was acquired by Chase Manhattan Corporation in February 1986 under the emergency provisions of the Garn-St Germain Act.

⁵This finding of improved ROA ratios at the 25th, 50th, and 75th percentile levels for banks with assets between \$100 and \$500 million and for banks between \$500 and \$1 billion appears to clash with the results in Table 5 showing no increase in the average ROA for these two groups. The apparent contradiction in findings can be resolved in a couple of ways. First, the profitability of banks within the percentile groups could be lower, for example, the 90th percentile in profitability could be lower in 1985 than in 1984. Second, most of the improved profitability in these size categories could have taken place at the smaller banks in each range while the larger banks experienced reduced profitability. This second possible explanation appears unlikely, however, as profit performance in 1986 seemed to improve with bank size.

⁶Banks in the Middle Atlantic states of New Jersey, New York, and Pennsylvania actually showed higher ROA ratios in 1985 than they did in 1981.

REFERENCES

Nejezchleb, Lynn A. "Declining Profitability at Small Commercial Banks: A Temporary Development or a Secular Trend?" in Federal Reserve Bank of Chicago, *Proceedings of a Conference on Bank Structure and Regulation*, forthcoming 1986.

Schmitt, Richard B. "As Big Banks Prosper in a Profit Recovery, Smaller Ones Languish," *Wall Street Journal*, June 19, 1986.

Wall, Larry D. "Profitability. Southeastern Banks Fare Better Than Most," Federal Reserve Bank of Atlanta, *Economic Review*, vol. 70, no. 6 (June/July 1985), pp. 18-29.

_____. "Bank Profitability in 1983," Federal Reserve Bank of Atlanta, *Economic Review*, vol. 69, no. 6 (June 1984), pp. 18-29.

_____. "Commercial Bank Profits: Southeastern Banks Fare Well," Federal Reserve Bank of Atlanta, *Economic Review*, vol. 68, no. 7 (July 1983), pp. 22-35.

Weinstein, Michael. "Another Good Year Is Expected for Bank Credit Cards, Although Prices are Under Pressure and Losses Are Up," *American Banker*, March 12, 1986.

Appendix

The data in this article were taken from the Reports of Condition and Income that insured commercial banks file with their federal bank regulators. We chose a 1985 sample consisting of all banks that had the same identification number at the beginning and end of each year. The number of banks in the sample was 14,026.

The three profitability measures used in this study are defined as follows:

Adjusted Net Interest Margin =

$$\frac{\text{Expected Interest Revenues} - \text{Interest Expenditures}}{\text{Average Interest Earning Assets}}$$

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Average Consolidated Assets}}$$

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Average Capital Equity}}$$

Average interest earning assets and average stockholders' equity are the average of the beginning, middle, and end-of-the-year balance sheet figures. The expected interest income component to net interest margin incorporates two significant adjustments from ordinary interest income. Revenue from state and local securities exempt from federal income taxes is adjusted by the bank's marginal tax rate and loan losses are subtracted from interest income.

The figures presented in this study differ from those presented in Wall (1983) and Wall (1984) due to a lack of a merger adjustment. Those two studies used data that had been modified by the staff of the Board of Governors of the Federal Reserve System. This study does not contain the merger adjustment because the file is no longer being created.



Economic Briefs

Two Measures of Employment: What Can They Tell Us?

David Avery

Statistics on employment, key gauges of the economy, are provided each month by the U.S. Department of Labor's Bureau of Labor Statistics through two independent estimates: the household series (current population survey) and the establishment survey (payroll, or nonfarm, series). The household employment series is used in part to compute the familiar jobless rate, and the payroll employment series measures primarily employment by industry.

Although both series attempt to quantify changes in the labor market, the two series sometimes record significantly different results; this disparity is caused mainly by fundamental differences in structure and coverage. Total employment as measured in the current population survey (C.P.S.) and total nonfarm employment as measured in the establishment (payroll) survey are quite distinct. For example, the differences between them cannot be reconciled by simply adding farm employment to the payroll series, as the uninitiated are sometimes prone to do. A look at the composition of the two series highlights some of their contrasting features (Figure 1).

What Each Series Measures

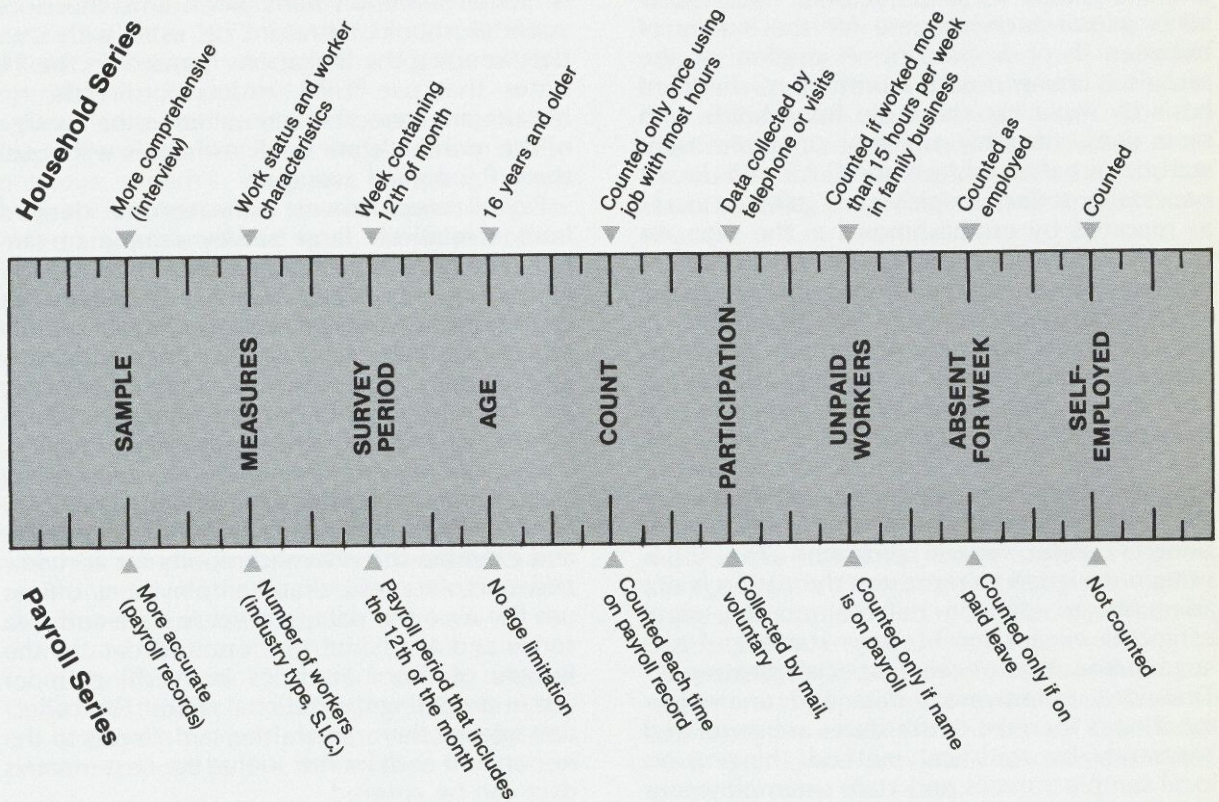
Household Survey. The household (C.P.S.) series provides employment status data representative of the entire U.S. civilian population 16 years of age and older. This survey of about 55,000 households, conducted by the U.S. Commerce Department's Bureau of the Census and published by the Bureau of Labor Statistics, measures the work status of individuals. In addition to canvassing respondents employed in corporations, government agencies, non-profit organizations, and other establishments,

it also captures those who are self-employed, unpaid employees working 15 hours or more during the survey week in family-operated enterprises, and private household workers. Members of the armed forces stationed in the United States are included in the employment total, as are citizens of foreign countries employed temporarily in the United States but not living on embassy premises.¹ Since each person surveyed is classified as either employed, unemployed, or not in the labor force, the household survey counts each person by work status only once. Employed persons with more than one job are counted in the job for which they work the most hours. A number of other characteristics, such as age, sex, race, educational attainment, and marital status are also reported. Inmates of correctional and mental institutions are excluded from the household data.

A household consists of all persons—related family members and all unrelated persons—who occupy a housing unit. A house, an apartment, a group of rooms, or a single room are each regarded as a housing unit when occupied or intended for occupancy as separate living quarters.

Establishment Series. The second measure of employment is the establishment or payroll employment series, also known as nonfarm employment, which is collected from a sample of business payroll records by the Bureau of Labor Statistics in cooperation with state agencies. Those who worked in more than one business establishment during the survey period are counted each time their name appears on a payroll. The establishment series provides practically no socioeconomic information about workers but is a good source of information on

Figure 1. Contrasting Two Measures of Employment



employment by specific geographic areas and industries. It also gathers hours and earnings data that correspond directly to the employment data. This series encompasses military personnel who hold civilian jobs during their off-duty hours and may also include some inmates of institutions who are working either inside or outside the institution, if they are included on payrolls. Unlike the household survey data, the establishment series has no age limitations; however, since child labor laws and school prevent most children under 16 from working, few statistics about children are captured in the survey.

