NOWS  Southeast's Prospects

RECOVERY  How Strong? How Fast?

INFLATION  Still Number One

REVIEWS
- Wage Rigidity in U.K. 1919-1939
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The purpose of the Economic Review is to inform the public about Federal Reserve policies and the economic environment and, in particular, to narrow the gap between specialists and concerned laymen. For more specialized readers, the Review also summarizes our basic research projects, which are available in complete form in our Research Paper and Working Paper series.
NOW Accounts: Applying the Northeast's Experience to the Southeast

NOW (Negotiable Order of Withdrawal) Accounts will be permitted at banks and savings and loan associations nationwide at the beginning of 1981. How will these interest-bearing checking accounts change the shape of banking competition in the Southeast? Bill Cox surveys the earlier experience of the Northeast and uses the results to estimate what we can expect in the Southeast in the next four years.

The Shape of the Recovery

With the long-anticipated recession meeting an early demise, observers differ about the nature of the recovery. Business economist Charles J. Haulk responds to questions about the recovery's probable strength, duration, and distinguishing characteristics, and offers an alternative scenario to the Administration/Congress consensus.

Inflation: Still Our Number One Problem

The recession which has just ended exacted a high cost in lay-offs and lost jobs, yet it is not our most serious economic problem. Inflation is. In this issue's Commentary, Harry Brandt explains why and traces the longer-term forces behind inflation.

Working Paper Review

1919-1939 Reassessed: Unemployment and Nominal Wage Rigidity in the United Kingdom

What happens when an industrialized society neglects the self-regulating character of its labor market? How do strong labor unions, expanded unemployment insurance, and wage control boards affect unemployment? In a forthcoming Working Paper reviewed here, Barbara Henneberry (Bloomington, Indiana), Robert E. Keleher (Federal Reserve Bank of Atlanta), and the late James G. Witte (Indiana University) focus on the relationship between unemployment and nominal wage rigidity in the United Kingdom from 1919-1939.

Research Paper Review

Supply-Side Effects of Fiscal Policy: Some Preliminary Hypotheses


Director of Research: Harry Brandt
Associate Director: William N. Cox III
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Susan F. Taylor and Eddie W. Lee, Jr.
NOW Accounts: Applying the Northeast’s Experience to the Southeast
by William N. Cox III

At the beginning of 1981, banks and savings and loan associations all over the country will be permitted to offer NOW accounts on which interest will be paid and against which checks can be written. For the first time in the Southeast, banks and savings and loan associations (S&Ls) will be competing broadly and intensely for the retail financial customer’s checking account business.¹

To assess what the results of this new competition are likely to be in the Southeast, we need to look to the Northeast, where NOWs are not so new. Since the introduction of NOWs by a Massachusetts savings bank in 1972, banks and thrift institutions in eight northeastern states have entered the NOW arena. Here we try to extract relevant patterns from the northeastern experience and to see what those patterns suggest for NOW activity in the Sixth District states of Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee.

Strategy. NOW accounts are essentially interest-bearing checking accounts. They can be offered only to individuals and a few nonprofit organizations. Households use them for transactions purposes: for paying bills and cashing checks. Although in many cases households have consolidated balances which were previously split between checking and savings accounts, most customers do not apparently perceive NOWs as savings accounts: in practice, most NOWs function as transactions accounts.

Accordingly, we choose to analyze NOWs by asking, first, “How many dollars of NOW balances and how many NOW accounts can a particular market support?” regardless of whether those accounts will be opened at a bank or an S&L. Then we can go on to ask, secondly, “How do we expect the banks and S&Ls to split that market?” The total market is defined by economic characteristics. In other words, the market shares are determined by competition among financial institutions for customer accounts.²

A Closer Look at the Northeast.
The experience of eight states seems like a lot of material to tap. Actually, there is less applicable information than there might first appear to be. Basically, in the Northeast, two states have had greater

¹The Southeast (Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee) has no mutual savings banks, but mutuals in other parts of the country and credit unions nationwide can also offer NOWs in 1981.

²Typically, banks and S&Ls planning for NOWs have taken a different approach, starting with their own balance sheets. Banks talk in terms of the proportion of their demand deposit balances that might be “converted” to NOWs. Savings and loan planners like to project an institution’s NOW balances in relation to that institution’s own assets. These are traditional and understandable approaches, well suited to their particular purposes. We take the “total market/market share” approach instead, however, for several reasons. Our approach recognizes the well-established relationship between income levels and the volume of transactions accounts. It recognizes, explicitly, that the number of accounts and balances at a particular institution depends on the aggressiveness of the competition, whereas projecting an institution’s NOW balances from its balance sheet implicitly ignores that competition. It provides a comprehensive picture and avoids “apples and oranges” questions such as whether it makes sense to combine estimates for banks, based on demand deposits, with estimates for S&Ls, based on assets. If we start anywhere but with the full market, we run the risk of adding up inconsistent pieces.
The pattern of NOW development in northeastern states provides a basis for projecting what may happen in the Southeast. This preliminary study focuses on how many NOW accounts (and in what amounts) a particular market can support, how banks and thrifts will split NOW accounts and NOW balances, and how fast NOW accounts will probably grow in the Sixth District states.

competition between banks and thrifts than we expect in the Southeast and four states have had less competition. In the remaining two states, a combination of small scale and other circumstances makes it difficult to compare experiences there with the Southeast.

**Massachusetts and New Hampshire.** These are the two states where it all began in 1972. Institutions and consumers alike were uncertain and skeptical. Banks did not receive NOW powers until the beginning of 1974, so thrift institutions there had, in effect, about a one-year head start. Banks in these two states tended to price NOW accounts cheaply in response to thrift aggressiveness.

**Vermont and Rhode Island.** The experience of Vermont and Rhode Island is difficult to apply to the Southeast. Both states entered the “NOW Club” at the beginning of March 1976. All types of institutions started together this time. But Vermont’s economy is very small and rural — about 7 percent the size of Massachusetts and one-fourth the size of Mississippi. There are fewer than 50 NOW-eligible financial institutions in the state, and only one-quarter of them offered NOWs during the first year. NOW penetration in Vermont has been very slow. The Rhode Island economy is a bit larger economically, but the state’s banking structure contains an unusual amount of interlocking control. Market-share data from Vermont and Rhode Island are not available, as far as we know. For these reasons, we set Vermont and Rhode Island aside in our analysis.

