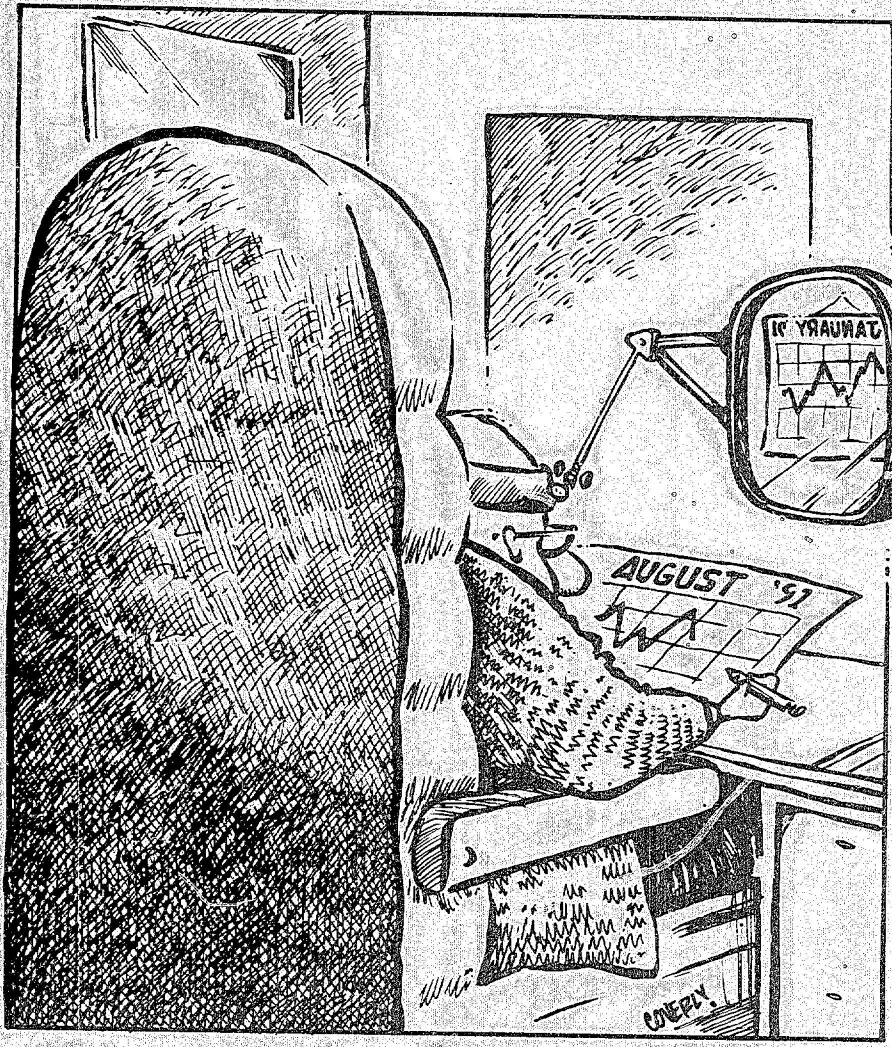
# Indiana Business Review




## The 1991 Midyear Outlook

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# The Midyear Outlook for the National Economy

**Bruce L. Jaffee**

*Chairperson and Professor of Business Economics and Public Policy, Indiana University*

Last fall we predicted a short and mild recession in the United States from the end of 1990 through the first quarter or half of 1991. We still believe this forecast is accurate, although the recession is likely to be a bit longer and deeper than we expected, though certainly less severe than the major downturn we experienced in 1981-82. The successful outcome of the short Persian Gulf War was a boost to the economy in terms of business and consumer expectations in keeping down energy prices. Yet the euphoria was short-lived and has not had any significant effect on the economy. The consumer and investment sectors of the economy were especially weak during first quarter 1991.

We now expect the recession to continue through the first half of 1991, with positive, though modest, growth in real GNP occurring in the third and fourth quarters of this year. On a year-to-year basis, we expect real GNP to decline between 0 and -0.5% for the year. Recovery in the housing, automobile, and consumer durable markets is likely to begin in earnest by midyear, though from dismally low levels.

The unemployment rate is likely to peak in the 6.5-7% range, substantially below the levels reached during the last recession. The slowdown of consumer spending and the moderation of energy prices have caused us to reassess our forecast for inflation in 1991. Comparing average price levels in 1991 and 1990, we now expect consumer prices to rise about 4.5% to 5% and for the broader GNP deflator to increase about 0.75% less, partly because it includes the weak investment sector.

The regional and sectoral impacts of this recession are quite different from the last one. The Northeast and Southwest have been hit badly, as have jobs in the financial, educational, real estate, and governmental sectors. Although unemployment rates for blue-collar workers and in the Midwest have increased, the rise has been less than in the most recent downturns.

We expect the investment sector to be weaker than we predicted last fall. In particular, non-residential investment should decline about 2-3% in 1991. The residential sector is expected to continue in the doldrums throughout the year, but we expect a modest upturn in the second half. Interest rates fell more than predicted, due in part to expansionary monetary policy, but we think no further significant declines in rates are likely. The stock market rise during first quarter 1991 was not based on any economic fundamentals other than the decline in interest rates. The stock market appears to be fully valued, but we also said that before the run-up in the first half of the year.

In general, bank and financial markets are likely to remain weak through 1991 as financial institutions try to strengthen their balance sheets. There is likely to be considerable credit restraint even with the sharp declines in interest rates because of an increased emphasis on loan quality. The strong sector of the economy in 1991 is likely to continue to be net exports. The recession is reducing imports while relative strength of economies in much of the rest of the world is promoting our exports. However, if our economy recovers in the last part of 1991 and if the dollar continues to strengthen, the U.S. balance of payments may worsen. Fiscal policy is serving as a modest restraint to economic growth. Since the recession began, taxes have increased at the federal, state, and local levels.

Overall, we think 1991 will be a year of negative growth in the first half and modest recovery in the last half as consumer spending and business investment improve from their low levels in the first half.

# Consumer Spending

**R. Jeffery Green**

*Professor of Business Administration and Economics and Co-Director, Indiana Center for Econometric Model Research, Indiana University*

Our forecast last November for consumer spending anticipated a decline in both the last quarter of 1990 and first quarter 1991. As **Table 1** shows, that decline occurred but was much larger than anticipated. Why was it so large?

We expected real incomes to fall during the winter for several reasons. The oil price increases resulting from the Iraqi invasion of Kuwait produced a temporary spurt of inflation that eroded the purchasing power of consumers' income. We expected that nonresidential investment and residential investment would both be weak and lead to reductions in employ-

**Table 1**
**Actual and Forecast Values—Real Personal Consumption Expenditures**
**(Trillions of 1982 dollars)**

| | Actual | Nov-90 Forecast | May-91 Forecast |
|---|---|---|---|
| 3Q 1990 | 2.697 | 2.700 | 2.697 |
| 4Q 1990 | 2.674 | 2.695 | 2.674 |
| 1Q 1991 | 2.664 | 2.690 | 2.664 |
| 2Q 1991 | | 2.690 | 2.676 |
| 3Q 1991 | | 2.702 | 2.692 |
| 4Q 1991 | | 2.714 | 2.708 |

**Table 2**
**Components of Real Personal Consumption Expenditures—May 1991 Forecast**
**(Billions of 1982 dollars)**

| | *Durable Goods* | *Nondurable Goods* | *Services* |
|---|---|---|---|
| 1Q 1991* | 404 | 895 | 1,365 |
| 2Q 1991 | 408 | 898 | 1,371 |
| 3Q 1991 | 413 | 901 | 1,378 |
| 4Q 1991 | 417 | 906 | 1,385 |

**Actual but preliminary*

ment and income. Finally, we expected the effects of higher defense spending for the Gulf War to partially offset these declines.

As the winter progressed, the declines in both residential and nonresidential investment became more severe than anticipated. Housing starts reached a trough in January 1991 that was near the lows seen in the recessions of the early 1980s. Nonresidential investment fell at more than a 14% annual rate in first quarter 1991 as both equipment and structures posted big declines. Even more surprising was the decline in real defense purchases in first quarter 1991 while war raged in the Persian Gulf. Surely this is the first war in American history during which defense purchases declined! As a result of these developments, real disposable personal income declined at a 3.5% annual rate in the last quarter of 1990, and declined at a 1.6% annual rate in first quarter 1991. It was these declines in income that caused the sharp reductions in consumer spending.

From third quarter 1990 to first quarter 1991, real consumer expenditures declined by $33 billion. Durable goods expenditures declined by $26 billion over the same period while nondurable goods expenditures declined by $22 billion and expenditures on services rose by $15 billion. This pattern is typical in recessions, because many durable goods purchases such as autos and appliances can be postponed, as can some purchases of nondurables such as clothing and restaurant food.

Automobile sales have been particularly hard hit in this recession. Total auto sales averaged more than 10 million units during each of the five years from 1984 through 1988. In 1989 unit sales declined to 9.9 million before dropping to 9.5 million units in 1990. These gradual declines turned into a rout late last year as unit sales fell to a 9 million annual rate in the fourth quarter and then dropped again to an 8.2 million annual rate in first quarter 1991. Auto sales have not been this poor since early 1983, as the last recession was ending.

Where will consumer spending go from here? Table 1 indicates that we still expect real consumer spending to rise during the rest of 1991. Whereas there are not yet any unambiguous signs that the economy has begn to recover, there are signs that we are reaching the trough of the recession. In particular, real disposable personal income, which experienced sharp declines late last year, was constant from January to February 1991 and then posted a small gain in March. We expect these income gains to increase during the rest of 1991 and provide the basis for the expected expansion of consumer spending.

**Table 2** shows that all major components of consumer spending are forecast to participate in the recovery, but the recovery is not rapid. Credit restraints in the aftermath of the S&L crisis and the declines in defense spending related to both the ending of the Gulf War and last fall's budget agreement should put some drag on economic recovery.