Measurement Method

The household survey regularly covers a group of 55,000 to 60,000 households selected throughout the nation by a probability sample designed to represent the entire non-institutional population. A sample is used because the costs of conducting a complete census to identify every employed and unemployed person each month would be prohibitive. The sample data are weighted according to total population estimates of age, sex, and race. These estimates are prepared by carrying forward the most recent census data to reflect the

aging of the population, deaths, immigration, and emigration. Each month approximately 59,500 occupied residential units are eligible for interview. Usually, about 2,500 of these households are missed because the occupants are not at home during repeated calls or they are unavailable for other reasons. This represents a non-interview rate for the survey of between 4 or 5 percent. A portion of the sample is changed each month on a scheduled basis by replacing some old households with new ones. Monthly national unemployment statistics are derived from the C.P.S. and do not necessarily reflect employment gains or losses as reported by establishments in the separate payroll employment series. Since the establishment series counts only jobs, no unemployment measure is associated with that series.

Labor force and unemployment estimates for states, labor market areas, and other areas covered by federal assistance programs are developed by state employment security agencies through a state and federal cooperative program. Local unemployment estimates are the basis for determining an area's eligibility for benefits under federal programs. The C.P.S. sample designed to represent the nation is not adequate to provide reliable monthly state estimates except for 11 large states and two large areas that receive special treatment.² Therefore, employment data and unemployment rates for most of the states are generated separately by statistical methods hinging on local sample surveys and state unemployment records. Adjustment factors from the C.P.S. are included to correct for differences among states in unemployment coverage as well as differences between employment measures at places of work and places of residence.³

Once each year, monthly estimates prepared by state employment security agencies (using estimating procedures based on unemployment insurance) are adjusted or benchmarked by the Bureau of Labor Statistics to the annual average C.P.S. estimates for these 39 states and the District of Columbia. This adjustment is

necessary because state-prepared estimates are not as reliable as the C.P.S. annual averages due to differences in state unemployment insurance laws, errors in the unemployment insurance data, and limitations of the unemployment insurance estimating method. Monthly state unemployment rates and those of counties should therefore be used with caution, keeping the limitations in mind. In the 11 states that use C.P.S. estimates directly, no benchmark correction is required as the average of the monthly state C.P.S. estimates will equal the C.P.S. annual average.⁴

Payroll employment estimates are derived from a relatively large survey sample of employers—220,000 establishments—having over 35 million employees. This size enhances the degree of the survey's accuracy. Payroll reports provide current information on wage and salary employment, hours and earnings of workers, and labor turnover in nonagricultural establishments by industry and geographic location. Under cooperative arrangements, responding establishments report data to state agencies. State agencies mail the forms to establishments and examine the returned reports for accuracy and completeness. State employment offices use the reported data to prepare state and area series and also send the reported data to the Bureau of Labor Statistics in Washington for use in preparing the national series. The collection agency then returns the same forms to the respondent each month so that the next month's data can be entered.

Reporting establishments are classified by industry on the basis of their principal product or activity, as determined from information on annual sales volume. This information is collected in a supplement to the quarterly unemployment insurance tax reports filed by employers. Employment for an establishment making more than one product or engaging in more than one activity is included under the industry identified as the principal product or activity. This procedure has obvious shortcomings for business conglomerates with a

number of different activities. Further, no distinction is made by occupation. A nurse employed at a textile mill would be counted as a textile industry employee, not as a health services worker. All data on employment, hours, earnings, and labor turnover for the nation and most states and areas are classified in accordance with the 1972 Standard Industrial Classification Manual, which is the latest available overall taxonomy of this kind.⁵

Since state estimating procedures compute the current month's level on the basis of the previous month's estimate, sampling errors may accumulate over several months. To remove any accumulated error, employment estimates for establishments are also adjusted annually to new benchmarks—comprehensive counts of employment derived primarily from unemployment insurance tax returns and supplemented by social security tax returns from small businesses and other sources.

Another major feature of the procedure used to estimate employment from the establishment data is the use of the "link relative" technique. This is a form of ratio estimation in which a sample composed of establishments reporting for both the previous and current months is used to compute the ratio of the current month's employment to the previous month's. This ratio is called a link relative. Current estimates of employment by industry are obtained by multiplying estimates for the previous month by the link relative.

Comparison Problems

Many factors affect the comparability of the two surveys. One difference is how workers absent for a full week from their jobs are considered. The household survey includes among the employed all persons who had jobs during the survey week but were temporarily absent because of illness, bad weather, vacation, strikes, or various personal reasons, regardless of whether they were paid by their employers for the time off or taking unpaid leave. By

contrast, the establishment survey excludes all absent employees except those persons on paid leave during the survey period. Another discrepancy is in the treatment of those employed in more than one job. The household survey, as noted earlier, counts each person by work status only once, since each person is classified as either employed, unemployed, or not in the labor force. Employed persons working more than one job are counted in the job in which they worked the most hours. For the establishment series, those employed in more than one position during the survey period are counted each time their names appear on a payroll.

Industries in the trade and service sectors, where dual job-holding is common, are responsible for the bulk of the comparison problems between series. Since 86 percent of job growth in the national economy over the past two decades has occurred in the service sector, the discrepancies between the two series are significant.

Yet another distinguishing feature between the two surveys is that sample adjustments are made in the household survey to reflect ongoing changes in the composition of the population. Since the sample is tied to the decennial census of population, an undercount or an overcount of the population would affect the household survey, whereas population changes would have no effect on the establishment survey. Age limitations mentioned previously also create differences between the series.

Different methods of surveying agricultural workers also account for a discrepancy between the two series. The payroll series, though known as the nonagricultural employment series, includes some farm workers in the services category. Still, most farm workers are missed by the payroll series. One reason for this omission is that many workers on family farms are unpaid; of course, unpaid workers are not taken into account in the payroll series because they are not on payrolls. Indeed unpaid workers on farms actually outnumber paid workers by

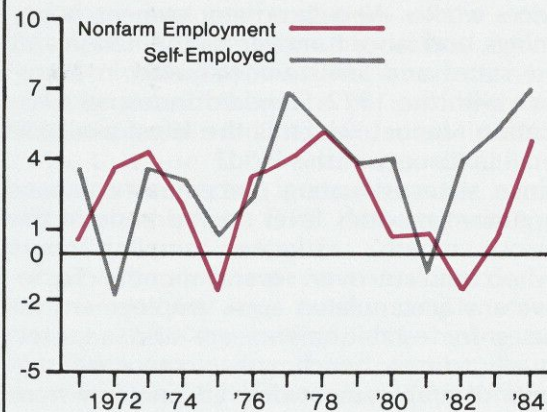
almost 3 percent, according to the U.S. Department of Agriculture. In contrast, the household series includes unpaid people who worked more than 15 hours a week in a family-operated enterprise. Since all family members, excluding small children, typically work in some fashion on the family farm and in other small family-run businesses, these figures could be responsible for a fairly large disparity between the employment measures of the two series.

The survey period itself is a point of difference between the two series. The time period for the household series is always one calendar week including the 12th of the month. For the payroll series, the time reference is the payroll period (not necessarily one week) that includes the 12th of the month. Clearly this period may not coincide with the week of the household survey.

The two series are also distinguished by separate methods of data collection and unique measurement problems. Establishment data is collected by mail on a voluntary basis, while household data is collected directly from individuals by personal visits or telephone contacts. Data collection problems may develop if the respondent to the establishment survey does not have ready access to the information requested. Self-employed people are another large and growing group not included in the establishment survey (Chart 1). As a result, this survey misses expanding employment for many small businesses, especially in the service and the agricultural sectors. Although adjustments have been incorporated into the payroll series to account for the number of new business formations, "segmenting out" the adjustments by component has proved difficult, especially for the manufacturing sectors.⁶

An additional problem is that part-time workers constitute a large portion of the work forces of service- or trade-oriented firms (20.7 percent compared with 4.5 percent in manufacturing). Since the establishment survey makes no distinction between part-time and

Chart 1. Self-Employed Workers and Total Nonfarm Employment
(Percent change)



Source: Bureau of Labor Statistics.

full-time workers, the numbers of workers reported for service industries are not strictly comparable to the manufacturing industries, where nearly all employees are full-time.

A Regional Perspective

When the two employment series are approached from a regional perspective, the differences between them are accentuated by the radical changes in the structure of the southeastern economy since 1970. The nation has had a fairly consistent ratio of total employment (C.P.S.) to payroll employment since 1970 (around 90 percent); however, the proportion of payroll employment has been much lower in southeastern states until recently. Many regional states are just now approaching the national ratio, though Alabama and Mississippi continue to lag (Table 1). Almost all of the states considered show a smaller spread between the two employment series in 1985 than they did in 1970.

Table 1. National Versus Southeastern Employment
 Total Employment (CPS Series) as a Percentage of Nonfarm Employment (Payroll Series)

	1970	1975	1980	1985
United States	1.11	1.10	1.08	1.10
Southeast	1.22	1.16	1.11	1.12
Tennessee	1.20	1.12	1.11	1.12
Mississippi	1.33	1.26	1.18	1.18
Louisiana	1.18	1.16	1.06	1.10
Georgia	1.18	1.14	1.10	1.04
Florida	1.19	1.16	1.12	1.11
Alabama	1.26	1.17	1.13	1.17

Source: Computed by Federal Reserve Bank of Atlanta from Bureau of Labor Statistics data.

This gap between total employment and payroll employment narrowed in part because of the changing industry mix of the states. The trade, service, and manufacturing sectors have altered significantly, though government employment as a part of total employment has changed little over the period. Mississippi and Alabama have always shown high concentrations in manufacturing compared with other southeastern states or the nation. Although it occupies a less dominant place in their economies now than in 1970, the shift away from manufacturing has not been as fast for these states as for the nation as a whole. Tennessee, by contrast, has turned rapidly from manufacturing, so that its employment composition now closely mirrors the nation's. Tennessee's industry, like Florida's and Louisiana's, shifted mainly to the service sector. During recessionary periods, the services industries in the Southeast have shown resilience while the goods industries have suffered the most economic decline, followed by little comparative

growth. As a result, the household employment series, which captures more nonmanufacturing employment, indicates less cyclical downturn than the payroll series.