**Connecticut and Maine.** Connecticut is urban and high income; Maine is rural and less prosperous economically. But their experience with NOWs has been similar.

Both states inaugurated NOWs in March 1976. Several months prior to that, however, mutual savings banks and S&Ls there were also permitted to offer personal (interest-free) checking accounts. This is an important distinction, for it offered the thrifts a way to compete for bank customers without aggressively promoting and pricing NOWs. Competition for NOW balances was not exceptionally intense between banks and thrifts, penetration of NOW accounts was relatively slow, the banks were able to attach high minimum balance requirements (especially in Connecticut), and average balances at banks (and their market shares) have run very high as a result of checking-saving consolidation by bank customers.

**New York and New Jersey.** Institutions here began with NOWs at the beginning of 1979 and 1980, respectively. The New York pattern, and what has happened so far in New Jersey, tends to follow the Connecticut experience: Checking accounts were previously available at thrift institutions. NOW accounts, when introduced, showed low penetration in terms of number of accounts, surprisingly high average balances — $5,000 to $8,000 — and high market shares at the banks.
The Outlook for the Southeast.

For most S&Ls in the Southeast, the availability of NOWs in early 1981 represents — as it did in Massachusetts and New Hampshire — the first opportunity to compete broadly for transactions accounts. Competition between banks and thrifts in most of the Southeast, therefore, should be much stiffer than we have seen in Connecticut, Maine, New York, or New Jersey, where thrifts were allowed to offer checking accounts before the introduction of NOWs. Aggressive marketing by southeastern S&Ls may make it difficult for banks to impose high minimum balance requirements without significant customer defections. Relative to the patterns from Connecticut, Maine, New York, and New Jersey, then, we would expect to see greater penetration (more accounts per household) of accounts in the Southeast, lower average balances, and lower market shares for banks. The greatest danger of an uncritical extrapolation from the Northeast is to ignore these probable effects of greater competition.

Florida, however, may be the exception. Savings and loan associations there were authorized to offer interest-free checking accounts as of midyear 1980. A clear possibility, judging from the northeastern experience, is that this new authority will shift Florida from the “Massachusetts-New Hampshire pattern” to the “Connecticut-Maine-New York-New Jersey pattern.” If so, banks and S&Ls might compete more over checking accounts than over NOWs. This would probably hold down the number of NOW accounts opened in Florida, raise the banks’ market share of NOW balances, and cause the average balances of NOWs at banks to be higher than in other southeastern states.

NOW Balances. How many dollars can we expect to see deposited in southeastern NOW accounts? Ultimately, the amount of NOW balances should be closely related to the volume of household transactions in a particular state or area. Household transactions are hard to measure. We know that transactions balances are closely related to income in economic theory. So since most NOWs are functionally transactions accounts and not savings accounts, the income of a particular area would seem very closely related to the volume of NOW balances that area will produce or require at either banks or S&Ls.

Chart 1 traces the ratio of state NOW balances per dollar of personal income for New Hampshire, Massachusetts, Connecticut, and Maine, along with one reading for New York. The ratios are plotted there against the number of calendar years elapsed since the introduction of NOWs at banks. Remembering, as we look to the Southeast, that our state-by-state summary suggested that dollar balances are likely to be a bit lower initially than they were in the two pioneers, Massachusetts and New Hampshire, and that NOW competition will be more intense than it has been in the other four northeastern states, our inspection of this chart leads us to propose the following general pattern in the Southeast:

1. One year after introduction, at the end of 1981, NOW balances in the six southeastern states combined may well total about one percent of personal income.
2. Two years after introduction, at the end of 1982, NOW balances in southeastern states may well total about 21/4 percent of personal income.
3. Three years after introduction, at the end of 1983, NOW balances in south-
eastern states may well total about 3½ percent of personal income.

These are rough rules of thumb, derived, as we have seen, from a judgmental inspection of the northeastern experience. We expect something like this pattern to emerge over the next three years in the Sixth District.3

**Number of NOW Accounts.** To estimate the number of NOW accounts in southeastern states, we start with the presumption, common in bank marketing circles, that the number of transactions accounts is related closely to the number of households in a given area.

Chart 2 shows the penetration of NOWs, measured by the number of accounts per hundred households, by years elapsed since introduction in each northeastern state.

The Massachusetts-New Hampshire penetration pattern, where novelty and uncertainty produced aggressive competition, is probably a slight overestimate of what we can expect in each of the southeastern states, except Florida. According to recent estimates of Massachusetts and New Hampshire, penetration appears to have reached “maturity” at about 80 accounts per hundred households.

Maine, Connecticut, and New York experienced lower penetration (Chart 2). According to press reports, the same thing is happening in New Jersey. Because of the availability of interest-free checking at thrifts, saturation at maturity in these states will probably fall far below the 80 accounts per hundred estimates for Massachusetts and New Hampshire. These four states offer us an estimate of the penetration we can expect in Florida, where thrifts also could offer interest-free checking accounts before NOWs were legalized. In general, then, we would expect a slower growth rate in numbers of NOW accounts in Florida than in the other southeastern states.

**Market Share.** The market share question—how the banks and thrifts will split both the NOW accounts and the NOW balances in each state—is the most interesting question. Since it is also the toughest question to answer, our projections for market share have a lower probability of being correct.

Again, we draw on the northeastern experience as a possible clue to the future in the Southeast. We assume that the number of banking and S&L offices is a fair measure of competitive strength in retail banking activities. We expect S&Ls in the five southeastern states outside Florida to be aggressive price setters and advertisers, perhaps offering accounts for minimum balances in the $100 to $500 range, generally lower than thrifts in Connecticut, Maine, New York, and New Jersey. Based on the Northeast’s experience, bank-thrift market shares should be fairly stable once established. Therefore, on the basis of informal discussions around the District, we expect that S&Ls will get more accounts per office, but that these accounts will be much smaller than NOW balances at banks, many of which are likely to begin offering NOWs with minimum balances in the $1,200 to $1,500 area.