## Nonresidential Investment and Inventory Change

**Lawrence S. Davidson**

*Professor of Business Economics and Public Policy and Director, Indiana Center for Global Business, Indiana University*

Last fall we forecast that nonresidential investment would show no growth from its 1990 level, as measured in 1982 dollars. We also predicted little or no inventory change. Since then we now know more about the resolution of the Persian Gulf conflict and we have learned more about the course of the recession from published data on fourth quarter 1990 and first quarter 1991. As we had hoped it would, the war ended quickly. Although the recession appears to be the short and shallow one we predicted last fall, it has been slightly more severe than we anticipated. The unemployment rate will peak higher than the 6.5% earlier projected and the economy will probably grow less than the meager 0.5% we thought last fall.

Closer to the subject of capital spending, nonresidential investment (spending by firms on equipment and structures) revealed an unexpectedly sharp contraction of more than 10% in first quarter 1991. Some experts look for another double-digit contraction in the second quarter. Though structures spending has been scaled back for several years, it doesn't look like 1991 is the year when this will snap back. The Commerce Department's annual survey of spending intentions in February showed that firms are paring back capital spending plans from levels anticipated three months earlier. In current dollar terms, firms are planning a meager 2% expansion of capital spending. Manufacturing firms are planning no increases over their 1990 spending levels. Overall manufacturing utilization rates have recently crawled below the 80% mark. Further, a recent survey of major metropolitan areas finds that around half of the cities have office vacancy rates above 20%. Many experts think the glut could last a few more years. There is also a growing recognition that foreigners are moving their financial and real investment spending elsewhere in the world.

This recent news makes even our flat forecast for nonresidential investment look too sanguine. Nevertheless, a few bright spots keep us from revising downward too much. The recession looks as if it has reached its trough. Inflationary expectations are subsiding and interest rates have a little more room to fall. Housing is starting to snap back, and other durable goods and capital spending won't be far behind. Offsetting the negative outlook with these positive factors leads me to predict that nonresidential investment could contract by no more than 2-3% in 1991.

Though the economy has grown a little slower than expected, inventories have not become a great burden. Firms reduced inventories by around $3 billion in 1990 in constant 1982 dollars. As sales began to contract at the end of 1990, business inventories were sharply reduced at an annual rate of over $20 billion during fourth quarter 1990 and first quarter 1991. Because firms have reacted so quickly to sales changes during this recession, I continue to expect very little change in business inventories over 1991—with changes falling within a bracket of, say, plus or minus $5 billion in 1982 dollars.

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# Unemployment, Inflation, Interest Rates, and Fiscal and Monetary Policies

**George W. Wilson**

*Distinguished Professor of Business Economics and Public Policy and Professor of Economics, and Director of the Transportation Research Center, Indiana University*

One major uncertainty in the outlook that hung over our forecast last fall has been removed—namely, the ending of the Gulf war. Its brevity and resoundingly successful outcome was expected to have a stimulating impact upon the economy despite the devastation to Kuwait's oil fields. Yet the wave of rejoicing and euphoria has not been translated into a renewed dynamism for the economy in any obvious way. Perhaps the aftermath of the war has dampened spirits somewhat: Hussein is still there, stubbornly refusing to flee the country, as all defeated tyrants are supposed to do, and behaving as usual toward his Kurdish countrymen and other rivals; the oil wells are still burning in Kuwait; and attempts to somehow "solve" the Middle East problems with our newly demonstrated power have, as expected, gone nowhere. Whatever the reason, the war has not had nearly as much effect upon the economy for good or evil as most had predicted.

At present writing (late May), there are some favorable signs, such as the rise in factory orders in April and marginal improvement in domestic vehicle sales. But there is no post-war spurt, and the unemployment rate remains well below the last recession, falling in April to 6.6% from 6.8% in March. After the shock of the unexpectedly large drop in real GNP during the first quarter, one needs to be somewhat optimistic to believe the turnaround will come soon, although the signs suggest that the worst may be over by the end of June. If so, real GNP growth on a yearly basis should be about what we predicted earlier—namely, about one-half of one percent real growth over calendar year 1990.

**Unemployment**

The unemployment rate depends upon the growth rates of real GNP, the labor force, and labor productivity (real GNP per person or, better, per person-hours employed per time period). The predicted growth rate of output is well below the growth rate of the labor force, so even with a low but non-negative growth of productivity the unemployment rate will increase. On plausible estimates of labor force and productivity growth rates, unemployment should average almost 6% per month throughout 1991, peaking at about 7% for either May or June. This is still well below unemployment rates during 1982 and 1983, which *averaged* over 9.6%. In this sense, if the recession ends in the next few months, as our forecast assumes, it will be relatively mild in its impact upon overall unemployment rates. The apparently more adverse consequences that these data suggest, as widely and vividly reported in the media, are a result of the more widespread incidence of unemployment on white-collar workers and workers in the professions and other areas hitherto largely exempted from recessionary layoffs. The industrial shift to service and knowledge-based industries has helped "democratize" the pain-cost of aggregate unemployment rates.

There is, of course, no way to calculate such costs. This recession, if it does end by late June, will be recorded as "mild" and short. The recovery after the second quarter is expected to be almost equally as mild, though we hope not as short—but that involves our forecast for 1992, due later this year.

**Inflation**

Oil prices can be expected to decline somewhat or stabilize, as the fear of future severe scarcity due to military destruction of Gulf oil facilities vanishes along with a slowdown in oil demand due to sluggish output growth, conservation, and greater supply from other regions as well as restoration of Kuwaiti and Iraqi production. Inflationary pressures in the U.S. will be held back by the sluggish economy and low growth of aggregate spending (further influenced negatively by the federal government's contractionary fiscal policies). The resultant excess labor and capital capacity represent powerful anti-inflationary pressures.

The only offsetting inflationary pressures are associated with the expected devaluation of the dollar and resultant higher import prices, and the excise tax increases in the federal budget package. But higher import prices will be less inflationary because import quantities will shrink from last year due to expected slower real GNP growth. On balance, if oil prices hold throughout 1991 at present levels or decline slightly, the overall inflation rates should decline to a range of 3.5 to 4.5% for the GNP deflator.

**Interest Rates**

Nominal rates should decrease with the rate of inflation, but probably not as much, depending upon the actions of the Federal Reserve, discussed below.

**Fiscal Policy**

Enough has already been said in the media and elsewhere about the process whereby the budget was finally approved. Its impact upon the economy during calendar year 1991 needs to be assessed. Aside from the inconsistency of a contractionary fiscal policy amid a rapidly contracting economy, and the perpetuation of the myth that all federal government deficits represent national dissavings (which implies that all federal government expenditures are consumption whether or not they are used to finance sorely needed infrastructure, health and education facilities, or other capital-like assets), the present package widely billed as reducing the deficit by almost $40 billion below what it would have been in fiscal year 1991 is something of a mouse in a $5.5 trillion economy.

Furthermore, the attempt to simplify taxation in 1986—never too successful in the first place but at least a useful attempt—has been emasculated with the present budget as we march sharply back to pre-1986. Reintroducing tax rate disparities between capital gains and ordinary income provides incentives to convert as much of the latter to the former as possible, with all the associated gamesmanship (if not outright fraud) that the 1986 act sought to eliminate. Many new complications are added, so simplification has once again yielded to complexity and higher incomes for firms that prepare tax returns.

The net effects of the budget on the economy will be mildly contractionary and will worsen somewhat or prolong recession, but not significantly. It may make many people happier to believe that a "real" deficit reduction process has begun. It hasn't, but if the economy begins to grow more rapidly beginning, say, in 1992, this package extending over five years should lead to greater deficit reductions than otherwise expected. It is also nice to see equity and fairness at least partially reintroduced into U.S. tax policy through somewhat higher progressivity.

**Monetary Policy**

The Fed has lowered the discount rate three times since December. If the economy does not show more convincing signs of a turnaround in the next several weeks, it will probably move again, though even more gingerly than last time. Like all central banks, the Fed fights inflation whether it exists or not, and even if it is a remote prospect. Though monetary policy remains the only counter-cyclical game in town, its use as a stimulus in this recession has been begrudging and weak. Even this tepid performance has been viewed by many as selling out to an administration that has "shown itself incapable of exercising wise economic leadership" (*The Economist*, May 4-10, 1991, p. 17) and running a serious inflationary risk.

On the other hand, there is much virtue to shortening the recession and getting a solid recovery under way. Many urgent needs require the productive capacity to be fully utilized and expanded. To be sure, lowering short-term nominal interest rates may not lead to reduction in long-term real rates and encourage gobs of useful new investment, but it is better than nothing, or than letting the recession drift along. Even if the stimulus does not take effect until after the economy is recovering, it will help accelerate the pace and get the system to full capacity output faster. The risk of accelerating inflation is not high throughout 1991. With whatever expansion takes place during the latter half of the year expected to be less than buoyant, a little stimulus can do no harm. But do not fear. The Fed will ease again even if the turnaround is obvious during June—for 1992 is an election year!

Thus the U.S., the world's only superpower, will come through 1991, mild recession and all, poised for more rapid, sustainable growth in a more stable and promising political and economic world.

# The International Economy

**Jürgen von Hagen**

*Associate Professor of Business Economies and Public Policy, Indiana University School of Business*

As we predicted last fall, world economic growth slowed in the first half of 1991 and will continue to do so for the rest of the year. Yet, with approximately 1-1.5% real growth, the industrialized world as a whole is not in a recession. The main industrial economies show remarkable differences in their business cycle position: the U.S., the U.K., and Canada are looking at little or negative growth for 1991, whereas Germany and Japan are still growing strongly, though less than in 1990, and the rest of continental Western Europe expects moderate growth. The stronger performance of the latter countries will help keep the recession relatively mild in the former group of countries. By 1992, world economic growth should pick up to around 2.5%, as the economies of the U.S. and U.K. recover. On a worldwide basis, inflation is expected to recede slightly from 5% in 1990 to 4.7% in 1991, and to around 4% in 1992.

During the past two months, the dollar has gained strength in the international markets, despite relatively low interest rates in the U.S. compared with other countries. We attribute this appreciation to the anticipation—prevailing in international financial markets—of an improvement in the performance of the U.S. economy compared to other countries in the world. The U.S. economy has recently shown signs of coming out of its recession earlier than some expected, while the strong economic growth in Japan and, even more so, in Germany appears to be faltering. As this tendency continues, the dollar should remain at its current level or even strengthen somewhat further.