Farm employment differs markedly among the states. The ratio of farm employment to total employment is .01 for Florida and .03 for Georgia, but it is .07 for Mississippi; in other words, about 7 percent of Mississippi's employment comes directly from the farming sector. Mississippi's relatively large farming sector is in part responsible for the large comparative gap between the two employment series in the state (Table 1), since farm labor consists mostly of unpaid workers who are not picked up on payroll records.

Although seasonal adjustment factors are incorporated in both the household and payroll series to smooth recurrent fluctuations in the data, an analysis of the nonadjusted data is useful to illustrate some of the basic differences between the two employment series (Table 2). The household series shows a peak buildup in

**Table 2. Southeastern Employment Comparison
(Thousands)**

Month, 1985	Employment		Percent Change, Month-to-Month	
	Household	Payroll	Household	Payroll
January	13,809	12,443	—	—
February	13,831	12,477	0.2	0.3
March	13,929	12,597	0.7	1.0
April	13,998	12,662	0.5	0.5
May	14,099	12,706	0.7	0.3
June	14,023	12,720	-0.5	0.1
July	14,056	12,652	0.2	-0.5
August	14,246	12,663	1.4	0.1
September	14,216	12,762	-0.2	0.8
October	14,303	12,847	0.6	0.7
November	14,225	12,907	-0.5	0.5
December	14,285	12,955	0.4	0.4

Source: Federal Reserve Bank of Atlanta.

southeastern employment over the summer as young people out of school enter the labor market. The payroll series, however, typically shows its major decline in July, reflecting unpaid absences as people go on vacation. Many southeastern textile mills, for example, traditionally shut down for a summer vacation period. Double counting of dual job holders, a flaw in the payroll employment series, helps to explain the payroll employment growth in

November and December, the household survey shows growth only in December, when previously idle workers are drawn into the work force. Christmas hiring of part-time workers by retailers and others with highly seasonal businesses also accounts for a significant portion of the gap between the two surveys.

Establishment data tend to be more volatile than household data due to a number of measurement problems. Double counting of

employees causes fluctuation by seasons. Exclusion of the self-employed as well as significant numbers of service employees and agricultural workers further affects the establishment data. The data-gathering method also assigns more weight to the cyclical manufacturing sector, which processes reliable records routinely, than to the fast-growing service sector, which is less subject to cyclical fluctuations.

Conclusion

In spite of their respective differences in methodology and purpose, the two employment series have been largely consistent, especially when comparing year-to-year change. Monthly changes, however, sometimes differ between the two series, mostly because of the differences in the way unpaid absences, dual job-holding service and farm workers, and the self-employed are treated.

This analysis has not attempted to provide adjustments that would force the two employment series into agreement; however, drawing attention to the composition and distinctions between the two series should help the reader interpret various reports of labor market data more accurately. For example, the reader should now have a clear idea that the difference between nonagricultural (payroll) employment and total (household) employment does not reflect agricultural employment. Once the respective purposes, strengths, and limitations of the two series are understood, both can be useful and informative. Because of the inexactness in the data-collecting techniques, however, short-run fluctuations in either series should be interpreted with extreme caution.

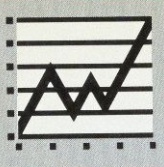
NOTES

- ¹The familiar civilian unemployment rate is calculated without using the military component. A separate series includes the resident armed forces. A more comprehensive measure of employment instituted in January 1986 includes an allowance for net undocumented immigration into the United States and an increased estimate of emigration from the United States by legal residents. These largely offsetting adjustments produce a small net effect on employment measures.
- ²Labor force and unemployment data collected in 11 large states—New York, California, Illinois, Ohio, New Jersey, North Carolina, Pennsylvania, Michigan, Texas, Massachusetts, and Florida—and two areas—Los Angeles/Long Beach and New York City—constitute large and statistically meaningful samples that can be used directly from the C.P.S.
- ³Employment data are based on place of work (unemployment insurance contribution records); unemployment data are based on place of residence (unemployment insurance compensation claims). Monthly employment and unemployment estimates for the state incorporate an adjustment factor based on a six-month moving average of the estimates derived from the C.P.S. for the state.
- ⁴These adjusted unemployment rates are available in the May issue of *Employment and Earnings*, U.S. Department of Labor, Bureau of Labor Statistics.
- ⁵The 1377 supplement to the 1972 Standard Industrial Classification Manual updates the 1972 manual with new and deleted industries and introduces modifications to some industry descriptions and index items.
- ⁶For additional information see Thomas Plewes, "Better Measures of Service Employment Goal of Bureau Survey Redesign," *Monthly Labor Review*, November 1982, pp. 7-15.

REFERENCES

For further information on each data series, seasonal adjustment methodology, and the major points in this paper refer to "Explanatory Notes" in any issue of *Employment and Earnings*, U.S. Department of Labor, Bureau of Labor Statistics, and "The Employment Situation," also published by Bureau of Labor Statistics. Also see Gloria Green, "Comparing Employment Estimates from the Household and Payroll Surveys," *Monthly Labor Review*, December 1969, pp. 9-20.

The author is a regional economic analyst in the Atlanta Fed's Research Department.



GENERAL

	LATEST DATA	CURR. PERIOD	PREV. PERIOD	YEAR AGO	ANN. % CHG.		JUL 1986	JUN(R) 1986	JUL 1985	ANN. % CHG.
UNITED STATES										
Personal Income (\$ bil. - SAAR)	1Q	3,304.6	3,268.0	3,157.0	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Prices Rec'd by Farmers				
Plane Pass. Arr. (thous.)		N.A.	N.A.	N.A.		Index (1977=100)	124	121	126	- 2
Petroleum Prod. (thous.)	JUL	8,809.9	8,808.1	8,957.5	- 2	Broiler Placements (thous.)	84,189	86,019	86,858	- 3
Consumer Price Index 1967=100						Calf Prices (\$ per cwt.)	59.80	58.10	60.00	- 0
Kilowatt Hours - mils.	MAY	179.4	187.7	177.6	+ 1	Broiler Prices (\$ per lb.)	42.40	34.00	30.60	+39
						Soybean Prices (\$ per bu.)	5.07	5.19	5.42	- 6
						Broiler Feed Cost (\$ per ton)	(Q3)190	(Q2)189	(Q3)196	- 3
SOUTHEAST										
Personal Income (\$ bil. - SAAR)	1Q	403.5	398.3	384.4	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Prices Rec'd by Farmers				
Plane Pass. Arr. (thous.)	JUN	5,160.8	4,928.1	4,811.1	+ 7	Index (1977=100)	119	115	119	0
Petroleum Prod. (thous.)	JUL	1,412.0	1,408.1	1,627.0	-13	Broiler Placements (thous.)	34,924	35,815	33,357	+ 5
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	57.28	54.96	56.15	+ 2
Kilowatt Hours - mils.	MAY	28.3	27.3	25.5	+11	Broiler Prices (\$ per lb.)	41.85	32.93	29.89	+40
						Soybean Prices (\$ per bu.)	5.19	5.22	5.49	- 5
						Broiler Feed Cost (\$ per ton)	189	181	190	- 1
ALABAMA										
Personal Income (\$ bil. - SAAR)	1Q	43.6	43.0	41.7	+ 4	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	151.8	146.1	147.1	+ 3	Dates: APR., APR.	554	-	565	- 2
Petroleum Prod. (thous.)	JUL	59.0	57.0	58.0	+ 2	Broiler Placements (thous.)	12,112	12,342	11,244	+ 8
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	54.10	52.80	54.70	- 1
Kilowatt Hours - mils.	MAY	3.8	3.7	3.7	+ 3	Broiler Prices (\$ per lb.)	42.00	33.10	29.00	+45
						Soybean Prices (\$ per bu.)	5.20	5.20	5.55	- 6
						Broiler Feed Cost (\$ per ton)	189	181	191	- 1
FLORIDA										
Personal Income (\$ bil. - SAAR)	1Q	156.4	154.4	147.7	+ 6	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	2,340.1	2,391.4	2,113.6	+11	Dates: APR., APR.	1967	-	1939	+ 1
Petroleum Prod. (thous.)	JUL	29.0	29.0	34.0	-15	Broiler Placements (thous.)	2,241	2,388	2,065	+ 9
Consumer Price Index 1967=100 MIAMI						Calf Prices (\$ per cwt.)	63.00	58.50	59.90	+ 5
Kilowatt Hours - mils.	MAY	8.1	7.9	8.1	+ 1	Broiler Prices (\$ per lb.)	42.00	32.00	30.00	+40
						Soybean Prices (\$ per bu.)	5.20	5.20	5.55	- 6
						Broiler Feed Cost (\$ per ton)	189	181	230	-18
GEORGIA										
Personal Income (\$ bil. - SAAR)	1Q	75.7	74.3	71.0	+ 7	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	1,999.5	1,765.8	2,016.8	- 1	Dates: APR., APR.	746	-	779	- 4
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Broiler Placements (thous.)	13,969	14,191	13,634	+ 2
Consumer Price Index 1967=100 ATLANTA						Calf Prices (\$ per cwt.)	53.20	51.70	53.70	- 1
Kilowatt Hours - mils.	MAY	5.0	4.5	4.8	+ 4	Broiler Prices (\$ per lb.)	42.00	32.00	29.50	+42
						Soybean Prices (\$ per bu.)	5.20	5.20	5.70	- 9
						Broiler Feed Cost (\$ per ton)	189	181	195	- 3
LOUISIANA										
Personal Income (\$ bil. - SAAR)	1Q	49.4	49.4	49.3	+ 0	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	285.8	314.7	300.9	- 5	Dates: APR., APR.	446	-	451	- 1
Petroleum Prod. (thous.)	JUL	1,240.0	1,238.0	1,362.0	- 9	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	60.00	58.00	58.40	+ 3
Kilowatt Hours - mils.	MAY	4.4	4.2	4.7	- 6	Broiler Prices (\$ per lb.)	44.00	35.50	31.00	+42
						Soybean Prices (\$ per bu.)	5.20	5.20	5.38	- 3
						Broiler Feed Cost (\$ per ton)	189	181	250	-24
MISSISSIPPI										
Personal Income (\$ bil. - SAAR)	1Q	24.5	24.0	23.6	+ 4	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	40.0	38.1	38.4	+10	Dates: APR., APR.	524	-	689	-24
Petroleum Prod. (thous.)	JUL	84.0	84.0	85.0	- 1	Broiler Placements (thous.)	6,602	6,874	6,414	+ 3
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	58.90	55.60	56.80	+ 4
Kilowatt Hours - mils.	MAY	2.0	1.8	2.0	+ 1	Broiler Prices (\$ per lb.)	40.80	34.40	32.00	+28
						Soybean Prices (\$ per bu.)	5.14	5.20	5.43	- 5
						Broiler Feed Cost (\$ per ton)	189	181	154	+23
TENNESSEE										
Personal Income (\$ bil. - SAAR)	1Q	53.9	53.1	51.1	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUN	343.5	272.1	194.3	+77	Dates: APR., APR.	465	-	578	-20
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	54.30	53.30	53.60	+ 1
Kilowatt Hours - mils.	MAY	5.1	5.1	5.2	- 2	Broiler Prices (\$ per lb.)	41.00	30.50	28.50	+44
						Soybean Prices (\$ per bu.)	5.24	5.31	5.53	- 5
						Broiler Feed Cost (\$ per ton)	189	189	173	+ 9