We would expect, therefore, in Alabama, Georgia, Louisiana, Mississippi, and Tennessee: (1) that thrifts will open about twice as

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3These results would be no less rough, incidentally, had we “dignified” them by regression analysis. To obtain enough data points to run a regression, we would have to pool data from the several states, which seems unwarranted in the light of the states’ varying institutional circumstances, or we would have to convert annual observations to quarterly ones by using quarterly income data, which are essentially interpolated. Neither approach promises to add any quality, except perhaps an artificial sophistication, to the rules of thumb we have already generated by inspection of Chart 1.
many NOW accounts per office as will banks but (2) that banks’ NOW accounts will average between two and two and one-half times as large as NOW accounts at thrifts. Our market-share estimates are no better than these rough “principles.”

The Florida Question. Florida could follow either pattern. At this point, we are inclined to base our market share more heavily on the NOW experience in Connecticut, Maine, New York, and New Jersey. Because Florida S&Ls will be offering personal checking accounts as well as NOWs, S&Ls will have a smaller number of NOW accounts in relation to the number of households than in the other five southeastern states. Florida banks will be able to price NOWs more conservatively (success-
fully imposing higher minimum balance requirements) and, therefore, garner a greater share of NOW balances than elsewhere in the District. In our judgment, the Connecticut-New York pattern is probably more likely to emerge. Table G reflects these assumptions.4

Final Considerations. As many observers are pointing out, there are several reasons why southeastern institutions might not enter the market quite as aggressively as was generally the case in the Northeast. More is known about the profit risks of “giving NOWs away” because thrifts are not as strong here, outside Florida, at least. Southeastern institutions are characteristi-
cally more conservative. These considera-
tions all suggest a slower southeastern response.

But there are also reasons, more power-
ful in our opinion, to expect a quicker response than in the Northeast. NOWs will be national in 1981, with attendant publicity and with operational support facilities for hesitant institutions. Thrifts are now in an increasingly better position to compete with convenient, one-stop retail packages than mutuals or S&Ls were in New England, New York, and New Jersey. Households have lived with high inflation longer now and are presumably more interested in new ways to get interest on their money. The Southeast has more in-migration and mo-
bility than the Northeast, with a higher proportion of people establishing new retail financial relationships. NOWs will probably begin in a phase of cyclical recovery with a stable saving rate, unlike the 1975-77 pattern of diminishing saving rates. Finally, growing interstate competition in retail finance is also adding steadily to competitiveness in large southeastern mar-
kets, spurring the larger financial institu-
tions’ willingness to innovate.

Our own feeling, initially, is these factors may well predominate over traditional southern conservatism and, therefore, that our estimates of NOW activity are, if any-
thing, more likely to be low than high.

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4Under the alternative assumptions, our method yields very different esti-
mates for Florida, as the reader can see by comparing Tables F and G.

To project the amount of NOW balances for the Southeast, we first had to make projec-
tions of personal income by state for the fourth quarters of 1981, 1982, and 1983. We began with Commerce Department personal income data for the fourth quarter of 1979 — the latest available — and applied to those fig-
ures our own estimates of each state’s growth in real personal income between 1979 and

1983. We have also incorporated different assumptions of future inflation: 10 percent in 1980, 9 percent in 1981, 8 percent in 1982, and 7 percent in 1983. With the resulting personal income estimates and the NOW-income rela-
tionships extracted from the northeastern experience, we have prepared the state-by-
state estimates of NOW balances shown in Tables A through G.
### A. ALABAMA

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Number of Accounts</th>
<th>Total NOW Balances (Million $)</th>
<th>Average NOW Balances (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>Banks</td>
<td>130,000</td>
<td>270</td>
<td>2,100</td>
</tr>
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<td></td>
<td>Thrifts</td>
<td>70,000</td>
<td>70</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>200,000</td>
<td>340</td>
<td>1,700</td>
</tr>
<tr>
<td>1982</td>
<td>Banks</td>
<td>310,000</td>
<td>680</td>
<td>2,200</td>
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<tr>
<td></td>
<td>Thrifts</td>
<td>170,000</td>
<td>170</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>480,000</td>
<td>850</td>
<td>1,800</td>
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<tr>
<td>1983</td>
<td>Banks</td>
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<td>1,150</td>
<td>2,500</td>
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<td></td>
<td>Thrifts</td>
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<tr>
<td>Total</td>
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<td>700,000</td>
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### B. GEORGIA

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<td>Thrifts</td>
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<tr>
<td>Total</td>
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<td>1,900</td>
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<td>Banks</td>
<td>390,000</td>
<td>990</td>
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<td>650,000</td>
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<td>Total</td>
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### C. LOUISIANA

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<td>Total</td>
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<td>400</td>
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<td>1982</td>
<td>Banks</td>
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<td>Thrifts</td>
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<td>1,200</td>
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<td></td>
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<td>480,000</td>
<td>1,340</td>
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<td></td>
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<tr>
<td>Total</td>
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### D. MISSISSIPPI

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<th>Average NOW Balances (Dollars)</th>
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<td>Banks</td>
<td>90,000</td>
<td>170</td>
<td>1,900</td>
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<tr>
<td></td>
<td>Thrifts</td>
<td>30,000</td>
<td>30</td>
<td>1,000</td>
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<tr>
<td>Total</td>
<td></td>
<td>120,000</td>
<td>200</td>
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<td>1982</td>
<td>Banks</td>
<td>200,000</td>
<td>430</td>
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<td></td>
<td>Thrifts</td>
<td>90,000</td>
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<td>900</td>
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<tr>
<td>Total</td>
<td></td>
<td>290,000</td>
<td>510</td>
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<td>1983</td>
<td>Banks</td>
<td>290,000</td>
<td>750</td>
<td>2,600</td>
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<tr>
<td></td>
<td>Thrifts</td>
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<td>130</td>
<td>1,000</td>
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<tr>
<td>Total</td>
<td></td>
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<td>880</td>
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### E. TENNESSEE