Weak economic growth in the U.S. in 1990, together with the strong performance of U.S. exports and last year's decline of the dollar, contributed to narrowing the U.S. current account deficit substantially. In 1991, the contributions of the allied countries to financing U.S. war expenses in the Gulf, and the additional export demand resulting from the reconstruction of Kuwait, will further contribute to reducing the current account deficit. Germany's current account surplus, on the other hand, is expected to fall substantially due to the increased import demand from East Germany after unification and the currently high real interest rates in Germany. Japan's current account surplus, in contrast, may rise somewhat, reflecting the reduced value of Japanese oil imports due to the fall in oil prices since January.

The recent summit meeting of the seven major industrialized countries demonstrated significant disagreement between the U.S. government and its partners over the current level of interest rates. While the Bush administration pressed for lower interest rates worldwide, the German delegation resisted most strongly for fear of a monetary over-expansion reviving inflation. This situation reminds us of the debate over coordinated monetary policy in the mid-1980s, when the U.S. Treasury under James Baker finally succeeded in gaining major concessions from Japan and Germany to lower their interest rates. The experience of the following years clearly shows that such international policy games are unproductive: the only significant result then was increased international inflation. Whatever the outcome of the current debate, then, its main consequence will be a higher or lower inflation rate in Europe, Japan, and the U.S. However, neither more real growth nor a reduction in the U.S. current account deficit will follow, if the Bush administration succeeds in persuading the other governments to give in.

The most dire economic outlook worldwide today is for the Soviet Union. Hyperinflation and chronic shortages mark a situation in which the Soviet economy is rapidly disintegrating. Individual republics have begun to take control over their economies from the central government, restrict trade with other states, and strive for national autarky. Yet decentralization in this way alone seems far from promising effective economic reform. In the foreseeable future, Soviet economic conditions will be in complete disarray, leaving the U.S. and its allies with some tough choices about cooperating with the process.

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# Equities, Bonds, and Corporate Earnings

**Michael Simkowitz**

*Professor of Finance and Director, Alumni Programs*

It's such a pleasure to have Bruce Jaffee, a beloved colleague of mine, give me the opportunity to eat crow in public. I will excerpt short quotes from my original forecast and then give some comments as to how these forecasts did.

"In general, we expect corporate earnings to be weak among the Standard & Poors 400 industrials. Areas of relative strength will be those corporations whose revenues are export driven and those companies that are relatively liquid compared with their competitors." Forecast pretty much on the nose; no embarrassment here.

"As for short-term interest rates, we may see a further drop of about 10-30 basis points in the first part of 1991 from the current 7.3% yield on Treasury bills and an additional 15-35 basis point drop toward the end of 1991." Well, at this writing (late May) the decline on short-term interest rates has been somewhere between 100 and 130 basis points, a far steeper decline than what we were predicting for the whole of 1991. So short-term interest rates did come down faster than we thought.

Where we really stubbed our toe was that we were rather bearish as to the prospects for the stock market. This outlook was based upon the predictions that: 1) we did not expect to see short rates fall substantially (wrong!); 2) we expected long rates to be sticky for a number of reasons, such as competition from the high rates in Japan and Europe (right!); 3) we felt that dividend growth would be slow relative to the inflation rate (right!); 4) we felt that the LBO demand for securities as well as the foreign demand for equities would be substantially reduced (right!); and 5) we basically felt we were in a bear market that had further to go before it ended (wrong!).

I believe we did reasonably well in pinpointing where the most spectacular returns could possibly be found: ". . . to pick up selected equities at distress bargain prices. These selected equities will most likely be found among the very strong companies in weak industries, such as casualty insurance, life insurance, money center banks, and the financial services industry." Pretty much right on the button for that forecast. The last paragraph of our written forecast started off with the following statement: "The quicker and further the intermediate and long-term interest rates decline, the less vulnerable is the market." These rates did decline a little bit more than we thought they would, so maybe I can hide behind that and say I warned you that if interest rates came down, the market may go up from there.

Now that I have finished my meal of crow, let's take a look at the future. The overwhelming—and in terms of life and treasure, inexpensive—victory in the Persian Gulf provided the market with a tremendous emotional boost that sent it exploding from its January lows to a gain of 16% in about five weeks. Since the end of February the market has basically moved sideways. What makes me nervous about this market is that the only good thing I hear people saying about it is it beats the alternatives: With interest rates coming down, the returns on short-term money instruments do not seem to be terribly attractive; there is a general feeling that the major amount of the drop in long-term rates has already occurred; therefore, bonds really aren't that attractive; the dollar may rise some more, so foreign investments aren't really attractive; therefore, I guess the stock market is the best choice.

That is not a rationale for an exploding bull market. I think this recession will show itself to be fairly stubborn and I don't think we're going to see a general turnaround in the economy until well into the third quarter and possibly later. I think the market, when it perceives this delay, will continue in a stalled pattern. Since late February the market has been in a trading range between 2850 and 3050 on the Dow. I think this kind of sideways movement will continue until mid or late summer, with this range being punctured possibly on the up or down side by no more than 3-5%. After late summer, if the recovery is documented and underway, and if long-term rates can come down, we could see a spirited market toward the end of 1991, with an upside potential of 3300 or 3400 on the Dow. This is a market where those who are naturally aggressive and risk-taking should remain reasonably fully committed to equities, while those who are naturally conservative may want to pare back selectively on their holdings.

As for interest rates, I don't see much of a further decline in short rates. As I write this update, the yield curve shows a one-year Treasury bill with a yield of around 6.1%, and I think we might even have seen the lows for short rates.

As to long rates, I think any significant movement will be toward lower rates and higher bond prices. I think there is a chance by the end of the year that we may find the long rate below 7.5%. If we do we should have a rather buoyant stock market. If the long rates don't come down and if the economy's recovery is delayed and not obvious, then the equity market will, at best, continue to move sideways.

# Indiana: What Kind of Recovery?

**Morton J. Marcus**

*Director, Indiana Business Research Center*

Most economists are now pleased to declare the recent recession at an end. It may have taken longer to end than expected, but there is fairly good agreement that second quarter 1991 was the bottom of this latest business cycle. Data revisions, of course and as ever, may prove us wrong. It is still possible that the recession actually ended in the first quarter as forecast and only better data stand between that forecast and reality.

A question does remain, however: When did this recession start? Or did we in Indiana have two recessions without being aware of the first one? **Figure 1** shows Indiana's personal income adjusted for price changes. Earlier recessions are fairly easy to see. There was a mild downturn in 1970, a more serious recession in 1974, and a major recession beginning in 1979.

A closer examination of the data (shown in **Figure 2**) indicates that the four quarters of 1988 were alternately up and down. The Indiana economy was going nowhere. Then there was a still unexplained surge in first quarter 1989. (Farm drought payments do not explain the surge.)

The next three quarters were a continuous downward slide. But first quarter 1990 brought Indiana's real personal income back above first quarter 1989 and, although weak, it remained about that level until the national recession began in third quarter 1990.

Did this recession begin in Indiana in 1989:1, 1990:1, or 1990:3? I am inclined to say that the recent recession began in first quarter 1989. That argument was made in the Winter issue of this publication. But out of consideration for my colleagues who may differ, **Figure 3** and **Table 1** depict the last four business cycles in Indiana with 1990:1 as the latest peak. The following discussion is little affected by the choice of which peak to use.

This latest recession was mild and of less consequence in terms of income than any of the three preceding recessions (see Table 1). The recession of 1969:4 to 1970:4 saw a decline in real personal income of 2.3% from the peak to the trough. Today hardly anyone remembers that recession. This recent recession was even milder with a decline of 1.8% in real personal income. By mid-1992, the Indiana economy should again be generating real income equal to that of the preceding peak period. Perhaps this recession will fade from memory as well.

### Have We Changed?

The question asked most frequently during this recession was, "Has the structure of our Indiana economy changed such that we don't feel recessions as much as we used to?"

In 1979, at the start of the great recession, 39.5% of Indiana's earnings (what people make because they work for themselves or someone else) came from manufacturing. This was well above the national figure of 24.9%. At that time, Indiana was second only to Michigan in its share of income derived from manufacturing.

In 1989, the (possible) start of our current cycle, Indiana derived 32.5% of its income from manufacturing compared with a national figure of 19.7%. We still rank second only to Michigan. Our decline was 10th in the nation with a change of seven percentage points (39.5% to 32.5%). Illinois was fifth, Ohio was eighth, and Michigan ninth in this change figure. Only two states saw an increase in the share of total earnings represented by manufacturing (New Mexico and South Dakota). Nationally, the decline in manufacturing's share was 5.2%.

What took up the slack? It varied by state. A big gainer was services, which includes personal and business services such as health care, barber shops, entertainment facilities, and janitorial services, as well as attorneys, accountants, and payroll services. The gain in services was 7.9 percentage points nationally but just 6.9 points in Indiana, rising from 12.5% of

**Table 1**
**Business Cycles in Indiana:**
**Period Covered and Percent Change in Real Personal Income**

| *Recession* | *Recovery* | *Expansion* |
|---|---|---|
| 1969:4 to 1970:4 (-2.30%) | 1970:4 to 1971:2 | 1971:2 to 1973:4 (+18.7%) |
| 1973:4 to 1975:2 (-7.00%) | 1975:2 to 1976:3 | 1976:3 to 1979:1 (+11.6%) |
| 1979:1 to 1983:1 (-9.30%) | 1983:1 to 1986:1 | 1986:1 to 1990:1 (+11.7%) |
| 1990:1 to 1991:2 (-1.80%) | 1991:2 to 1992:2 | 1992:2 to ???? |

*Note: Data for 1991:2 forward in this report are based on a forecast by the Center for Econometric Model Research at Indiana University. If the latest peak was 1989:1, then the expansion increased real personal income by 10.9%, the recession reduced real personal income by 1.1%, and the recovery stage would be ended in 1991:4.*