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.



EMPLOYMENT

	JUN 1986	MAY 1986	JUN 1985	ANN. % CHG		JUN 1986	MAY 1986	JUN 1985	ANN. % CHG
UNITED STATES									
Civilian Labor Force - thous.	118,116	117,664	115,024	+ 3	Nonfarm Employment - thous.	100,728	100,333	98,317	+ 2
Total Employed - thous.	109,673	109,110	106,601	+ 3	Manufacturing	19,269	19,173	19,420	- 1
Total Unemployed - thous.	8,443	8,554	8,423	+ 0	Construction	5,154	5,001	4,865	+ 6
Unemployment Rate - % SA	7.0	7.2	7.2		Trade	23,934	23,761	23,292	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	16,801	17,063	16,447	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	23,241	23,027	23,031	+ 1
Mfg. Avg. Wkly. Hours	40.6	40.5	40.6	0	Fin., Ins. & Real Est.	6,334	6,255	5,994	+ 5
Mfg. Avg. Wkly. Earn. - \$	396	394	386	+ 3	Trans., Com. & Pub. Util.	5,219	5,267	5,287	- 1
SOUTHEAST									
Civilian Labor Force - thous.	16,016	15,850	15,426	+ 4	Nonfarm Employment - thous.	12,994	13,017	12,731	+ 2
Total Employed - thous.	14,756	14,648	14,151	+ 4	Manufacturing	2,312	2,311	2,328	- 1
Total Unemployed - thous.	1,312	1,202	1,261	+ 4	Construction	780	776	787	- 1
Unemployment Rate - % SA	7.9	7.9	7.9		Trade	3,252	3,245	3,148	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	2,256	2,300	2,221	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	2,759	2,752	2,659	+ 4
Mfg. Avg. Wkly. Hours	41.0	40.9	41.1	- 1	Fin., Ins. & Real Est.	758	755	733	+ 3
Mfg. Avg. Wkly. Earn. - \$	350	350	342	+ 2	Trans., Com. & Pub. Util.	715	718	729	- 2
ALABAMA									
Civilian Labor Force - thous.	1,896	1,893	1,814	+ 5	Nonfarm Employment - thous.	1,443	1,445	1,428	+ 1
Total Employed - thous.	1,705	1,718	1,659	+ 3	Manufacturing	359	355	366	- 2
Total Unemployed - thous.	191	175	156	+22	Construction	72	72	72	0
Unemployment Rate - % SA	10.1	9.9	8.7		Trade	312	311	306	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	300	306	292	+ 3
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	246	247	242	+ 2
Mfg. Avg. Wkly. Hours	41.1	41.0	40.9	+ 0	Fin., Ins. & Real Est.	70	69	66	+ 6
Mfg. Avg. Wkly. Earn. - \$	356	356	344	+ 3	Trans., Com. & Pub. Util.	71	71	74	- 4
FLORIDA									
Civilian Labor Force - thous.	5,655	5,550	5,313	+ 6	Nonfarm Employment - thous.	4,551	4,561	4,430	+ 3
Total Employed - thous.	5,313	5,256	4,947	+ 7	Manufacturing	524	522	514	+ 2
Total Unemployed - thous.	342	293	367	- 7	Construction	336	336	334	+ 1
Unemployment Rate - % SA	5.7	5.7	6.6		Trade	1,233	1,233	1,195	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	684	699	671	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	1,187	1,186	1,131	+ 5
Mfg. Avg. Wkly. Hours	41.3	41.0	41.2	+ 0	Fin., Ins. & Real Est.	332	331	317	+ 5
Mfg. Avg. Wkly. Earn. - \$	329	328	323	+ 2	Trans., Com. & Pub. Util.	244	244	245	- 1
GEORGIA									
Civilian Labor Force - thous.	2,999	2,969	2,881	+ 4	Nonfarm Employment - thous.	2,640	2,628	2,581	+ 2
Total Employed - thous.	2,817	2,798	2,677	+ 5	Manufacturing	554	555	554	0
Total Unemployed - thous.	182	172	204	-11	Construction	158	154	143	+ 7
Unemployment Rate - % SA	5.9	5.9	6.7		Trade	637	671	649	- 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	457	456	452	+ 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	481	477	468	+ 3
Mfg. Avg. Wkly. Hours	40.9	40.7	40.7	+ 0	Fin., Ins. & Real Est.	143	142	138	+ 4
Mfg. Avg. Wkly. Earn. - \$	334	335	322	+ 4	Trans., Com. & Pub. Util.	165	165	163	+ 1
LOUISIANA									
Civilian Labor Force - thous.	1,994	1,995	2,020	- 1	Nonfarm Employment - thous.	1,527	1,544	1,605	- 5
Total Employed - thous.	1,773	1,733	1,779	- 1	Manufacturing	167	168	181	- 8
Total Unemployed - thous.	271	263	241	+12	Construction	93	94	109	- 5
Unemployment Rate - % SA	13.2	13.3	11.5		Trade	383	382	387	- 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	318	328	323	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	316	317	322	- 2
Mfg. Avg. Wkly. Hours	41.1	41.1	41.9	- 2	Fin., Ins. & Real Est.	85	85	86	- 2
Mfg. Avg. Wkly. Earn. - \$	435	433	433	+ 0	Trans., Com. & Pub. Util.	105	107	116	- 9
MISSISSIPPI									
Civilian Labor Force - thous.	1,170	1,166	1,137	+ 3	Nonfarm Employment - thous.	906	909	839	+ 8
Total Employed - thous.	1,024	1,033	1,017	+ 1	Manufacturing	223	222	223	0
Total Unemployed - thous.	147	133	121	+21	Construction	36	36	37	- 3
Unemployment Rate - % SA	11.9	11.6	10.0		Trade	184	183	179	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	185	191	184	+ 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	136	136	131	+ 4
Mfg. Avg. Wkly. Hours	40.5	40.2	40.6	- 0	Fin., Ins. & Real Est.	37	37	36	+ 3
Mfg. Avg. Wkly. Earn. - \$	302	299	291	+ 4	Trans., Com. & Pub. Util.	39	40	40	- 2
TENNESSEE									
Civilian Labor Force - thous.	2,302	2,276	2,260	+ 2	Nonfarm Employment - thous.	1,927	1,932	1,863	+ 3
Total Employed - thous.	2,122	2,110	2,074	+ 2	Manufacturing	484	488	494	- 2
Total Unemployed - thous.	180	166	190	- 5	Construction	84	84	84	0
Unemployment Rate - % SA	11.9	11.6	10.0		Trade	467	465	435	+ 7
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	311	319	299	+ 4
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	392	388	365	+ 7
Mfg. Avg. Wkly. Hours	41.1	41.4	41.4	- 1	Fin., Ins. & Real Est.	91	92	90	+ 1
Mfg. Avg. Wkly. Earn. - \$	343	347	337	+ 2	Trans., Com. & Pub. Util.	90	92	92	- 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. N.A. = Not Available.