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Number of Accounts</th>
<th>Total NOW Balances (Million $)</th>
<th>Average NOW Balances (Dollars)</th>
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</thead>
<tbody>
<tr>
<td>1981</td>
<td>Banks</td>
<td>170,000</td>
<td>360</td>
<td>2,100</td>
</tr>
<tr>
<td></td>
<td>Thrifts</td>
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<td>60</td>
<td>900</td>
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<tr>
<td>Total</td>
<td></td>
<td>240,000</td>
<td>420</td>
<td>1,800</td>
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<tr>
<td>1982</td>
<td>Banks</td>
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<td>890</td>
<td>2,200</td>
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<td></td>
<td>Thrifts</td>
<td>170,000</td>
<td>160</td>
<td>900</td>
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<tr>
<td>Total</td>
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<td>580,000</td>
<td>1,050</td>
<td>1,800</td>
</tr>
<tr>
<td>1983</td>
<td>Banks</td>
<td>600,000</td>
<td>1,530</td>
<td>2,600</td>
</tr>
<tr>
<td></td>
<td>Thrifts</td>
<td>250,000</td>
<td>270</td>
<td>1,100</td>
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<tr>
<td>Total</td>
<td></td>
<td>850,000</td>
<td>1,800</td>
<td>2,100</td>
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FEDERAL RESERVE BANK OF ATLANTA
The estimates of the number of NOW accounts presented in Tables A through G reflect the following rules of thumb:

<table>
<thead>
<tr>
<th>Accounts per 100 Households</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connecticut-New York Pattern</strong></td>
</tr>
<tr>
<td>Fourth Quarter 1981</td>
</tr>
<tr>
<td>Fourth Quarter 1982</td>
</tr>
<tr>
<td>Fourth Quarter 1983</td>
</tr>
</tbody>
</table>

probably applying to Florida applying to Alabama, Georgia, Louisiana, Mississippi, Tennessee, and possibly to Florida

To convert these ratios into number-of-accounts estimates, we employed 1978 Census Bureau data — the latest available — on the number of households in each state, extrapolating them into 1981-83 estimates by applying the annual percentage growth rates measured during the 1975-78 period.
The Shape of the Recovery

with Charles J. Haulk

With the worst of the recession apparently behind us, business analysts are turning their attention to the recovery. In this interview (conducted in August), Business Economist Charles J. Haulk comments on the prevailing government forecast for the upcoming year and explains why he thinks the recovery could be sluggish after a strong start.

Q
Do Congress and the Administration agree on what to expect from the economy in 1980-81?

A
Basically, they both see the recession ending before the end of 1980 and a return to fairly even growth through 1981. The Administration's midyear outlook calls for real GNP, which was expected to fall at a 3-percent rate in the last half of 1980, to grow at 2.6 percent from fourth quarter 1980 to fourth quarter 1981. Unemployment is expected to rise to 8.5 percent by the fourth quarter of 1980 and stay there for the next year. Inflation, as measured by the GNP deflator, is expected to remain in the 9-percent range. The Congressional Budget Office in its July forecast sees the economy much the same as does the Administration, although it puts wider ranges on values of the forecast variables. The CBO sees unemployment rising to as high as 9.4 percent in 1981, for example.

Q
Do you see any factors which could make the recovery differ from the consensus view?

A
Yes. To begin with, it appears that the recession has been confined primarily to autos and housing and related industries. Seventy-five percent of the GNP drop in the second quarter was attributable to residential construction and consumer durable outlays, a very large portion of which was in auto sales. Car sales, domestic and imported, plunged after the credit tightening and credit restraint program in March. Changes in inventories

FEDERAL RESERVE BANK OF ATLANTA
were small in real terms in the second quarter, contrary to most expectations. The export sector and government spending showed small growth.

The government's mid-year forecast (Chart 1) shows a substantial real GNP drop in the third quarter and a small decline in real GNP in the fourth quarter, with the recession ending before the quarter is over and then a return to fairly even growth throughout 1981.

My alternative scenario, depicted by the green bars, calls for a rebound of fairly strong dimensions in the fourth quarter, maybe 4 percent or higher. After the fourth quarter, the strength of the recovery weakens as monetary restraint drives interest rates higher very quickly due to fears of rekindled inflation and tightening credit markets. Unemployment rates in the 8-percent range will likely not subdue growth in compensation or unit labor costs quickly enough to change expectations of inflation substantially.

Nineteen eighty-one's second half could be a period of very slow but positive growth, with unemployment not improving appreciably (Chart 2) and inflation showing very slight improvement by year-end (Chart 3). This scenario, or any other for that matter, depends on how soon the Federal Reserve is forced to rein in money growth, which depends, in turn, on whether there has been a shift in the demand for money and a recovery from that shift. If money growth is well above Federal Reserve targets in the third quarter, that probably means the economy is rebounding strongly and moving toward further growth in the fourth quarter. If money growth is tamer, I think interest rates could remain steady at or slightly below current levels, which appear to be low enough to continue encouraging recovery, so either way the next few months look good for real activity. The only exception would be if money growth is so fast that a run-up in short rates of 300-400 basis points occurred, putting the housing and durable goods sectors on the skids again, in which case the recovery

would be forestalled before it proceeds very far. The same might hold if the Fed lowered its money growth targets in fear of too fast a recovery and a rekindling of inflation fears.
**Q** What is the rationale for your alternative scenario?

**A** My belief that there will be a sharp turnaround by the fourth quarter is predicated on two things. First, the history of recessions since the second World War is that, by and large, the downturn and the recovery tend approximately to be mirror images. The drop in real GNP in the second quarter was the largest absolute one-quarter decline and the second largest percentage drop in the history of modern GNP accounting, 34 billion 1972 dollars and 9.1 percent, respectively. A fast upturn is almost surely coming. Secondly, there are crucial changes in the structure and institutions of the economy which some econometric models have either discounted or ignored altogether and which have led to forecasting errors in recent years.

**Q** What effects do these structural changes have on the economy?

**A** Structural changes have created an economy which resists downturns and has great rebound capacity, but with a strong inflationary bias. First, there has been a decline in the share of manufacturing, particularly durables, in the nation’s output and employment together with growth in the share of interest rate-insensitive sectors, such as services and government. Second, because government participation in the economy leans toward protecting or creating jobs and maintaining spending power (unemployment compensation, trade adjustment compensation, new jobs programs, etc.), behavior of the private sector has been altered in a way which leads to expectations of monetary and fiscal stimulus at the first indication of unemployment rate increases.