**Figure 1**
**Indiana Real Personal Income**

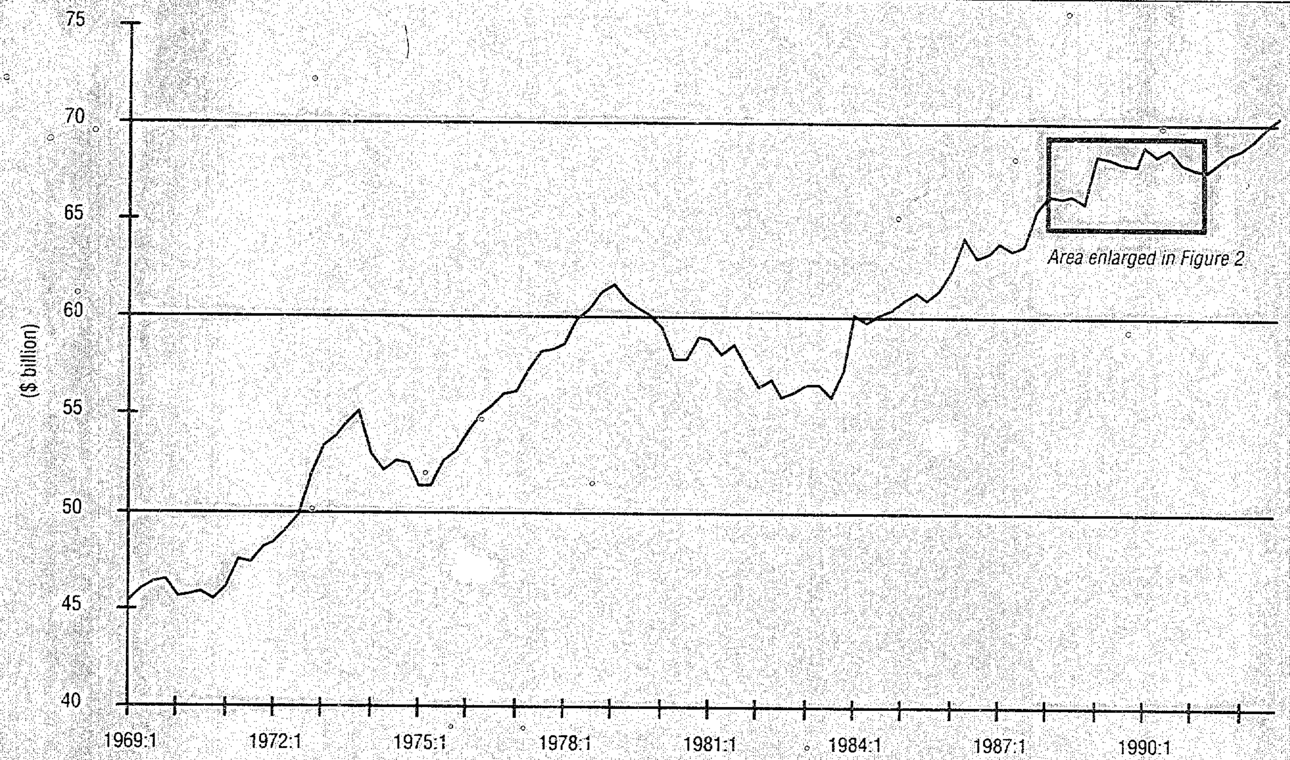
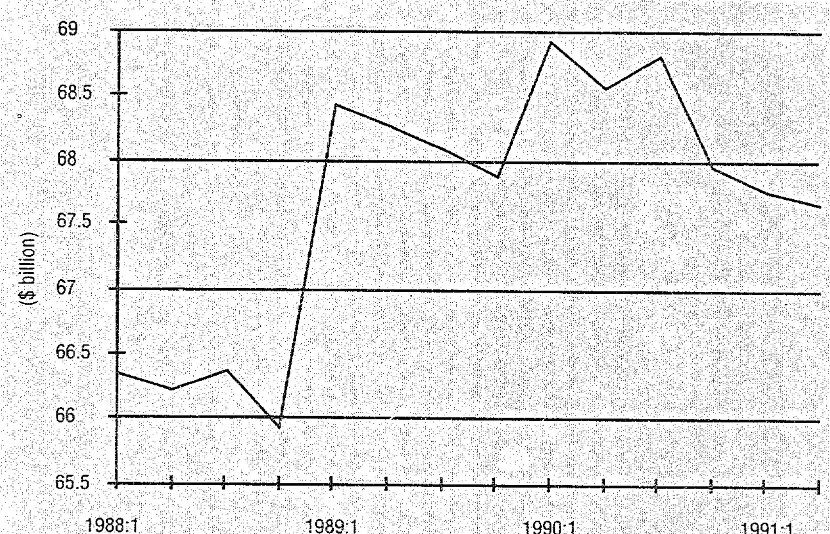



**Figure 2**
**Indiana Real Personal Income: A Closer Look**



earnings in 1979 to 19.4% in 1989. Our gain was 33rd in the nation.

To summarize, manufacturing lost 7% of the share of earnings in Indiana and services gained 6.9%. That's the shift. The rest of the economy has jostled about, but there have been no movements of this magnitude in other sectors. Are we better off? In real earnings, manufacturing declined by $3.5 billion between 1979 and 1989 (those are 1989 dollars). Services in Indiana gained $4.8 billion in the same period.

Contrary to frequent references to hamburger flipping, the decline in manufacturing was not taken up by retail trade in this state in the past decade. Retail as a percentage of total earnings has declined both in the nation and the state. In absolute terms, after adjustment for inflation, retail trade generated less earnings for Hoosiers in 1989 than in 1979.

**County Variations**

Although manufacturing may have declined in relative importance in the state, it gained a stronger hold in some counties where other sectors had greater declines. In 40 of our 92 counties, manufacturing earnings represented a greater share of total earnings in 1989 than in 1979. Clearly, much of the state is going against the national trend (see **Figure 4**).

The gainers from manufacturing were not just those counties with minor representations by industry. For example, in 1979, 45.1% of the earnings in Lawrence County originated in manufacturing; by 1989 that figure rose to 45.6%. A small gain, but clearly against the so-called third wave. In Kosciusko County, the share for manufacturing rose from 48.9% to 53%.

Back in 1979, 15 Indiana counties had 50% or more of their earnings generated by manufacturing employment. That number has dropped to 14 counties. Fayette County now leads the state with 64.1% of its earnings from manufacturing, hardly down from 65.6% in 1979. Formerly in first place, Howard County had shown only a modest decline from 66.5% to 63.2%.

The biggest declines in dependence on manufacturing came from just six counties. Lake County led the state with a drop of nearly 17 points from 52.2% for 11th place in the state in 1979 to 40th place in 1989 with 35.5%. The changes in Lake County, one of

**Figure 3**
**Indiana's Business Cycles: Real Personal Income (Peak = 1)**

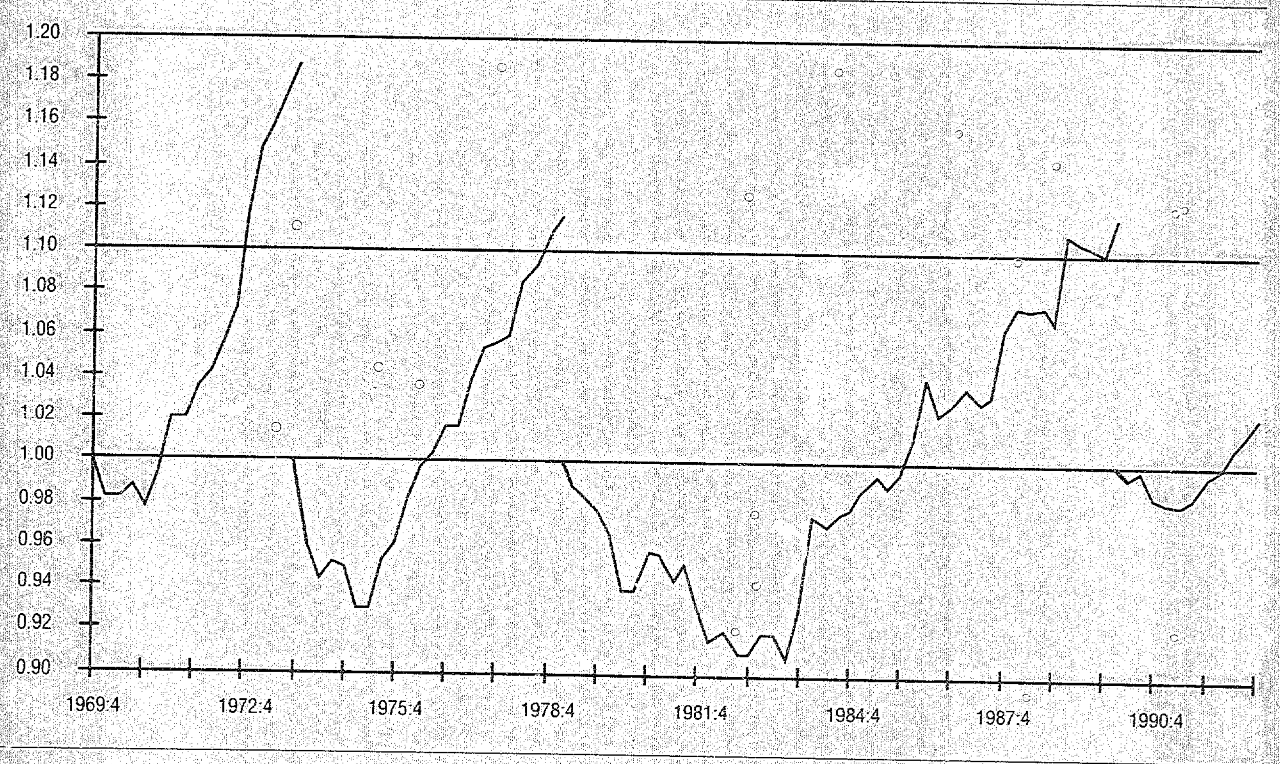
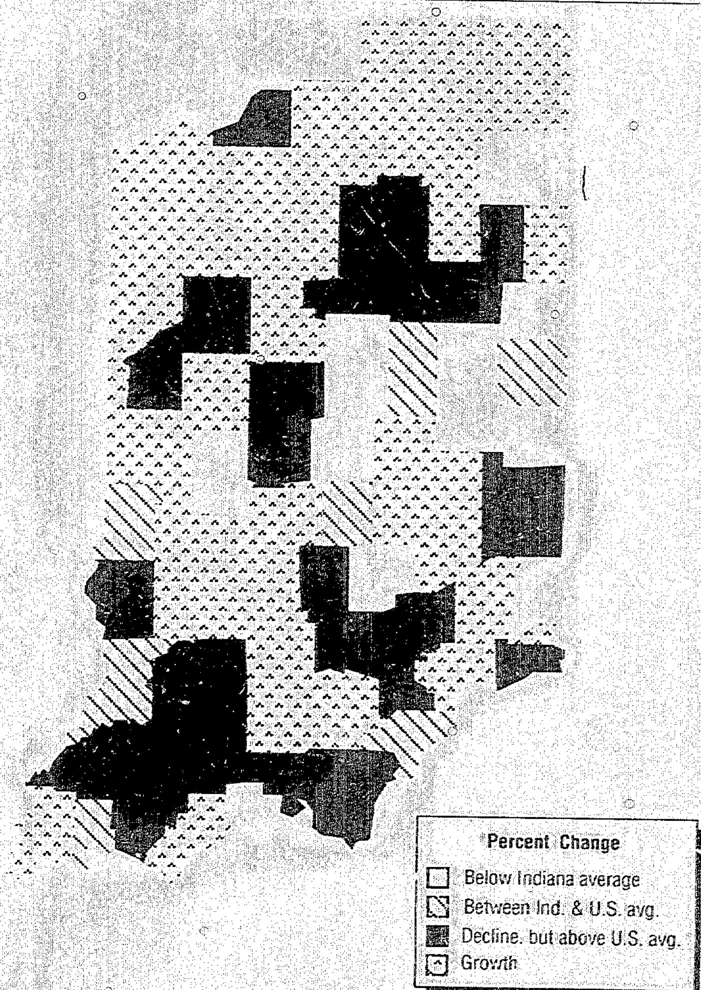