MSA

SOUTHEAST REGIONAL ECONOMIC INDICATORS

	NONFARM EMPLOYMENT THOUSANDS			UNEMPLOYMENT RATE PERCENT			PLANE PASSENGER ARRIVALS THOUSANDS		
	June 1986	June 1985	Annual % Change	June 1986	May 1986	June 1985	June 1986	June 1985	Annual % Change
ALABAMA	1,442.8	1,427.9	+1	10.1	9.9	8.7	151.8	147.1	+3
Birmingham	378.4	358.7	+5	8.3	7.4	7.5	69.8	69.4	+1
Huntsville	115.0	107.8	+5	7.8	9.9	6.2	34.3	29.9	+15
Mobile	158.8	156.3	+2	11.0	8.9	9.5	29.9	29.8	+0
Montgomery	117.1	115.5	+1	8.0	7.3	7.9	17.8	18.0	-2
FLORIDA	4,550.7	4,415.8	+3	5.7	5.7	6.6	2,430.2	2,114.6	+11
Daytona Beach	109.4	101.4	+8	5.1	4.2	6.2	26.9	20.0	+35
Ft. Lauderdale	440.6	424.5	+4	4.5	4.2	5.4	258.2	223.4	+16
Jacksonville	378.1	360.9	+5	5.8	5.0	5.9	120.9	104.2	+16
Melbourne	137.5	135.5	+1	6.0	5.5	5.5	16.7	20.2	-17
Miami	801.2	782.6	+2	6.8	6.4	8.7	853.2	826.9	+3
Orlando	433.6	412.5	+5	5.2	4.2	5.5	518.6	491.9	+5
Sarasota	94.2	92.7	+2	4.4	3.8	4.9	44.5	45.2	-2
Tallahassee	99.5	95.7	+4	4.1	3.4	5.2	29.6	25.5	+16
Tampa-St. Pete	742.2	723.8	+3	5.5	4.9	5.8	345.2	340.7	+1
West Palm Beach	292.6	283.0	+3	6.5	5.4	7.4	129.9	115.2	+13
GEORGIA	2,639.8	2,580.9	+2	5.9	5.9	6.7	1,999.5	2,016.9	-1
Atlanta	1,321.7	1,278.5	+3	4.8	4.5	5.7	1,920.1	1,944.5	-2
Augusta	145.8	145.0	+1	6.3	6.3	7.3	18.0	18.4	-2
Columbus	89.5	89.8	+0	7.9	7.4	9.4	10.3	9.7	+6
Macon	115.5	113.2	+2	6.3	5.8	8.8	4.5	5.0	-10
Savannah	97.0	95.7	+1	6.8	6.4	8.4	46.7	39.3	+19
LOUISIANA	1,527.5	1,605.2	-5	13.2	13.3	11.5	285.8	300.9	-6
Baton Rouge	211.7	215.1	-2	11.4	11.0	11.2	33.5	33.3	-1
New Orleans	511.9	536.3	-5	11.3	11.1	11.6	252.3	267.5	-6
MISSISSIPPI	908.1	838.7	+8	11.9	11.6	10.0	40.0	36.4	+4
Biloxi-Gulfport	71.7	70.8	+1	9.3	8.5	8.0	4.7	4.7	+0
Jackson	165.8	161.4	+3	8.5	7.6	7.1	35.3	33.7	+5
TENNESSEE	1,926.8	1,862.9	+3	7.8	7.7	7.6	341.5	194.3	+77
Chattanooga	180.3	179.3	+1	7.8	7.2	7.0	25.6	22.7	+13
Knoxville	230.6	229.3	+1	7.6	7.2	7.1	47.4	41.4	+14
Nashville	425.4	420.7	+1	5.0	4.4	4.7	270.5	130.2	+108

	NONRESIDENTIAL BUILDING PERMITS \$ MILLIONS, 12-MO. RATE			RESIDENTIAL SINGLE-FAMILY BUILDING PERMITS			RESIDENTIAL MULTI-FAMILY BUILDING PERMITS		
	June 1986	June 1985	Annual % Change	June 1986	June 1985	Annual % Change	June 1986	June 1985	Annual % Change
ALABAMA	630.2	646.0	-2	10,382	9,092	+14	8,156	6,413	+13
Birmingham	223.8	250.7	-11	2,993	2,398	+25	1,948	562	+247
Huntsville	99.8	94.8	+5	1,775	1,427	+24	2,275	1,702	+34
Mobile	80.2	86.1	-7	732	895	-18	138	601	-77
Montgomery	50.0	54.9	-9	-	-	-	-	-	-
FLORIDA	5,226.8	5,110.7	+2	105,352	99,950	+5	96,323	96,934	+0
Daytona Beach	104.9	89.4	+17	4,924	4,382	+11	3,028	3,234	-6
Ft. Lauderdale	662.2	440.2	+50	9,547	5,209	+83	15,269	10,730	+42
Jacksonville	288.9	333.7	-13	7,848	6,331	+24	6,711	7,506	-11
Melbourne	177.5	206.7	-14	5,343	5,603	-5	3,209	4,705	-32
Miami	579.2	620.0	-16	6,718	5,160	+30	9,965	9,144	+9
Orlando	1,109.4	662.6	+67	12,936	11,485	+13	12,909	7,654	+69
Sarasota	66.2	79.7	-17	2,048	1,996	+3	1,472	1,684	-13
Tallahassee	62.9	51.2	+23	1,369	1,540	-11	294	348	-16
Tampa-St. Pete	879.6	978.7	-10	15,961	15,783	+1	16,201	17,876	-9
West Palm Beach	450.0	536.3	-16	11,139	11,799	-6	9,875	9,351	+6
GEORGIA	1,945.1	1,620.7	+7	51,524	44,309	+16	28,574	23,144	+23
Atlanta	1,408.9	1,336.2	+5	35,306	31,634	+12	19,449	15,137	+28
Augusta	53.6	74.9	-28	3,522	2,731	+29	1,874	1,726	+9
Columbus	46.8	77.7	-40	846	497	+70	653	525	+24
Macon	50.7	38.6	+31	-	-	-	-	-	-
Savannah	96.3	104.4	-8	-	-	-	-	-	-
LOUISIANA	872.3	1,310.3	-33	10,380	12,384	-6	3,875	8,914	-57
Baton Rouge	161.6	269.1	-40	1,552	1,964	-21	349	2,393	-85
New Orleans	368.2	553.7	-34	3,705	4,736	-22	1,228	3,477	-65
MISSISSIPPI	308.6	241.8	+28	5,859	6,213	-6	2,385	3,284	-12
Biloxi-Gulfport	31.3	31.6	-1	-	-	-	-	-	-
Jackson	115.1	65.6	+75	1,563	1,533	+2	1,044	1,815	-42
TENNESSEE	1,137.2	935.6	+22	20,867	15,379	+36	18,551	20,969	-12
Chattanooga	167.6	72.0	+133	1,599	1,306	+22	1,938	1,178	+65
Knoxville	101.6	98.0	+4	1,829	1,656	+10	1,305	753	+73
Nashville	308.9	474.5	-35	6,640	4,726	+40	7,918	12,008	-34

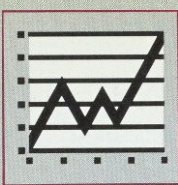
NOTES: Labor Force data are from Bureau of Labor Statistics reports supplied by state agencies. Plane Passenger Arrivals are collected from 26 airports. Building Permit data are supplied by the U. S. Bureau of the Census. Nonresidential data exclude the cost of construction for publicly owned buildings.



CONSTRUCTION

	JUN 1986	MAY 1986	JUN 1985	ANN. % CHG.		JUN 1986	MAY 1986	JUN 1985	ANN. % CHG.
(12-month cumulative rate)									
UNITED STATES									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	59,517	61,149	64,639	- 8	Value - \$ Mil.	90,028	88,225	75,280	+20
Industrial Bldgs.	8,866	8,846	8,565	+ 4	Residential Permits - Thous.				
Offices	15,572	15,823	16,485	- 6	Single-family units	1,026.9	1,005.0	896.9	+14
Stores	11,850	11,644	10,027	+18	Multifamily units	765.4	770.4	727.7	+ 5
Hospitals	2,405	2,403	2,025	+19	Total Building Permits				
Schools	1,126	1,090	1,127	- 1	Value - \$ Mil.	149,553	149,373	139,918	+ 7
SOUTHEAST									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	10,120	10,361	10,065	+ 1	Value - \$ Mil.	15,818	15,564	13,635	+16
Industrial Bldgs.	1,175	1,178	1,037	+13	Residential Permits - Thous.				
Offices	2,402	2,482	2,438	- 1	Single-family units	204.4	203.7	187.3	+ 9
Stores	2,415	2,343	2,018	+20	Multifamily units	159.0	157.6	159.0	0
Hospitals	404	419	372	+ 9	Total Building Permits				
Schools	159	161	116	+37	Value - \$ Mil.	30,546	30,293	23,257	+31
ALABAMA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	630	632	646	- 2	Value - \$ Mil.	615	607	474	+29
Industrial Bldgs.	63	59	66	- 5	Residential Permits - Thous.				
Offices	155	149	121	+28	Single-family units	10.4	10.2	9.1	+14
Stores	180	181	139	+29	Multifamily units	8.2	8.2	6.4	+28
Hospitals	21	21	51	-59	Total Building Permits				
Schools	17	17	9	+89	Value - \$ Mil.	1,245	1,239	1,123	+11
FLORIDA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	5,227	5,349	5,111	+ 2	Value - \$ Mil.	8,796	8,696	7,746	+14
Industrial Bldgs.	448	469	559	-20	Residential Permits - Thous.				
Offices	1,187	1,197	1,102	+ 8	Single-family units	105.3	106.2	100.0	+ 5
Stores	1,212	1,203	1,156	+ 5	Multifamily units	96.9	94.7	96.2	+ 1
Hospitals	236	243	182	+30	Total Building Permits				
Schools	52	53	40	+30	Value - \$ Mil.	14,022	14,044	12,856	+ 9
GEORGIA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	1,945	1,979	1,821	+ 7	Value - \$ Mil.	3,692	3,546	2,843	+30
Industrial Bldgs.	351	352	272	+29	Residential Permits - Thous.				
Offices	510	523	493	+ 3	Single-family units	51.5	50.3	44.3	+16
Stores	426	392	290	+47	Multifamily units	28.6	28.4	23.1	+24
Hospitals	34	35	29	+17	Total Building Permits				
Schools	28	26	16	+75	Value - \$ Mil.	5,637	5,524	4,664	+21
LOUISIANA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	872	955	1,310	-33	Value - \$ Mil.	673	707	848	-21
Industrial Bldgs.	36	40	46	-22	Residential Permits - Thous.				
Offices	267	325	390	-32	Single-family units	10.4	10.7	12.4	-16
Stores	215	215	239	-10	Multifamily units	3.9	4.7	8.9	-56
Hospitals	34	35	64	-47	Total Building Permits				
Schools	43	43	37	+16	Value - \$ Mil.	1,545	1,662	2,158	-28
MISSISSIPPI									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	308	307	242	+27	Value - \$ Mil.	357	350	353	+ 1
Industrial Bldgs.	31	31	14	+121	Residential Permits - Thous.				
Offices	69	69	45	+53	Single-family units	5.9	5.8	6.2	- 5
Stores	90	79	48	+88	Multifamily units	2.9	2.7	3.3	-12
Hospitals	16	16	6	+167	Total Building Permits				
Schools	6	6	5	+20	Value - \$ Mil.	666	657	595	+12
TENNESSEE									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	1,137	1,138	936	+21	Value - \$ Mil.	1,684	1,658	1,369	+23
Industrial Bldgs.	246	229	81	+204	Residential Permits - Thous.				
Offices	214	218	286	-25	Single-family units	20.9	20.5	15.4	+36
Stores	291	272	146	+99	Multifamily units	18.5	18.8	21.0	-12
Hospitals	63	70	39	+62	Total Building Permits				
Schools	13	15	8	+63	Value - \$ Mil.	3,032	3,006	2,304	+32