These expectations of prompt stimulus have steadily pushed upward the unemployment rate at which inflation begins to slow and also have pushed higher the unemployment rate required to prompt reduced wage demands. This has led to an increase in the fraction of the labor force persistently out of work or underemployed. Third, the growth of the underground economy, which is predominantly service-oriented and, therefore, not interest rate-sensitive, creates additional recession resistance and recovery potential. These plus the cost of governmental regulations and other rigidities create a situation where inflation is harder and harder to contain.

The situation we face now and for the foreseeable future is an economy with sectoral hardship in a few areas but one with a lot of inherent overall strength. The problem is that, with each recovery, inflation gets worse.
Do you see any particular developments which will definitely play a role in the recovery?

The hefty 14.7-percent increase in Social Security benefits boosted personal income in July. The savings rate, which had risen for one quarter, will likely not rise further. That means relatively strong consumption spending will return, especially in view of the elimination of credit controls.

New factory orders for durable goods, other than transportation, actually rose in June, and nondurable orders were about unchanged from May, indicating some turn-around in manufacturing may be coming by early fall. July durable goods orders rose by over $6 billion. Total labor force grew by 780,000 from April to July, a sign that people are still relatively optimistic about finding work.

The pent-up demand for cars, combined with the new, small lines of domestic autos, should provide a much needed lift to the auto makers and their workers.

This is an election year. How will fiscal policy affect the recovery?

The federal budget has moved steeply into deficit and should be acting to contain the recession. With a tax cut likely early next year, the Federal Government would remain stimulative unless substantial spending cuts were also forthcoming (Chart 4). With an election coming up in November, it is probably safe to say that there could be some surprises on the fiscal front, either before or after the election or both. It also seems safe to say that fiscal policy will remain stimulative for a while longer, although not as much as some would wish.

In any event, unless there are expectational effects following the November election that are strong enough to have an immediate impact on inflationary tendencies, 1981 does not appear to be a very robust year. We could go through another roller coaster year, with swings less turbulent than in 1980.
Some people speak of a "full employment budget" being in surplus, thus making fiscal policy not stimulative at all. Apparently, you are unconvinced by this view.

There is a concept in the economics literature called the "full employment surplus or deficit" which calculates the federal deficit by estimating revenues that would be forthcoming if the economy were at full employment, currently defined at 5.1-percent unemployment. Those who accept the concept argue that we are currently restrictive with fiscal policy. My own opinion is that the concept of full employment is too arbitrarily defined and does not adequately take into account the reality that inflation now worsens long before a 5-percent unemployment rate is reached.

In previous Review articles, you predicted the Southeast would fare better than the nation. What is the current outlook?

Most of the District has outperformed the nation during the recession, although high unemployment in Alabama and Tennessee brought overall unemployment in the District to 7.8 percent in July, equalling the national rate. The more favorable industry mix in the Southeast, the lack of overbuilding prior to the onset of recession, and special factors in Florida and Louisiana have kept the District as a whole in good shape. Barring a complete collapse of the national recovery, the Southeast should continue to outperform the nation throughout the remainder of 1980 and 1981.

Could you comment further on the prospects for the longer term, especially with regard to inflation?

As I mentioned earlier, our economy has undergone several important changes which create a bias toward inflation and resistance to downturn. These developments create a particularly difficult situation for monetary policy. In order to decelerate inflation, the economy has to be slowed sufficiently to alter expectations and curb wage demands in the heavily unionized sectors, particularly durable goods manufacturing and construction. Unless progress can be made in reducing wage demands, then, overall demands must be restrained further to slow inflation.

With an economy inherently strong due to structural changes that have occurred, it becomes necessary to inflict ever more crushing burdens on durable goods, particularly autos and housing, to accomplish demand restraint sufficient to reduce inflation.

The longer term outlook for inflation will likely not improve substantially until the government's pro-employment, job and income protecting policies, and the government's influence on wage setting, are changed.
Inflation: Still Our Number One Problem

by Harry Brandt

ER's Commentary section presents personal opinion on topics of current interest: in this issue, why is inflation so dangerous and so difficult to control? Because inflation has become embedded in our economy, the author argues, only a major, wide-ranging attack can break inflation's stranglehold.

The U.S. economy is emerging from a recession which many observers are calling "short" in duration and "slightly worse than moderate" in severity. To many of the workers who were laid off or lost their jobs, of course, there was nothing "moderate" about it. The cost of recessions, in terms of human suffering, should not be minimized. Recessions, however, are cyclical phenomena; they do not intrinsically weaken the economy over the long run.

Inflation, on the other hand, is a more sinister long-term problem which undermines the foundations of our economy. Despite the recession, our number one problem is still inflation, and we can only control it by attacking its underlying causes.

Inflation is not a new phenomenon. What is new and disturbing is its acceleration in recent years.

From 1.8 percent between 1950 and 1965 and 4.4 percent from 1965 to 1973, the average annual inflation rate (measured by the Consumer Price Index) jumped to 9.4 percent in the last six years and topped 14 in the first half of 1980 (Chart 1).

Measuring inflation in terms of the GNP implicit price deflator, which is technically a better measure of the actual inflation people experience, does not change the basic pattern of accelerating inflation.

When we look at the rate of inflation for the year following each recession (Chart 2), we see the rise of inflation (measured by the Consumer Price Index) from a somewhat different perspective: Since 1955, inflation started from a higher base after each successive recession. Whether this happens once again, in the aftermath of the current recession, will depend in part on the policies followed in the interim. The disturbing trend, however, suggests there is an "underlying" rate of inflation which continues rising through economic expansions and contractions.

Why is long-run inflation such a serious problem? Assuming a long-run inflation rate of 10 percent (a figure picked for illustrative purposes only), this is what a dollar we put in a non-interest-earning account today would be worth: 39 cents after 10 years, 15 cents after 20 years, 6 cents after 30 years, and 1 cent after 50 years.

Inflation is clearly intolerable. Although it benefits some groups, it tends to hurt savers, lenders, and those on fixed incomes. It causes distortions in the economy and can undermine political institutions. Allowed to continue, it can precipitate a breakdown in
Inflation is accelerating...

and starts higher after each recession.

the fundamental structures of society. For this overriding reason, unchecked, endemic inflation is more dangerous than short-term recession.