Figure 4
**Indiana Counties: Percent Change in Manufacturing Share of Total Earnings, 1979-1989**




our very largest counties, have driven the state's figures. Dearborn and Bartholomew counties dropped 12 points each, followed by Jay, Putnam, and Henry with more than 10-point declines.

On the upside, Pulaski County led the state, with nearly 37% of earnings in 1989 generated by manufacturing, rising over 15 percentage points from less than 21% in 1979. No other county had more than a 10-point increase.

In sum, Indiana goes into the next business expansion with less dependence on manufacturing, but still much more dependence than the nation. Our change has been less than that of the nation as a whole. Many of our counties are more dependent on manufacturing and many of our most dependent counties have changed little. A few significant counties have taken most of the decline in manufacturing, and the restructuring they have experienced has been costly and even painful to their residents, businesses, and government.

If our state's policy in the 1980s was to diversify away from manufacturing and change the structure of our economy, it does not seem to have been successful. In 71 counties we remain above the national average for dependence on manufacturing.

The marketplace may be telling us something worthwhile: that perhaps manufacturing is a successful activity when conducted in Indiana, and Indiana may be well served by pursuing manufacturing activity for its future. There is an alternative explanation: perhaps we are slow to change and these data reflect our laggard nature.

How we fare in the next recovery and expansion phases of the business cycle will depend on how competitive Indiana manufacturing is in the national and world markets. That forecast is unchanged from words that have appeared in these pages for three-quarters of a century.

# Indianapolis

**Robert Kirk**

*Professor of Economics, Indiana University-Purdue University at Indianapolis, with data assistance from the Statistical Services Division of the Indiana Department of Employment and Training Services*

The Indianapolis metropolitan area economy weathered the 1990-91 national recession very well, as evidenced by estimates of employment change in the **Table**. Employment in Indianapolis *increased* by 2.3% during the recession, which means that Indianapolis's *rate of growth* declined. This statistic is little consolation to the employers whose businesses failed, the government officials who anticipated more tax revenues, and the employees who were laid off. But it does suggest that the recession was much less severe compared to the recessions of 1974-75 and 1980-82 in the Midwest, and that Indianapolis did relatively well in the region.

Because of the mildness of the recession, I predict that the recovery will be moderate, and employment will continue to grow in the range of 2-2.5%. First, I will discuss some factors that could lead to a stronger recovery than predicted, and second, some that could lead to a weaker one.

**Productivity and Profitability**

The recovery should be considered within the broader context of the long-run slowdown in national economic growth as evidenced by slowing productivity growth and falling returns on equity in nonfinancial corporations. Usually in recoveries, labor productivity increases as firms increase production before hiring more employees.

Investment is based on expected profitability. Where will investment in new plants and equipment occur in the 1990s? Indianapolis and the Midwest are expected to be particularly attractive because of low costs relative to other regions. The Japanese are showing increased attention to the Midwest. The Midwest produces capital goods, which will be in demand in the 1990s. In the near term, as foreign economies' rates of growth slow, export demand may slow, but it is expected to be a source of strength as we move through the first half of the 1990s.

**Table**
**Employment Change by Metropolitan Area, July 1990-March 1991***
(Seasonally adjusted: July=100)

| *Metropolitan Area* | *Total Employment* | *Manufacturing Employment* |
|---|---|---|
| Indianapolis | 102.3 | 99.7 |
| Cincinnati | 100.6 | 99.3 |
| Columbus, OH | 100.1 | 99.8 |
| Chicago | 100.0 | 99.5 |
| Louisville | 99.8 | 98.0 |
| St. Louis | 99.4 | 94.7 |
| Detroit | 97.4 | 90.9 |

**July 1990—national business cycle peak; March 1991—most recent data available.*
*Source: Author's calculations based on establishment employment estimates provided by the states' Departments of Employment and Training Services.*

**Business and Health Services**

During the 1980s, the primary contributors to Indianapolis's employment growth were business and health services. To predict whether this growth will continue, we need to understand its sources. Although several factors have contributed, two will be highlighted.

One is informational imbalances between demand and supply. In health care, when we (the patient) are ill we see a physician (the supplier) because he or she has access to information in terms of diagnostics and treatment that we don't have. Similarly, in business services, if we have an engineering, marketing, accounting, advertising, or public relations problem, we seek someone with "expertise."

The second factor is that business services tend to locate in larger metropolitan areas where the market is sufficiently large to support these specialized services. By reaching thresholds of market size permitting economies of scale, Indianapolis firms can compete with distant producers. This process is called import substitution, and its continuation should support employment growth in these services.

Another factor that has benefited Indianapolis and should continue to do so relates to the weakening of attachment to place. Increasing numbers of people are now job-loose, freed from specific jobs or places by skills, career transitions, and new communication technologies. The implication is that people are placing increasing attention on urban amenities (or the absence of urban disamenities) as a location factor. Recognizing this shift, Indianapolis has placed emphasis on broadening its range of amenities.

**Concerns**

The 1990-91 national recession has been characterized as a "balance-sheet" recession because the economy used debt excessively in the 1980s, resulting in financial sector loan stringency in 1990-91. Commercial and residential real estate is a prime example both nationally and locally. Because the recession did not have the typical precursors to recession such as rising core inflation, rising interest rates, and rising levels of inventories relative to sales, the recovery will not be typical. Certain structural problems remain from the 1980s, and other changes are expected that could dampen the economy's recovery. Let's consider a few.

**Auto Industry**

Auto production is expected to pick up in the third quarter. Auto parts producers sell to two markets, the original equipment manufacturer (OEM) and the aftermarket. The OEM market is cyclical, so as an auto upturn develops, earnings should increase. On the other hand, the aftermarket is more stable. However, there have been recent changes that may have a negative impact on it. For example, extended warranties have resulted in car owners returning their cars to the dealers for parts repair. Also, higher quality parts in recent years may require fewer repairs. The "pent-up" demand for new cars may be tempered by the availability of "retired" fleet cars. To blunt this deterrent to new car sales, General Motors is attempting to get control of the used fleet-car business. The Indianapolis metropolitan area—with major presence by the Big 3 and OEM and aftermarket parts suppliers—has much at stake as the recovery materializes.

**Two Deficits**

The two deficits usually referred to are the federal government deficit and the balance of trade deficit. The latter is the one facing many state and local governments throughout the U.S. Because the federal government, when financing the deficit, is not squeezed or priced out of debt markets, it experiences less short-term pain than state and local governments that do not have the borrowing flexibility or capability of the federal government. State and local governments must eliminate the deficit or risk a lower credit rating with associated high borrowing costs. If taxes are increased, then disposable income and consumption will be affected. If expenditures are cut, households will incur the cost. In cases where borrowings increase, there may be upward pressure on interest rates. As taxes and fees are raised, firms will attempt to pass on these increased business costs, if market conditions allow, by raising their prices to maintain profit margins. The result is both a direct and indirect inflationary effect.

**Consumption**

In the 1980s the declining saving rate nationally spurred consumption. Consumption as a percent of GNP increased by two percentage points. I doubt if this trend will continue in the 1990s. In the previous decade, consumption was supported by favorable demographic forces. In the 1990s, the members of the baby boom generation (major contributors to the consumption boom of the 1980s) will be in the 35-44 age bracket and thinking about the adequacy of their own pensions, their parents' retirement needs, and their children's educational expenses. Some analysts think these life-cycle changes will increase the saving rate and reduce the consumption rate. For Indianapolis, the 1980s increase in consumption's share of GNP showed up, for example, in the form of new home furnishing businesses, specialized retailing establishments, and restaurants. The forecast is a slower rate of growth in retail employment than in the 1980s. A premium will be placed on good management skills to meet the challenge of a very competitive marketplace. If we are indeed successful in attracting new investment, then we can expect stronger retail growth.

**Defense Closings**

As of this writing, the outcome is unknown as to what extent Indianapolis might be affected by defense department closings. There will be short-term negatives with population loss, decline in residential and commercial property values, and decline in school enrollment and associated loss in federal aid to local schools. However, longer-term benefits may arise as new jobs are created from new businesses that could replace or exceed lost employment from closings. With some infrastructure in place, new uses can be housed at reduced costs to local government. Local government can obtain increased property tax revenue from previously exempt property. To reduce a potential negative impact, the reuse process should include public and private participants.