NOTES: Data supplied by the U. S. Bureau of the Census, Housing Units Authorized By Building Permits and Public Contracts, C-40. Nonresidential data exclude the cost of construction for publicly owned buildings. The Southeast data represent the total of the six states.



GENERAL

	LATEST DATA	CURR. PERIOD	PREV. PERIOD	YEAR AGO	ANN. % CHG.		AUG 1986	JUL (R) 1986	AUG 1985	ANN. % CHG.
UNITED STATES										
Personal Income (\$ bil. - SAAR)	1Q	3,304.6	3,268.0	3,157.0	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Prices Rec'd by Farmers				
Plane Pass. Arr. (thous.)		N.A.	N.A.	N.A.		Index (1977=100)	125	124	122	+ 3
Petroleum Prod. (thous.)	AUG	8,653.1	8,809.9	8,926.0	- 3	Broiler Placements (thous.)	81,200	84,189	86,679	- 6
Consumer Price Index 1967=100	AUG	328.6	328.0	323.5	+ 2	Calf Prices (\$ per cwt.)	60.70	59.80	60.20	+ 1
Kilowatt Hours - mils.	JUN	194.7	179.4	208.9	- 7	Broiler Prices (\$ per lb.)	45.90	42.40	28.70	+60
						Soybean Prices (\$ per bu.)	4.88	5.07	5.05	- 3
						Broiler Feed Cost (\$ per ton)	(Q3)190	(Q2)189	(Q3)196	- 3
SOUTHEAST										
Personal Income (\$ bil. - SAAR)	1Q	403.5	398.3	384.4	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Prices Rec'd by Farmers				
Plane Pass. Arr. (thous.)	JUL	N.A.	4,946.0	4,851.6		Index (1977=100)	119	119	114	+ 4
Petroleum Prod. (thous.)	AUG	1,530.0	1,515.0	1,527.0	+ 0	Broiler Placements (thous.)	34,450	34,924	33,620	+ 2
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	57.97	57.28	58.30	- 1
Kilowatt Hours - mils.	JUN	32.8	28.3	35.0	- 6	Broiler Prices (\$ per lb.)	45.13	41.85	27.72	+63
						Soybean Prices (\$ per bu.)	5.10	5.19	5.09	- 1
						Broiler Feed Cost (\$ per ton)	189	181	190	- 1
ALABAMA										
Personal Income (\$ bil. - SAAR)	1Q	43.6	43.0	41.7	+ 4	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	158.7	151.8	147.7	+ 7	Dates: May, May	677		708	- 4
Petroleum Prod. (thous.)	AUG	59.0	59.0	58.0	+ 2	Broiler Placements (thous.)	11,911	12,112	11,317	+ 5
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	54.40	54.10	56.30	- 3
Kilowatt Hours - mils.	JUN	4.3	3.8	4.6	- 7	Broiler Prices (\$ per lb.)	43.00	42.00	27.50	+56
						Soybean Prices (\$ per bu.)	5.10	5.20	5.31	- 4
						Broiler Feed Cost (\$ per ton)	189	181	191	- 1
FLORIDA										
Personal Income (\$ bil. - SAAR)	1Q	156.4	154.4	147.7	+ 6	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	N.A.	2,340.2	2,221.4		Dates: May, May	2,275		2,447	- 7
Petroleum Prod. (thous.)	AUG	29.0	29.0	34.0	-15	Broiler Placements (thous.)	2,139	2,241	2,063	+ 4
Consumer Price Index 1977=100 MIAMI	JUL	171.2	173.0	171.4	- 1	Calf Prices (\$ per cwt.)	62.30	63.00	61.20	+ 2
Kilowatt Hours - mils.	JUN	9.9	8.1	10.4	- 5	Broiler Prices (\$ per lb.)	46.00	48.00	27.00	+70
						Soybean Prices (\$ per bu.)	5.10	5.20	5.31	- 4
						Broiler Feed Cost (\$ per ton)	189	181	230	-18
GEORGIA										
Personal Income (\$ bil. - SAAR)	1Q	75.7	74.3	71.0	+ 7	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	2,086.8	1,999.5	1,960.3	+ 6	Dates: May, May	1,169		954	+23
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Broiler Placements (thous.)	13,854	13,969	13,699	+ 1
Consumer Price Index 1967=100 ATLANTA	AUG	338.9	338.5	331.4	+ 2	Calf Prices (\$ per cwt.)	56.50	53.20	54.90	+ 3
Kilowatt Hours - mils.	JUN	6.1	5.0	5.9	+ 3	Broiler Prices (\$ per lb.)	46.00	42.00	27.00	+70
						Soybean Prices (\$ per bu.)	4.87	5.20	5.17	- 6
						Broiler Feed Cost (\$ per ton)	189	181	195	- 3
LOUISIANA										
Personal Income (\$ bil. - SAAR)	1Q	49.4	49.4	49.3	+ 0	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	309.1	285.8	283.0	+ 9	Dates: May, May	469		518	- 9
Petroleum Prod. (thous.)	AUG	1,255.0	1,240.0	1,350.0	- 7	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	60.50	60.00	60.60	- 0
Kilowatt Hours - mils.	JUN	5.3	4.4	5.7	- 7	Broiler Prices (\$ per lb.)	47.00	44.00	29.50	+59
						Soybean Prices (\$ per bu.)	5.19	5.20	4.86	+ 7
						Broiler Feed Cost (\$ per ton)	189	189	250	-24
MISSISSIPPI										
Personal Income (\$ bil. - SAAR)	1Q	24.5	24.0	23.6	+ 4	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	43.4	40.0	40.5	- 7	Dates: May, May	606		775	-22
Petroleum Prod. (thous.)	AUG	84.0	84.0	85.0	- 1	Broiler Placements (thous.)	6,547	6,602	6,541	+ 1
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	56.90	58.90	59.30	- 4
Kilowatt Hours - mils.	JUN	2.2	2.0	2.6	-15	Broiler Prices (\$ per lb.)	46.30	40.80	29.50	+57
						Soybean Prices (\$ per bu.)	4.98	5.14	5.06	- 2
						Broiler Feed Cost (\$ per ton)	189	181	154	+23
TENNESSEE										
Personal Income (\$ bil. - SAAR)	1Q	53.9	53.1	51.1	+ 5	Agriculture				
Taxable Sales - \$ bil.		N.A.	N.A.	N.A.		Farm Cash Receipts - \$ mil.				
Plane Pass. Arr. (thous.)	JUL	286.1	280.5	198.7	+44	Dates: May, May	523		682	-23
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Consumer Price Index 1967=100		N.A.	N.A.	N.A.		Calf Prices (\$ per cwt.)	57.40	54.30	57.30	+ 0
Kilowatt Hours - mils.	JUN	5.1	5.1	5.8	-12	Broiler Prices (\$ per lb.)	44.50	41.00	26.00	+71
						Soybean Prices (\$ per bu.)	4.96	5.24	5.20	- 5
						Broiler Feed Cost (\$ per ton)	189	189	173	+ 9

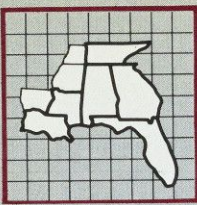
NOTES: Personal Income data supplied by U. S. Department of Commerce. Taxable Sales are reported as a 12-month cumulative total. Plane Passenger Arrivals are collected from 26 airports. Petroleum Production data supplied by U. S. Bureau of Mines. Consumer Price Index data supplied by Bureau of Labor 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.