Inflation must be reduced and controlled. In order to attack this problem successfully, we must first understand the forces responsible for the accelerated inflation. Some of those forces bear more blame than others. Many are interrelated, and most acted with different intensity at different times. Yet, they have all played a part.
High Federal spending boosted deficit, while... Money growth was too rapid,

**Fiscal Policy**

To many minds, the first is the federal government's poorly designed expenditure and revenue policies. Too much fiscal stimulus tends to push total resource demand in the economy beyond what can be supplied at existing prices.

With the Vietnam war, federal spending relative to GNP began to rise sharply, and by 1975, the federal government was spending an amount equivalent to $23\frac{1}{2}$ percent of GNP (Chart 3). More recently, this ratio has leveled off at about 22 percent.

The most dramatic spending increases have been in the form of transfer payments (such as Social Security, unemployment insurance, and Medicare). Federal grants-in-aid, through which highway, mass transit, education, and pollution control money is funneled, also increased rapidly as a percent of GNP and had much of the same effect. This acceleration in primarily new social programs clearly compounded our inflation problem.

The result has been an almost unbroken string of annual budget deficits. Deficit financing has covered the red ink but has crowded out private borrowers from the credit markets at times when overall credit demands have been high.

**Monetary Policy**

Meanwhile, monetary policy, instead of reducing inflation, has contributed historically to the inflation process by permitting too fast a rate of money growth (Chart 4).

The expansion in the money supply over the last two decades has been generous, exceeding the economy's average real growth rate by a substantial margin. In fact, by the traditional M-1 definition, money has grown faster than real output in each of the last 16 years, thereby providing fuel to the inflation.

Fast money growth and high rates of inflation go together. There is a close historical relationship between money growth

**To attack inflation successfully,**
and was tracked by prices after two years.

and prices (the GNP price deflator), lagged 24 months (Chart 5). In other words, overly rapid money growth intensifies inflation about two years later. The Federal Reserve has acknowledged, in retrospect, that the overexpansion of money and credit over much of this period has contributed importantly to the acceleration of inflation, but in the last year, the Fed increased its resolve not to repeat this pattern in the future. One implication of this resolve to hold down monetary growth is that the additional federal borrowing is even more likely to crowd private borrowers out of the credit markets.

we must understand the forces responsible for it.

Saving rate dropped sharply, contributing to...

**Lagging Investment**

Fiscal and monetary policies are two of the most important forces behind our inflation problem, but there is another that, at the same time, has held down the growth in our economy; namely, lagging saving and investment. U.S. households are consuming more and saving less. U.S. businesses have cut back, if not reversed, the trend of substituting capital for labor. Capital investment has been weak, both the amount of productive capacity and its efficiency have suffered, and the result has been another contribution to the upward pressure on prices.

The drop in the saving rate (the proportion of income saved rather than spent) since 1975 has been remarkable and disturbing (Chart 6). Faced with accelerating inflation not matched by after-tax income, the consumer has been increasingly inclined to “buy now rather than later” and to spend a larger proportion of his paycheck doing it. As that same consumer has seen the real value of his saving diminished by inflation, he has been understandably reluctant to devote a higher proportion of his income to savings. This reduced rate of savings and the larger rate of consumption have combined to diminish both the financial capital and the productive resources available for new plant and equipment.
New plant and equipment spending increased sharply from 1960 to 1969, exceeding employment growth. But after 1969, plant and equipment spending slowed while employment accelerated (Chart 7). Although there is more than one explanation for this, we know that some businesses raised output by adding employees instead of equipment. And even some of the equipment that businesses bought added nothing to capacity but was installed to reduce pollution or fuel costs.

Consequently, during the seventies, annual plant and equipment spending, as a percent of GNP, actually fell slightly (Chart 8). This slowdown of the seventies contrasts sharply with the capital boom of the sixties, which was propelled by corporate income tax reductions, depreciation liberalization, and the then new investment tax credit. Such business tax reforms nominally lowered corporate income tax liabilities during much of the sixties. But when you take

Inflation causes distortions in the economy and can undermine political institutions. Allowed to continue, it can precipitate a breakdown in some of the fundamental structures of society.
Business tax reforms were offset by inflation. U.S. capital investment rate trailed Japan and Germany.

into account the complete impact of inflation, as Chart 9 does, you can see that the tax cutting was temporary and partly illusory. By 1977, corporate income tax liabilities adjusted for inflation had returned to the high level of the mid-fifties. Thus, the distorting effects of inflation on depreciation and inventories have substantially offset the entire business tax relief of the past two decades. High taxes, of course, reduce the dollars available for investment in plant and equipment and reduce profitability.

NOTE: Chart 9 is based on data in Martin Feldstein and Lawrence Summers, Inflation and the Taxation of Capital Income in the Corporate Sector, Working Paper No. 312, National Bureau of Economic Research, Inc.

This means the United States is devoting a smaller share of our GNP to capital investment than are many other countries, among them, Japan and Germany (Chart 10). The savings rates of these three countries present a similar pattern. Varying institutional arrangements make such international comparisons tricky, but the fact remains that we are devoting a smaller share of our production to the enhancement of productive facilities.

For this overriding reason, unchecked, endemic inflation is more dangerous than short-term recession.
U.S. productivity dropped... and fell increasingly behind other countries.

### Productivity and Wage Trends

Low rates of capital investment are related to another problem: the lag in productivity, defined as output per man-hour. The growth of U.S. productivity (Chart 11) fell from 2.4 percent annually between 1950 and 1965 to 2 percent between 1965 and 1973 and to nine-tenths of 1 percent between 1973 and 1978. During 1979 and the first half of 1980, productivity actually declined.

As you would expect, the U.S., in terms of manufacturing productivity, has fallen increasingly behind other major industrial countries (Chart 12). This has severely reduced our competitiveness at home and abroad.

From a cost standpoint, our poor productivity performance must be further weighed against the pressure for higher wages as workers try to offset the squeeze on their incomes by inflation.