**New Accounting Procedures**

The recovery may be tempered as firms begin to introduce the new accounting treatment of retiree medical, life insurance, and other nonpension benefits as a form of deferred compensation. Though the new procedures are national in scope, there may be an impact on central Indiana firms. For example, industries with a high ratio of retirees to active employees will be significantly affected. Because the steel, auto, and other capital goods industries during the 1980s downsized by encouraging early retirement, they have a relatively high ratio of retirees to active employees. Central Indiana, Indiana, and the Midwest are specialized in these industries. Potential conflict between labor and management and a negative impact on labor productivity growth may arise as management seeks to reduce post-retirement benefits to existing employees. Also, management may have limited flexibility in altering benefits to existing employees unless specifically provided for in labor contracts.

## Conclusions

Given that Indianapolis experienced a slowing rate of growth during the recession, it should continue on its recent moderate growth path. Some regional analysts are heralding the first half of the 1990s as a strong period for the Midwest relative to other regions. I think there are reasons to be optimistic about Indianapolis's participation. However, I have also mentioned some changes in the early 1990s that could dampen employment growth. These changes, as well as unanticipated ones, provide an opportunity for entrepreneurs to develop new products and services.

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# Bloomington

**Richard L. Pfister**

*Professor Emeritus of Business Economics and Public Policy, Indiana University*

Employment data provide the most up-to-date indicators of business conditions in local economies. These data suggest that the Bloomington area began to experience a slowdown in economic activity in early 1990, a slowdown that lasted for the entire year. Although the unemployment rate remained quite low for all of 1990 (it ranged from 2.5 to 4.3 percent), 10 of the 12 months showed either no gain or losses in total establishment employment compared to the same month of 1989. The gains in the two months (January and December) were small—less than 1%.

A question of great interest is whether the local economy is showing signs of a revival. Establishment employment shows some encouraging signs—the first four months of 1991 show increases of slightly over 1% compared to the same months last year. These increases are small, and the period is short; nevertheless, the small increases represent a reversal and could be the start of a recovery.

Monthly manufacturing employment rose over year-ago levels in the first seven months of 1989 and then began a period in which 18 of the next 20 months showed declines as compared to the preceding years' figures. This 20-month period includes the first four months of 1991, each of which was lower than it was last year. All of these declines have been small; the April 1991 figure of 9,000 was only 300 lower than it was a year ago, but was 900 below the peak reached in December 1988.

Total nonmanufacturing employment was strong throughout 1989, with year-over-year monthly increases averaging just over 7%. The monthly increases over year-ago levels fell sharply in the first three months of 1990 and turned negative in May. The changes continued to be negative until January 1991, which began a string of four consecutive months with increases of nearly 2% over last year's figures. Thus the turnaround in total establishment employment in first quarter 1991 has been entirely the result of the nonmanufacturing sectors. Manufacturing employment is still showing small declines from year-ago levels.

Among the nonmanufacturing sectors, the major changes have occurred in retail trade and selected services. Employment in retail trade was either steady or up slightly during the first 11 months of 1989 as compared with 1988. In December 1989, however, a decline began that continued for 12 months before the monthly year-over-year changes turned positive again in December 1990. The last five months (December through April) have experienced increases averaging over 6% as compared with the same month one year ago. Services and miscellaneous employment exhibited strong growth until December 1990, when employment declined slightly from the previous December. The first four months of 1991 had virtually the same employment levels as in 1990. Thus service employment has not yet begun to turn around, although the declines seem to have stopped. The government sector is the largest in terms of employment. It had been showing small monthly gains in 1990 over 1989 levels until December, after which it has been nearly the same as the year before.

Another indicator available with a short lag is the initial unemployment insurance claims. The number of such claims in the Bloomington office began to increase over year-ago levels in April 1990, and continued to show increases until August. Then, after two months of lower initial claims, the number of claims shot up in October to six times the number of the year before. Large increases over the year earlier continued until April 1991, which showed a decline from April 1990. The figure for April 1991 was still substantially higher than the comparable months for 1989 and 1988, although it was substantially lower than March 1991 and April 1990. The April 1991 figure could indicate improvement in the local labor market, although one month cannot indicate a trend.

Another encouraging sign comes from construction contracts as reported by the F.W. Dodge Company. The value of building contracts let in the Bloomington Metropolitan Area was up by 23% in April 1991 over April 1990. Cumulative totals for the first four months of 1991 lag the same period of 1990 because first quarter 1991 was quite weak. The data on building contracts, like other data for April 1991, appear encouraging, but only time will tell if they are the start of a recovery.

There are indications that the national economy as well as the state economy may be in the early phases of a recovery. The indications for Bloomington are equally encouraging. For the last several years, the Bloomington economy has grown faster than the state economy. It is too soon to tell whether Bloomington can again grow more rapidly than the state average once the recovery is definitely underway. Most forecasters are expecting a rather slow recovery from the recession lows; it seems likely that Bloomington will follow a similar pace in its recovery. Manpower, Inc. recently released the results of its latest Employment Outlook Survey for the Bloomington labor market. The result was a slightly more optimistic outlook for increased employment in third quarter 1991 than was the case three months ago.

The largest employer in Bloomington—Indiana University—is not likely to contribute toward employment growth in the months ahead because of the budgetary crisis facing the state. At this stage, the best outcome that can be expected for the University and the local public schools is for them to continue employment at about the present level.

# Columbus

**Patrick M. Rooney**

*Assistant Professor, Department of Economics, IUPUI Columbus*

The local unemployment rate in Columbus has increased dramatically from 4% in fourth quarter 1990 to 6.7% in the first quarter of this year. However, much of that change is probably seasonal, given that the unemployment rate for first quarter 1990 was 6.4% (and the fact that these data were not seasonally adjusted). The total number of employed persons has remained fairly constant, averaging 29,290 in first quarter 1991 and 29,287 in first quarter 1990. The large increase in the unemployment rate is due to the number of people actively looking for work, which is up 69% from fourth quarter 1990 to 2,123, but up only 5% from a year ago. (Labor market data, as well as residential construction, real estate, and auto sales data, are depicted in **Table 1**.)

Unemployment insurance claims show that the labor market remains very soft. Continued claims in

**Table 1**
**Columbus Area Data**

| | *1Q 1991* | *4Q 1990* | *% Change 4Q-1Q* | *1Q 1990* | *% Change 1Q 90-91* |
|---|---|---|---|---|---|
| *Labor Market* | | | | | |
| Number Employed | 29,290 | 29,630 | -1.15 | 29,287 | 0.01 |
| Number Unemployed | 2,123 | 1,256 | 69.03 | 2,020 | 5.10 |
| Unemployment Rate | 6.7% | 4.0% | 67.50 | 6.4% | 4.69 |
| Cont'd Unemployment Insurance Claims | 7,750 | 3,036 | 155.27 | 4,372 | 77.26 |
| Initial Unemployment Insurance Claims | 1,612 | 1,027 | 56.96 | 441 | 265.53 |
| Help Wanted Advertising (1987 = 100) | 90 | 119 | -24.37 | 146 | -38.36 |
| *Residential Construction* | | | | | |
| Estimated Value of Permits Issued ($ million) | 1.23 | 1.04 | 18.27 | 1.81 | -32.04 |
| Number of Permits Issued | 16.0 | 11.7 | 36.75 | 16.3 | -1.84 |
| Average Value per Permit ($ million) | 0.08 | 0.09 | -11.11 | 0.11 | -27.27 |
| *Real Estate* | | | | | |
| Number of Homes Sold | 156 | 197 | -20.81 | 200 | -22.00 |
| Average Number of Days Listed | 115.64 | 135.87 | -14.89 | 139.58 | -17.15 |
| Average Market Price (sold) | $71,205.48 | $73,137.66 | -2.64 | $74,604.82 | -4.56 |
| *Auto Sales* | | | | | |
| New Car Sales | 304 | 385 | -21.04 | 401 | -24.19 |
| Used Car Sales | 1,988 | 1,605 | 23.86 | 1,938 | 2.58 |

the first quarter were up 77% from a year ago and 155% from fourth quarter 1990. Initial claims were up 266% from a year ago and 57% from fourth quarter 1990. Our local help wanted advertising index is 38% lower than it was a year ago and 24% lower than it was in the fourth quarter—local firms are not gearing up for large-scale hirings.

Residential building permits are down 32% from a year ago, but up 18% from the fourth quarter to $1.23 million per month in the first quarter of this year. This indicates that the local housing construction market collapsed at the end of last year but is now showing signs of recovery. This is further evidenced by the fact that building permits in March were up to $2.04 million from just under $1 million in February.

Although housing in Columbus remains very affordable, the median-priced home increased in value from $55,000 in fourth quarter 1989 to $61,000 in fourth quarter 1990 (the most recently available data). Consequently, our Housing Affordability Index (HAI) fell from 168 to 160. (Recall that the higher the index, the more affordable the median-priced home would be to the median-income family in that area.) Statewide, the median-priced home fell from $57,500 to $57,000, and the HAI increased from 157 to 167. Although Columbus remains more affordable than Indianapolis, which averaged $70,500 with an HAI of 142 in fourth quarter 1990, the median-priced home in Columbus is much higher than the rest of southern Indiana, which averaged $48,000 in fourth quarter 1990 with an HAI of 177.

The local real estate data suggest that fewer but more serious buyers and sellers have been exchanging properties lately. The average price of sold listings is over 4% lower than it was a year ago and 2.6% lower than in the fourth quarter. Likewise, the volume is 22% lower than a year ago. These factors suggest fewer buyers and a weaker market.

Conversely, the average number of days listed is over 17% lower than it was a year ago. This indicates that buyers and sellers are more serious—or that listing agreements are expiring and that the houses are selling on subsequent listings. This discrepancy is possible because the number of days on the market only reflects the number of days listed under the current listing, which will generate lower numbers than a more comprehensive measure of total number of days on the market.

Local car sales reflect a substitution from new cars to increased reliance on used cars. New car sales are down 24% from a year ago and 21% from fourth quarter 1990. Conversely, used car sales are up 2.6% from a year ago and almost 24% from the fourth quarter. Also, new car sales are down a noteworthy 40% from first quarter 1987, and used car sales are also off more than 20%.