EMPLOYMENT

	JUL 1986	JUN 1986	JUL 1985	ANN. % CHG		JUL 1986	JUN 1986	JUL 1985	ANN. % CHG
UNITED STATES									
Civilian Labor Force - thous.	120,303	118,116	117,536	+ 2	Nonfarm Employment - thous.	100,728	100,333	97,650	+ 3
Total Employed - thous.	111,832	109,673	108,854	+ 3	Manufacturing	19,056	19,269	19,315	- 1
Total Unemployed - thous.	8,471	8,443	8,682	- 2	Construction	5,290	5,154	4,865	+ 9
Unemployment Rate - % SA	6.9	7.1	7.3		Trade	23,972	23,934	23,359	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	15,852	16,801	15,581	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	23,367	23,241	22,123	+ 6
Mfg. Avg. Wkly. Hours	40.2	40.6	40.1	+ 0	Fin., Ins. & Real Est.	6,417	6,334	6,015	+ 7
Mfg. Avg. Wkly. Earn. - \$	391	396	382	+ 2	Trans., Com. & Pub. Util.	5,290	5,216	5,319	- 1
SOUTHEAST									
Civilian Labor Force - thous.	16,095	16,021	15,443	+ 4	Nonfarm Employment - thous.	12,918	12,993	12,662	+ 2
Total Employed - thous.	14,705	14,704	14,138	+ 4	Manufacturing	2,291	2,312	2,304	- 1
Total Unemployed - thous.	1,390	1,319	1,305	+ 7	Construction	793	782	795	- 0
Unemployment Rate - % SA	8.2	8.0	8.0		Trade	3,260	3,253	3,158	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	2,167	2,256	2,153	+ 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	2,761	2,761	2,653	+ 4
Mfg. Avg. Wkly. Hours	40.5	41.1	40.5	0	Fin., Ins. & Real Est.	763	758	739	+ 3
Mfg. Avg. Wkly. Earn. - \$	348	351	340	+ 2	Trans., Com. & Pub. Util.	720	710	728	- 1
ALABAMA									
Civilian Labor Force - thous.	1,898	1,897	1,821	+ 4	Nonfarm Employment - thous.	1,448	1,444	1,432	+ 1
Total Employed - thous.	1,698	1,704	1,658	+ 2	Manufacturing	355	359	357	- 1
Total Unemployed - thous.	200	192	164	+22	Construction	75	72	74	+ 1
Unemployment Rate - % SA	10.1	10.2	8.5		Trade	316	313	305	+ 4
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	301	300	298	+ 4
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	248	247	243	+ 1
Mfg. Avg. Wkly. Hours	41.1	41.3	40.7	+ 1	Fin., Ins. & Real Est.	70	70	66	+ 6
Mfg. Avg. Wkly. Earn. - \$	354	357	346	+ 2	Trans., Com. & Pub. Util.	72	71	74	- 3
FLORIDA									
Civilian Labor Force - thous.	5,720	5,655	5,345	+ 7	Nonfarm Employment - thous.	4,508	4,547	4,370	+ 3
Total Employed - thous.	5,328	5,315	4,971	+ 7	Manufacturing	520	524	510	+ 2
Total Unemployed - thous.	392	342	374	+ 4	Construction	340	338	339	+ 0
Unemployment Rate - % SA	6.5	5.7	6.8		Trade	1,233	1,234	1,191	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	643	684	628	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	1,183	1,187	1,128	+ 5
Mfg. Avg. Wkly. Hours	40.8	41.2	40.6	+ 0	Fin., Ins. & Real Est.	333	332	320	+ 4
Mfg. Avg. Wkly. Earn. - \$	329	327	319	+ 3	Trans., Com. & Pub. Util.	243	238	244	- 0
GEORGIA									
Civilian Labor Force - thous.	3,019	3,002	2,878	+ 5	Nonfarm Employment - thous.	2,634	2,640	2,574	+ 2
Total Employed - thous.	2,822	2,818	2,666	+ 6	Manufacturing	547	553	550	- 1
Total Unemployed - thous.	197	184	211	- 7	Construction	161	158	151	+ 7
Unemployment Rate - % SA	6.1	6.0	6.6		Trade	679	674	654	+ 4
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	443	457	436	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	486	481	470	+ 3
Mfg. Avg. Wkly. Hours	40.2	41.0	40.8	- 2	Fin., Ins. & Real Est.	145	143	140	+ 4
Mfg. Avg. Wkly. Earn. - \$	329	335	330	- 0	Trans., Com. & Pub. Util.	166	166	164	+ 1
LOUISIANA									
Civilian Labor Force - thous.	1,964	1,992	1,999	- 2	Nonfarm Employment - thous.	1,506	1,524	1,590	- 5
Total Employed - thous.	1,713	1,718	1,758	- 3	Manufacturing	167	167	179	- 7
Total Unemployed - thous.	251	275	241	+ 4	Construction	94	93	107	-12
Unemployment Rate - % SA	12.4	13.4	11.6		Trade	378	380	387	- 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	302	317	315	- 5
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	313	315	319	- 2
Mfg. Avg. Wkly. Hours	41.1	41.3	41.2	- 0	Fin., Ins. & Real Est.	85	85	86	- 1
Mfg. Avg. Wkly. Earn. - \$	441	437	429	+ 3	Trans., Com. & Pub. Util.	107	105	115	- 7
MISSISSIPPI									
Civilian Labor Force - thous.	1,169	1,169	1,140	+ 3	Nonfarm Employment - thous.	900	907	835	+ 8
Total Employed - thous.	1,017	1,023	1,014	+ 0	Manufacturing	220	223	220	0
Total Unemployed - thous.	152	146	126	+21	Construction	36	36	38	- 5
Unemployment Rate - % SA	12.3	11.8	10.5		Trade	184	184	180	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	180	185	182	- 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	136	136	130	+ 5
Mfg. Avg. Wkly. Hours	39.2	40.5	39.4	- 1	Fin., Ins. & Real Est.	37	37	36	+ 3
Mfg. Avg. Wkly. Earn. - \$	291	302	281	+ 4	Trans., Com. & Pub. Util.	40	39	40	0
TENNESSEE									
Civilian Labor Force - thous.	2,324	2,306	2,260	+ 3	Nonfarm Employment - thous.	1,925	1,931	1,862	+ 3
Total Employed - thous.	2,341	2,122	2,070	+13	Manufacturing	483	485	488	- 1
Total Unemployed - thous.	198	181	190	+ 4	Construction	87	84	86	+ 1
Unemployment Rate - % SA	8.2	7.8	8.1		Trade	470	467	441	+ 7
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	298	313	293	+ 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	395	393	363	+ 9
Mfg. Avg. Wkly. Hours	40.8	41.3	40.5	+ 1	Fin., Ins. & Real Est.	92	91	91	+ 1
Mfg. Avg. Wkly. Earn. - \$	345	348	334	+ 3	Trans., Com. & Pub. Util.	92	91	91	+ 1

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. N.A. = Not Available.



MSA

SOUTHEAST REGIONAL ECONOMIC INDICATORS

	NONFARM EMPLOYMENT THOUSANDS			UNEMPLOYMENT RATE PERCENT			PLANE PASSENGER ARRIVALS THOUSANDS		
	July 1986	July 1985	Annual % Change	July 1986	June 1986	July 1985	July 1986	July 1985	Annual % Change
ALABAMA	1,446.5	1,431.9	+1	10.1	10.2	8.5	158.7	147.7	+7
Birmingham	380.9	362.2	+5	9.0	8.4	7.0	75.0	70.9	+6
Huntsville	115.0	110.2	+4	9.8	10.0	5.9	33.2	29.4	+13
Mobile	158.0	157.7	+0	11.1	11.1	8.9	31.4	28.9	+9
Montgomery	117.9	115.7	+2	8.1	8.1	7.4	19.1	18.5	+3
FLORIDA	4,304.0	4,189.7	+3	6.5	5.7	5.8	N.A.	2,221.4	
Daytona Beach	107.9	100.4	+7	5.3	5.1	4.9	29.7	21.2	+40
Ft. Lauderdale	432.8	418.3	+3	4.9	4.5	5.5	289.3	237.8	+22
Jacksonville	375.9	358.2	+5	6.2	5.7	5.8	133.2	102.5	+30
Melbourne	136.8	136.0	+1	6.6	6.1	5.2	18.9	21.1	-10
Miami	794.0	779.1	+2	7.5	7.0	8.3	N.A.	885.9	
Orlando	433.1	411.2	+5	5.6	5.1	5.5	591.0	422.8	+40
Sarasota	93.4	91.1	+3	4.7	4.3	4.7	44.7	41.1	+9
Tallahassee	98.5	95.5	+3	4.5	4.0	4.7	29.8	22.5	+32
Tampa-St. Pete	739.2	723.3	+2	6.0	5.4	5.6	384.4	350.7	+10
West Palm Beach	287.0	276.5	+4	8.1	6.6	8.4	139.7	116.1	+20
GEORGIA	1,614.2	1,571.8	+3	6.1	6.0	5.9	1,986.6	1,860.4	+6
Atlanta	1,325.6	1,282.0	+3	4.9	4.8	5.2	2,008.0	1,891.8	+6
Augusta	145.7	146.4	-1	6.1	6.3	6.6	18.3	17.5	+5
Columbus	89.5	89.3	+0	7.7	7.8	8.7	10.4	9.5	+9
Macon	115.5	113.5	+2	6.1	6.4	7.6	4.5	4.7	-4
Savannah	96.5	94.6	+2	6.8	6.9	7.5	45.6	36.9	+24
LOUISIANA	1,598.1	1,589.6	+5	11.4	11.4	11.9	509.0	533.1	-4
Baton Rouge	211.7	214.2	-1	10.7	11.6	11.3	33.6	34.3	-2
New Orleans	510.5	535.2	-4	10.5	11.5	11.6	275.4	266.8	+3
MISSISSIPPI	800.4	814.6	-3	11.3	11.8	10.5	43.4	40.5	+7
Biloxi-Gulfport	70.7	71.5	-1	9.7	9.3	8.0	5.3	4.4	+20
Jackson	163.5	160.3	+2	8.9	8.4	7.2	38.1	36.1	+6
TENNESSEE	1,344.8	1,282.3	+5	7.2	6.9	8.1	286.1	1,983.7	+44
Chattanooga	178.6	171.2	+4	7.1	7.8	7.9	25.0	22.1	+13
Knoxville	230.3	229.5	+0	7.8	7.6	7.3	49.1	42.5	+16
Nashville	426.3	425.5	+0	5.2	5.0	5.0	211.9	134.2	+58