The following figures show the extent of this “cost-push” inflation. During the sixties, average annual productivity rose 2.5 percent, compensation rose 4.9 percent, and unit labor costs (roughly the difference between the two) rose 2.3 percent. This was one of the prime reasons for the low rate of inflation during this period. But in the seventies, the situation changed: Productivity gains fell, compensation growth rose sharply, and, as a result, unit labor costs tripled, to 6.9 percent. So it is not surprising that under these pressures the inflation rate was much higher (7.1 percent) during this decade than the one before.
Government Regulation

When it comes to inflation, government regulations must also shoulder some blame because however socially desirable they may be, they increase costs and prices. The growth in the number of pages in the Federal Register, shown in Chart 13, illustrates the mushrooming of regulations over this period. The explosive increase in the budgets of 56 federal agencies which regulate business is another indicator of this trend.

One reliable study estimated that the annual cost of meeting federal regulations for consumer product safety, job safety, environmental protection, paper work, and other areas totaled $102.7 billion in 1979. This amount, which includes administrative and compliance costs, was equivalent to about 4 percent of GNP.

Energy Prices

Yet, of the many forces contributing to inflation, the quantum jump in energy prices has perhaps been the most noticeable. Thanks largely to OPEC, the retail gasoline price (Chart 14) has jumped from 20 cents per gallon in 1950 to about $1.20 recently. Higher energy costs mean higher energy prices, unquestionably. But some other industrial nations import a greater proportion of their energy supplies than we do, and yet they have had better results with inflation. Energy costs have contributed with their increase, but only because we have failed to achieve a lessening of inflation elsewhere in the economy.

and the dollar weakened.

Conversely, the dollar weakened.

**Weakness of the Dollar**

No list of inflationary influences would be complete without citing the weakness of the dollar in the foreign exchange markets compared to other major foreign currencies. The 1973 dollar devaluation and the further fall in the dollar exchange rate (Chart 15) have raised the cost of what we import and have lessened the price competition from imports on domestically produced products. The broad peak in the dollar back in 1976 marks the last time that U.S. inflation was low and expected to be low in comparison with other industrial nations.

**Inflationary Expectations**

Inflationary expectations, meaning the anticipation of continued inflation, is the last but not least of the forces behind inflation. Much of the inflationary momentum built into the economy has come from the expectation of employers that inflation would continue, thus permitting them to pass generous wage increases along through higher prices. Indexing of wages and prices has both reflected and contributed to these expectations. Indeed, if it persists long enough, inflation begins to affect the psychology of most groups, especially consumers.

Seeing the purchasing power of their income eroded by inflation, consumers, since about 1970, have reduced the percent of income saved (which, as we saw earlier, has reduced capital available for investment) and, instead, have spent and borrowed more freely (refer to Chart 6, repeated above). This urge to buy has added directly to the demand for goods and services, resulting in higher prices.
### Inflationary Forces
- Fiscal Policy
- Monetary Policy
- Saving and Investment
- Productivity and Wage Trends
- Government Regulation
- Energy Prices
- Weakness of the Dollar
- Inflationary Expectations

### Remedies
- Restrain Federal Spending
- Reduce Money Growth
- Reduce Corporate Income Taxes
- Teamwork: Lower Wage Increases
- Reduce Regulation
- Alternative Energy Sources
- Reduce Inflation
- Reduce Inflation

The forces contributing to inflation are complex and deep-seated. Yet, once we have identified these forces, some remedies present themselves. Our list is not meant to be complete.

To shed the inflationary effects of fiscal policy, we need most of all to restrain Federal spending. In the area of monetary policy, it is incumbent for the Federal Reserve to reduce money growth over a long time. This goes to the root of the inflation problem and is, therefore, essential to any program for curbing inflation.

But fiscal and monetary restraint alone are not enough. To stimulate investment and productivity, we should reduce corporate income taxes and accelerate depreciation schedules. To raise productivity, we also need more teamwork and less confrontation between government and business and between business and labor. And the lower the wage increases, the lower the inflation will be. We must reduce government regulation. We must push harder for alternative energy sources to reduce our dependence on oil. And when we achieve a steady reduction of inflation, both the weakness of the dollar internationally and the pervasive momentum of inflationary expectations will take care of themselves and begin contributing to disinflation.

There is obviously nothing novel about these suggestions. They have been proposed by a lot of other people. But to a large extent, they have not been put into effect. Yet, inflation has become so embedded in our economy that only a major battle waged on many fronts, aimed at breaking the inflationary pattern, has any hope of moving this problem from its number one position.
Working Paper Review

The following article is a staff review of a more complete study in the Federal Reserve Bank of Atlanta Working Paper series.

Barbara Henneberry
Robert E. Keleher
James G. Witte

1919-39 Reassessed: Unemployment and Nominal Wage Rigidity in the United Kingdom

The high unemployment of the 1919-39 period in the United Kingdom was related to the deterioration in flexibility of aggregate nominal wages. The authors argue that the more rigid wage levels were primarily due to the growing power of trade unions and to expanded social legislation (e.g., unemployment insurance and minimum wage laws).

It is becoming increasingly clear that many of the economic problems of the post-World War II era are rooted in the policies, social attitudes, and institutional changes of the 1920s and 1930s. It was during this period between World War I and World War II that, because of the alleged bankruptcy of traditional theory, influential economic thinkers persuaded policymakers to adopt a "new" (Keynesian) economic theory. Contending that much of this "new" theory and policy of the inter-war period was not only unnecessary but actually destructive to economic stability, the authors of this Working Paper have focused on some of the changes which took place in the labor markets and labor market institutions in the United Kingdom from 1919 to 1939.

An important element of pre-Keynesian employment theory was that a flexible nominal wage structure facilitates the equilibration of the labor market. In times of high unemployment, for example, employers could hire more workers if wages were lowered. Contemporary economic theory and policy, on the other hand, commonly assume a degree of nominal wage rigidity (wages will not fluctuate up and down) and shelve the larger topic of wage flexibility and its determinants. This attitude derives largely from Keynes, who blamed the sluggish British economy of the 1920s on the policies pursued by the monetary authorities and not on labor market...
conditions (where the money wage rate was actually too high for full employment, given the rate of interest). In this Working Paper, Henneberry, Keleher, and Witte reexamine the money wage issue. Britain is examined because it constitutes one of the first experiences of a relatively rapid deterioration of nominal wage flexibility in a modern industrial economy. Moreover, the “new” economic theory developed within this changed institutional environment. The authors conclude that the high unemployment of the interwar period in Britain was indeed related to the deterioration in flexibility of aggregate nominal wages.