Most of the local economic news has been dominated by losses and layoffs at Cummins, and, paradoxically, a Cummins-owned plant reopening. In first quarter 1991, Cummins reported a paper profit of $17.2 million, which was largely due to a one-time accounting change. They reported an operating loss of $34.3 million for the first quarter and a record $137 million loss last year, including a one-time "belt-tightening" charge of $65.3 million. Cummins has had approximately $300 million in losses from 1986-1990. In response to these losses, Cummins recently announced they were cutting their dividend from $.55 to $.05 per share, which will generate almost $7.5 million per quarter in savings.

Cummins currently has approximately 1,200 laid-off workers, but it expects to add 350 new jobs by the end of next year at the Walesboro plant. Although the union members had to accept more flexible work rules and a 43% wage cut (to $8 an hour), they felt this was better than allowing the jobs to be located out of the state.

The stock market has reacted favorably to cost-cutting measures enacted by Arvin. The stock price is up over 50%, from $14 per share in late 1990 to over $22 recently.

*Business Week* (May 20, 1991) released sales and profitability data for industrial firms overall, by industry, sub-industry, and firm. We can use this information to evaluate both the trends of the industrial economy and our local *Fortune* 500 firms.

While our local firms have under-performed the all-industrial average, Arvin has clearly outperformed the "auto parts" industry and the "auto" industry averages. Cummins, on the other hand, finds itself well below both the auto and "special machinery" industries (see **Table 2**).

**Table 2**
**Financial Data: Columbus Area Firms vs. National Averages**

| | *All* | *Special Machinery* | *Auto Parts* | *Arvin* | *Cummins* |
|---|---|---|---|---|---|
| % Change 1Q Sales from 1990 | 3.0% | -6.0% | -9.0% | -3.0% | -3.0% |
| % Change 1Q Profits from 1990 | -9.0% | -79.0% | n.m. | n.m. | n.m. |
| Return on Equity | 11.5% | 8.5% | 0.8% | 5.7% | -39.6% |
| 5-year Growth Earnings/Share | 10.0% | 40.0% | -3.0% | -19.0% | n.a. |
| 12 Months' Earnings/Share | $2.14 | $2.24 | $0.17 | $1.18 | -$14.92 |

*Note: n.m. = not meaningful; n.a. = not available*

## Forecast

The local economy is subject to the seemingly capricious vicissitudes of the international and national business cycles. Because the core of the Columbus economy has been durable goods manufacturing, our local economic fate has reflected the rising and falling tides of the nation, only more so. During most of the recovery, our local unemployment rate has been less than or equal to that of the nation. During the recession, the local unemployment rate exceeded the national average.

We can expect to see the local unemployment rate continue to exceed the overall economy's average for the next eight to twelve months, since durable goods orders tend to lag economic recoveries, and employment tends to lag the overall economy. Immediately following a recession, employers are somewhat chastised and will try to make labor adjustments with increased hours rather than increased employment—to the extent that it is feasible.

The local labor market seems to have stabilized, despite the rapid increase in the number of unemployed individuals. I would hypothesize that much of this increase is attributable to households in which one earner has recently been laid off or is at risk of being laid off. Subsequently, other individuals in the family have gone into the labor market to try to solidify household income. As workers are hired at new plants and recalled at existing plants, especially Cummins, local employment will rise, and the number considered unemployed will fall even faster.

The trucking industry had slowed even before the recession began. As demand grows and the trucking industry recovers, there should be pent-up demand that will facilitate Cummins' recovery. If Cummins' cost-cutting efforts are successful, then the local economy could experience significantly higher than average growth.

While Arvin is poised for the recovery, the auto industry is in a world of hurt. A May survey found that only 6.5% of consumers "planned" to buy a new auto in the next six months, compared to 7.7% last month. Subsequently, we should not expect to see a burst of hiring at Arvin.

The housing industry is showing signs of recovery; nationwide, housing is returning to its pre-war levels. Unfortunately those levels were not great. Additionally, some households are encouraged to buy now, while housing prices are moderating and mortgage interest rates are quite low. Most households, however, must wait for their employment and income conditions to stabilize before even considering buying a new house.

Locally, we can expect the real estate market to improve, especially if employment grows. The fact that residential building permits more than doubled in March from February augurs well for the local market. In addition, one local broker said that pending transactions in April were on a record-breaking pace, and that we may have seen the "crest of the wave" in the local real estate market, with momentum building.

Looking to the longer term, perhaps the biggest variable affecting our future growth is the state of our educational systems. Both American and Japanese CEOs have indicated that key variables in locational decisions are the quality of the existing labor force and the quality of the educational system. Unfortunately, educational support has become a political "hot potato," with all sides supporting "better education," yet none willing to take the heat to raise funding to adequate levels.

More money is not the sole solution, but it is clearly part of the answer. Indiana ranks 34th in the nation in expenditures per pupil and 46th in educational attainment. The national average of those over 25 years of age with four or more years of education beyond high school is 31% greater than that of Indiana. Southern Indiana falls significantly below that of the rest of the state. Since most of the research suggests that American workers will need higher skill levels if they hope to compete with workers around the world, clearly the long-range forecast is even more pessimistic than the short-term outlook.

# Evansville

**Maurice Tsai**

*Professor of Economics, University of Evansville*

In 1990, the Evansville economy grew at 1.7%, lower than the earlier estimate due to the onset of a national recession in the fourth quarter. The Gulf War and the fear of a possible earthquake in Southwestern Indiana injected uncertainty into the area economy in the second half of the year. Consequently, the local industrial production became sluggish and activities in construction, transportation, and finance slowed down. Trade and service sectors, however, topped their earlier records by growing at 5.8% for the entire year. Local employment still kept its momentum of growth, but at a slower rate of 1.5% compared to a 3% rate in 1988 and 1989. The impacts of national recession were felt by the area economy more in the first half of 1991 than in 1990.

First quarter 1991 began with weakness in industrial production, construction, transportation, and employment. The industrial production index fell by 5% from fourth quarter 1990; the construction index fell by 11%, even after correcting for seasonal factors. The transportation index remained the same as in fourth quarter 1990, which was below the third quarter by 2.3%. Area employment declined by 3,000 from fourth quarter 1990 to first quarter 1991. The exception was trade and service sectors. Trade employment declined by 500 from December 1990 to March 1991, but service employment sustained and even rose up to April, when the last statistics are available. A 10% decline in construction employment was noticed in first quarter 1991.

The impacts of the current recession in the remainder of 1991 are as yet uncertain. Consumption expenditures are projected to remain at a constant real level throughout 1991; consumer spending on durables depends on local banks' willingness and ability to finance these purchases. Fortunately, the area financial institutions have been sound and healthy, so this will not be a problem as long as local banks are willing to make loans available. The worry will be consumers' ability to borrow, since the consumers' debt has been unusually high at present. Residential and business construction showed a sign of revival in the second quarter due to low interest rates. The financial sector, which experienced low activities in the past three years, is expected to expand in 1991.

During 1991, industrial production will be below the 1990 level, with a possible exception in the last quarter, when the national economy enters its recovery phase. Wholesale and retail trade will be sliding down for the first three quarters and rising in the fourth quarter; the 1991 average is expected to be 3% above the 1990 level. The service sector will remain strong throughout the whole year. The transportation sector will resume its slow upward move in the second half of 1991. Area employment is projected to rise during 1991 by 1%.

Although there are uncertainties lying ahead, the Evansville economy is expected to decline by 0.9% in 1991 in terms of Evansville Area Business Index (see the **Table**), assuming the recession ends in the third quarter. If the recession ends in the second quarter, the area economy will see less decline in its overall performance. Whenever industrial production begins to regain its upward trend, the area economy will be lifted and on its way to further growth.

**Table**
**Evansville Area Business Index (1977 = 100)**

| | *Industrial Production* | *Trade & Services* | *Construction* | *Transportation* | *Finance* | *Employment* | *Composite Index* |
|---|---|---|---|---|---|---|---|
| *Quarterly Index* | | | | | | | |
| 1Q 1990 | 120.56 | 128.97 | 118.30 | 104.90 | 106.38 | 116.99 | 121.43 |
| 2Q 1990 | 125.62 | 128.29 | 116.52 | 101.08 | 106.13 | 117.20 | 122.47 |
| 3Q 1990 | 126.17 | 127.15 | 112.48 | 101.95 | 106.87 | 118.62 | 122.14 |
| 4Q 1990 | 123.52 | 130.87 | 103.16 | 99.53 | 107.43 | 120.60 | 121.86 |
| 1Q 1991 | 117.18 | 133.77 | 91.44 | 99.16 | 107.75 | 119.06 | 119.09 |
| *Annual Index* | | | | | | | |
| 1987 | 120.57 | 115.24 | 131.46 | 98.04 | 109.98 | 109.52 | 116.58 |
| 1988 | 123.76 | 119.71 | 115.54 | 98.58 | 108.38 | 112.67 | 118.22 |
| 1989 | 123.64 | 121.78 | 118.76 | 102.13 | 107.60 | 116.55 | 119.92 |
| 1990 | 123.97 | 128.82 | 112.62 | 101.86 | 106.70 | 118.35 | 121.98 |
| 1991* | 119.50 | 132.70 | 101.25 | 100.60 | 108.12 | 119.60 | 120.90 |
| *Annual Growth Rate (%)* | | | | | | | |
| 1987 | 3.9 | 4.1 | -24.6 | -1.4 | 2.1 | 2.0 | -0.5 |
| 1988 | 2.6 | 3.9 | -12.1 | 0.6 | -1.5 | 2.9 | 1.4 |
| 1989 | 0.0 | 1.7 | 2.8 | 3.6 | -0.7 | 3.4 | 1.4 |
| 1990 | 0.3 | 5.8 | -5.2 | -0.3 | -0.8 | 1.5 | 1.7 |
| 1991* | -3.6 | 3.0 | -10.1 | -1.2 | 1.3 | 1.1 | -0.9 |

**Forecast. Indices for 1989, 1990 have been revised.*
*Source: School of Business Administration, University of Evansville*

# Fort Wayne

**Thomas L. Guthrie**

*Associate Professor of Business and Economics and Director, Community Research Institute, Indiana University-Purdue University at Fort Wayne*

There is increasing evidence as this column is being written that the national recession has ended or will end shortly. Practically every economic barometer has had at least a modest uptick in activity; therefore, the pertinent economic question of the day nationally is not when the recession will end, but what will be the shape of the recovery? The logical extension of that for our purposes is: What will be the shape of the recovery, if any, in the Fort Wayne area economy?