	NONRESIDENTIAL BUILDING PERMITS \$ MILLIONS, 12-MO. RATE			RESIDENTIAL SINGLE-FAMILY BUILDING PERMITS NO. OF UNITS, 12-MO. RATE			RESIDENTIAL MULTI-FAMILY BUILDING PERMITS NO. OF UNITS, 12-MO. RATE		
	July 1986	July 1985	Annual % Change	July 1986	July 1985	Annual % Change	July 1986	July 1985	Annual % Change
ALABAMA	507.7	511.0	-7	10,406	9,849	+11	8,583	8,533	+1
Birmingham	214.9	239.8	-10	3,039	2,472	+23	1,789	758	+136
Huntsville	91.4	101.0	-10	1,738	1,465	+19	2,591	1,628	+59
Mobile	80.4	87.5	-8	749	869	-14	266	497	-47
Montgomery	48.4	55.6	-13	-	-	-	-	-	-
FLORIDA	4,581.8	5,749.6	-25	105,190	100,949	+4	49,320	46,070	+4
Daytona Beach	118.5	87.9	+35	4,936	4,415	+12	2,943	3,127	-16
Ft. Lauderdale	700.6	455.6	+54	10,259	5,061	+103	16,126	11,005	+47
Jacksonville	275.3	351.7	-22	7,909	6,689	+18	6,498	7,740	-16
Melbourne	162.6	212.9	-24	5,195	5,687	-19	3,263	4,705	-30
Miami	554.9	628.8	-12	6,682	5,130	+30	9,903	8,288	+19
Orlando	609.2	1,175.9	-49	13,045	11,470	+14	14,355	7,550	+90
Sarasota	67.5	75.7	-11	2,159	1,975	+9	1,494	1,794	-17
Tallahassee	63.0	51.2	+23	1,368	1,501	-9	298	312	-4
Tampa-St. Pete	841.8	1,007.9	-17	15,939	15,951	-1	16,643	18,133	-8
West Palm Beach	415.4	570.9	-27	11,279	11,486	-2	10,398	8,734	+19
GEORGIA	1,313.3	1,484.1	-11	82,047	48,000	+15	17,844	11,143	+19
Atlanta	1,417.6	1,365.8	+4	35,722	32,101	+11	18,853	15,578	+21
Augusta	55.3	76.2	-27	3,675	2,572	+43	1,609	1,797	-9
Columbus	45.2	77.6	-42	671	543	+24	842	475	+77
Macon	47.0	39.5	+19	-	-	-	-	-	-
Savannah	98.5	107.9	-9	-	-	-	-	-	-
LOUISIANA	790.2	1,334.5	-41	10,011	12,430	-20	1,899	8,603	-88
Baton Rouge	147.6	275.5	-46	1,515	1,920	-20	341	2,160	-84
New Orleans	344.4	564.2	-39	3,585	4,688	-24	1,152	3,354	-66
MISSISSIPPI	279.1	222.9	+25	5,888	6,175	-5	2,950	2,923	+1
Biloxi-Gulfport	31.9	33.9	-6	-	-	-	-	-	-
Jackson	105.7	72.1	+47	1,589	1,540	+3	1,183	1,439	-18
TENNESSEE	1,120.1	990.8	+13	21,572	15,931	+35	17,751	20,999	-15
Chattanooga	171.7	74.5	+130	1,612	1,339	+20	1,935	1,067	+81
Knoxville	95.7	97.7	-2	1,904	1,714	+11	944	1,333	-30
Nashville	301.0	480.9	-37	7,016	4,806	+46	8,280	10,979	-25

NOTES: Labor Force data are from Bureau of Labor Statistics reports supplied by state agencies. Plane Passenger Arrivals are collected from 26 airports. Building Permit data are supplied by the U. S. Bureau of the Census. Nonresidential data exclude the cost of construction for publicly owned buildings.



CONSTRUCTION

	JUL 1986	JUN 1986	JUL 1985	ANN. % CHG.		JUL 1986	JUN 1986	JUL 1985	ANN. % CHG.
(12-month cumulative rate)									
UNITED STATES									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	57,224	59,517	65,966	-13	Value - \$ Mil.	91,483	90,028	76,609	+19
Industrial Bldgs.	8,851	8,866	8,630	+3	Residential Permits - Thous.				
Offices	15,405	15,573	16,485	-7	Single-family units	1,039.6	1,026.9	910.2	+14
Stores	11,929	11,850	10,210	+17	Multifamily units	759.7	765.4	728.9	+4
Hospitals	2,503	2,405	2,115	+18	Total Building Permits				
Schools	1,112	1,126	1,124	-1	Value - \$ Mil.	148,716	149,553	142,575	+4
SOUTHEAST									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	9,312	10,120	10,878	-14	Value - \$ Mil.	16,001	15,818	13,772	+16
Industrial Bldgs.	1,080	1,175	1,073	+1	Residential Permits - Thous.				
Offices	2,191	2,402	2,503	-12	Single-family units	205.1	204.4	190.0	+8
Stores	2,168	2,415	2,074	+4	Multifamily units	159.5	159.0	157.5	+1
Hospitals	349	404	415	-16	Total Building Permits				
Schools	143	159	140	+2	Value - \$ Mil.	30,930	30,546	24,063	+29
ALABAMA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	608	630	651	-7	Value - \$ Mil.	631	615	485	+30
Industrial Bldgs.	64	63	65	-2	Residential Permits - Thous.				
Offices	155	155	125	+24	Single-family units	10.4	10.4	9.3	+12
Stores	173	180	150	+15	Multifamily units	8.6	8.2	6.6	+30
Hospitals	21	21	52	-60	Total Building Permits				
Schools	10	17	13	-23	Value - \$ Mil.	1,239	1,245	1,135	+9
FLORIDA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	4,582	5,227	5,746	-12	Value - \$ Mil.	8,887	8,796	7,796	+14
Industrial Bldgs.	468	448	572	-18	Residential Permits - Thous.				
Offices	1,157	1,187	1,131	+2	Single-family units	105.2	105.4	100.9	+4
Stores	1,216	1,212	1,165	+4	Multifamily units	99.0	96.9	95.3	+4
Hospitals	213	236	211	+1	Total Building Permits				
Schools	43	52	49	-13	Value - \$ Mil.	13,469	14,023	13,541	-1
GEORGIA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	1,934	1,945	1,883	+3	Value - \$ Mil.	3,721	3,692	2,908	+28
Industrial Bldgs.	366	351	279	+31	Residential Permits - Thous.				
Offices	483	510	502	-4	Single-family units	52.0	51.5	45.1	+15
Stores	433	427	303	+43	Multifamily units	27.6	28.6	23.1	+19
Hospitals	34	33	26	+31	Total Building Permits				
Schools	29	28	19	+53	Value - \$ Mil.	5,654	5,637	4,791	+18
LOUISIANA									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	790	872	1,335	-41	Value - \$ Mil.	659	673	843	-22
Industrial Bldgs.	34	36	47	-28	Residential Permits - Thous.				
Offices	246	267	401	-39	Single-family units	10.0	10.4	12.4	-19
Stores	186	214	241	-23	Multifamily units	3.6	3.1	8.6	-58
Hospitals	41	34	68	-40	Total Building Permits				
Schools	44	43	43	+2	Value - \$ Mil.	1,450	1,545	2,177	-33
MISSISSIPPI									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	278	308	273	+2	Value - \$ Mil.	363	358	348	+4
Industrial Bldgs.	27	31	18	+50	Residential Permits - Thous.				
Offices	67	69	50	+34	Single-family units	5.9	5.9	6.2	-5
Stores	86	91	56	+54	Multifamily units	3.0	2.9	2.9	+3
Hospitals	8	16	17	-53	Total Building Permits				
Schools	3	6	8	-62	Value - \$ Mil.	641	666	621	+3
TENNESSEE									
Nonresidential Building Permits - \$ Mil.					Residential Building Permits				
Total Nonresidential	1,120	1,137	991	+13	Value - \$ Mil.	1,740	1,684	1,393	+25
Industrial Bldgs.	259	246	91	+104	Residential Permits - Thous.				
Offices	231	214	295	-22	Single-family units	21.6	20.9	15.9	+36
Stores	279	291	158	+77	Multifamily units	17.8	18.6	21.0	-15
Hospitals	61	63	41	+49	Total Building Permits				
Schools	14	13	8	+75	Value - \$ Mil.	3,071	3,031	2,384	+29

NOTES: Data supplied by the U. S. Bureau of the Census, Housing Units Authorized By Building Permits and Public Contracts, C-40. Nonresidential data exclude the cost of construction for publicly owned buildings. The Southeast data represent the total of the six states.

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

Address Correction Requested

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