The empirical data indicate that a certain degree of nominal wage flexibility existed in Britain until about 1922. Nominal wages, in other words, fell significantly in the face of high levels of unemployment, and this wage reduction served to eliminate a substantial amount of that unemployment. The data also clearly indicate that this relative degree of nominal wage flexibility was never exhibited after 1922.

The principal reasons for this shift to more rigid wage levels in the 1920s, the authors argue, were (1) the growth in the power and influence of trade unions and (2) the effects of social legislation, including unemployment insurance and minimum wages (together with the absence of significant immigration from 1904 to 1930). Trade union membership, for example, doubled from 1914 to 1920, unions became more centralized, and strike activity increased substantially. Thus, employers became more reluctant to risk costly clashes with labor, and wage rigidity was strengthened. Social legislation, particularly the Trade Boards Act of 1918, reduced wage flexibility by transforming the wage board into a wage control mechanism for unorganized industries instead of simply enforcers of the minimum wage law. At the same time, British expenditures on unemployment insurance benefits increased 52 fold between 1920 and 1922. As a result, unemployed workers could now refuse to work at less than the standard rate and still continue to draw benefits. The unemployment insurance program also relieved the unions of the responsibility for the unemployed; this burden was shifted to the taxpayers.

The authors, then, show that the loss of nominal wage flexibility in Britain during this interwar period was related to the growing strength of labor unions, the rapid expansion of unemployment insurance, and the regulation of certain wages by trade boards. Because the British experience was among the first with such rapid institutional change, the authors identify it as a harbinger for “other Western industrialized societies that are, even today, continuing to eliminate the self-regulating character of their respective labor markets.” If Britain is, in fact, such a harbinger, this rigidification of the nominal wage structure has important implications for economic policy relating to stabilization and inflation as well as to longer term policies relating to labor market conditions.


A copy of this study is available upon request to the Research Department, Federal Reserve Bank of Atlanta, P.O. Box 1731, Atlanta, Georgia 30301.
Robert E. Keleher

Supply-Side Effects of Fiscal Policy: Some Preliminary Hypotheses

Reductions in tax rates tend to increase the supply of labor because of shifts from leisure to work and from non-market to market activity. They also increase the supply of capital because of shifts from consumption to savings and investment activity and from tax shelters to more productive uses of capital.

In a paper published in June 1979 as part of the Federal Reserve Bank of Atlanta’s Research Paper Series, Robert E. Keleher discussed some key issues surrounding tax cuts and, in particular, examined the effects of tax cuts on the “supply-side.” A longer article based on the Research Paper appeared in the September/October 1979 Economic Review, but because of the recent, increased attention to the topic, a brief outline of some of the paper’s major points may be of interest to some readers.

In particular, the political campaign and the “tax revolt” have focused attention on the economic effects of a major tax cut. Opponents of a tax cut fear that increased consumer spending and an increased government deficit will result in higher inflation. In the debate over the effects of cutting taxes, many economists of both Keynesian and monetarist persuasions have focused almost entirely on how tax cut policies affect aggregate demand. Because of this preoccupation with aggregate demand, these economists do not distinguish between the economic effects of tax cuts and government spending increases or between tax rate changes and tax revenue changes.

According to economists (including Keleher) who support the so-called “supply-side” view, tax rate cuts not only affect disposable income but also may induce changes in the supplies of factors of production such as labor and capital and hence changes in aggregate production, supply and economic growth. Tax rate changes, they argue, are relative price changes and thus will affect choices between work and leisure, consumption and saving-investment, and market and non-market activity. These changes in the supply of factors of production to the market economy consequently affect aggregate supply and economic growth. Supply-side effects, in their view, are a
key to the long-term growth of the economy. For those economists, then, these effects are more relevant to growth theory and policy than to stabilization theory (which seeks to control short-term, cyclical fluctuations in the economy).

Although most economists agree that the supply-side effects of fiscal policy exist and that these effects have long been neglected in macroeconomics, Keleher says there is still much disagreement about the policy implementation of these ideas. If the economy is on the upper portion of the so-called “Laffer Curve,” for example (when, theoretically, rising tax rates diminish incentives to work and to supply capital and eventually reduce tax revenues), then the substantial increase in tax rates in recent years has induced a slowdown in aggregate market production that, together with undiminished monetary expansion, has produced “stagflation” (i.e., the coexistence of high rates of inflation and sluggish real economic growth).

Accordingly, supporters of this view recommend a reduction in tax rates which they contend will increase production (aggregate supply), the tax base, and, consequently, tax revenues. They argue further that if such policies are coupled with a gradual deceleration in the growth of the money supply, such tax cuts can contribute to slowing the rate of inflation.

Other economists have questions about the location of the economy on the “Laffer Curve,” the magnitude of the supply-side effects, and the timing of the effects. Empirical tests of refutable tax cut hypotheses, they argue, have not been conducted. Tax cuts, in their view, could create pressures to monetize the increased deficit and thus create inflationary pressures in the short run. Supply-side theorists respond that these are short-term uncertainties which do not invalidate the long-term supply-side effects of a consistent fiscal and monetary policy.

Proponents of the supply-side theory include those economists who support tax cutting policies in order to slow the increase in total government spending (as a proportion of GNP). Instead of making decisions about government spending in isolation from decisions about revenue collection and taxation (as is currently the case), they argue, the electorate should first decide about levels of taxation and then allow its representatives to allocate these revenues.

Keleher’s study analyzes specifically how these “supply-side” tax cuts influence (a) incentives, (b) the market supplies of factors of production, and (c) aggregate supply. Although the study is in the nature of “some preliminary hypotheses,” Keleher concludes that reductions in tax rates tend to increase the supply of labor services because of shifts from leisure to work and from nonmarket to market activity. They also increase the supply of capital because of (a) shifts from consumption to savings and investment activity and (b) from tax shelters to more productive domestic uses of capital. Consequently, such restrictions in tax rates are likely to increase the economy’s aggregate supply of real goods and services. In a concluding section, Keleher also summarizes some of the criticisms and various implications of the “supply-side” position.


A copy of this study is available upon request to the Research Department, Federal Reserve Bank of Atlanta, P.O. Box 1731, Atlanta, Georgia 30301.
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