The **Figure** shows the comparative performance of nonagricultural payroll employment in the Fort Wayne area economy before and after the three previous recessions: 1973-1975, 1980, and 1981-1982. The relative performance of the area economy to date in the current recession is also shown. To do this, I assumed that (1) the current national recession will end in July, and (2) area employment will fall an additional 1%—2,000 jobs—between April and July.

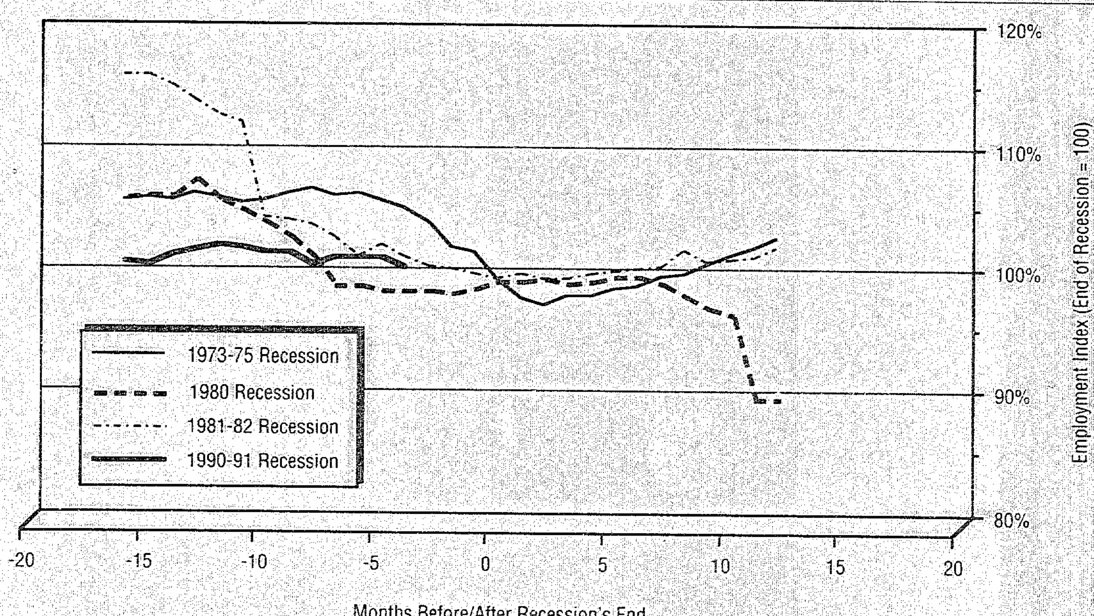
At least two observations stand out. First, the downturn in the Fort Wayne area economy during the current recession is minuscule compared to the three previous downturns. It appears almost as a non-event—except of course to the 3,500 who have already lost jobs and the projected additional 2,000 who will lose jobs.

The second observation is that the recovery path in area employment for two of the three previous recessions was similar. Recovery after the 1980 recession was aborted by the start in July 1981 of the 1981-82 recession. (As shown, the local economy began declining again in February 1981.)

One year after the 1973-75 and 1981-82 recessions ended, area employment recovered 3.4% and 2.6%, respectively. If recovery from the current recession were to track somewhere in between, employment would grow between 5,200 and 6,800 between July 1991 and July 1992.

Although there is casual evidence of a surplus of commercial office space in the Fort Wayne area, still there should be a healthy upturn in construction

**Figure**
**Comparative Performance of the Fort Wayne Area Economy During/After Recent Recessions**




*The Fort Wayne area consists of Allen, DeKalb, and Whitley counties.*
*Source: Indiana Department of Employment*

activity, given the combination of an expanding economy and relatively low nominal interest rates.

In conclusion, area employment is forecast to grow between 2 and 2.5%—4,000 to 5,000 jobs—between July 1991 and July 1992, with the distribution of the expansion evenly spread over the year.

The primary reservation with respect to the forecast has to do with the export portion of area economic activity. Data do not exist at this time, but it is logical to assume that one factor mitigating the downturn in the area economy was increased exports. However, with the trade-weighted value of the dollar having risen roughly 10% and the European economies weakening, one wonders how much of a drag exports will be on the area's economic recovery.

I concur with the forecast for the national economy contained herein that has the economy recovering the first year at roughly half the rate typically experienced. As a result of manufacturing's tight-fisted control of inventories, inventory liquidation in the current recession has been modest compared to previous recessions. Likewise, inventory accumulation during the recovery is likely to be modest.

## Lafayette

**Gerald J. Lynch**

*Associate Professor of Economics, Purdue University*

Lafayette was carried along with the rest of the nation as the recession made a visit to the local economy. In March, unemployment rates rose to more than 3% for the first time in three years. Recently local unemployment rates have fallen, but it is too early to tell if that is a long-term trend. The economy has been bolstered by the news that the Caterpillar plant, which previously has been a manufacturer only, is going to become more of a self-contained business unit. This means that some 125 white-collar jobs will move from Peoria to Lafayette. The actual number of jobs created will be higher as support staff is hired to supplement the move.

A less encouraging note locally is the impact of the budget impasse. Even when the budget negotiations are completed, it does not appear that the employees of Purdue will receive a very large raise, if they receive a raise at all. What impact will that have on the economy? First, Purdue's influence in the local economy is significant. Not including the graduate teaching assistants, Purdue provides roughly 12% of the total jobs in the Lafayette SMA and just under 14% of the total spending power. The Lafayette economy obviously is dependent upon the power of Purdue employees to spend. Fortunately, that power has grown; in the past three years, the average raises at Purdue have out-paced the national rate of inflation by 2.8%, 3.0%, and 2.5%, respectively, for an average of 2.8%. That means that Purdue has been injecting real purchasing power into the economy. If there are no raises this year, and inflation runs about 4% as projected, then rather than adding real purchasing power to the community, Purdue will serve as a drag. Even if employment does not decrease, there is still not going to be the source of growth coming from West Lafayette that there has been in the past.

Thus the impact of this would not be seen in decreased employment at the West Lafayette campus, but perhaps in decreased employment or income for those people who depend on the purchasing power of the campus. In addition, some of the local manufacturing will not be able to escape the effects of the national downturn—automobiles and construction related employment will be affected, but, like the rest of the nation, should see a recovery by the summer. The impact of Purdue, however, could postpone the recovery of the Lafayette economy beyond that of the nation.

## Richmond/Connersville/ New Castle

**Ashton I. Veramallay**

*Director, Center for Economic Education, Indiana University East*

The current recession is having its adverse effects on Richmond-Connersville-New Castle (RCNC). Decreased economic activity, particularly in the manufacturing sector, results in layoffs and hence a higher unemployment rate. This phenomenon is expected to continue for another quarter until there is an economic upturn. The unemployment rate in RCNC will then gradually move into single-digit range.

The lackluster economic performance is partly attributable to consumer spending. Despite the euphoria over the Persian Gulf War, consumers are still wary about the state of the national economy. Having been burned by previous recessions, they are not buying big-ticket items on the same scale as in the expansionary phases. In practice, consumers are preempting the effectiveness of monetary and fiscal policy. Talking about fiscal policy, do we really have one? What we are witnessing is the height of fiscal incompetency. It is a clear abrogation of constitutional responsibilities, and we the people deserve better accountability of political stewardship. To ensure it, we must actively participate in the political process and deliberately focus on the real problems facing the economy.

Related to consumer spending is retail trade. It is likely to follow seasonal patterns, especially in fast food establishments, grocery stores, consumer malls, health care, financial services, and recreational amenities which, in turn, can improve the employment outlook. The retail sector in RCNC accounts for at least 30% of gross local product, and any employment gain is always good news. This sector typically fares better during a recession.

The traditional industries, automobile and housing, will play a secondary role to the export sector in pulling the national economy out of recession. Local firms with an export market are likely to do an above-average performance in the coming quarters. A weak dollar not only makes American goods cheaper and attractive to foreigners, but also helps narrow our trade deficit.

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# South Bend/Mishawaka-Elkhart/Goshen

**John E. Peck**

*Professor of Economics and Director, Bureau of Business and Economic Research, Indiana University at South Bend*

The mid-year assessment of the economic condition of the South Bend/Mishawaka and Elkhart/Goshen communities is based on an analysis of the latest available economic indicators for the area tracked by Indiana University at South Bend's Bureau of Business and Economic Research. A look at the indicators suggests that both communities continue to feel the effects of the recession that appeared in full force locally in the fall of 1990, and was the basis for the 1991 area outlook in the Winter issue of the *IBR*.

The accompanying **Table** summarizes the various indicators of local economic activity compiled by the BBER. These figures are seasonally adjusted and, with the exception of the unemployment rates and real estate data, are index numbers expressed as a percentage of 1986 base year values. It is noted that comparative indicators along with percentage changes are given for January and February 1991, the latest months for which the full range of data are available as the midyear outlook is prepared. To highlight longer-term trends, the same figures are also provided for February 1990.

### South Bend/Mishawaka

Though not nearly as severe a drop in employment indicators occurred in February as in January, it is nevertheless clear that the 1990-91 recession continued to take its toll on area workers in the second month of the year. In South Bend/Mishawaka, this toll showed up in the manufacturing employment index, which was off nearly a full percentage point from the January figure, and down almost 7% from February 1990. The transportation equipment sector, which is linked most directly with automobile production, saw the largest decline—a drop of some 100 workers.

Several other South Bend/Mishawaka indicators showed modest improvement in the January to February 1991 comparison. Natural gas sales and seasonally adjusted car and truck registrations were among these. The largest gains came in housing construction data, where the number of housing permits issued, as well as the value of those permits, more than doubled. It should be noted, however, that these latter indicators are quite volatile on a month-to-month basis, so it is risky to draw conclusions with respect to emerging trends on such short-term fluctuations. It is also noteworthy that whereas these nonemployment indices rose in February, the year-to-year performance remains depressed in virtually all categories.

### Elkhart/Goshen

As in South Bend/Mishawaka, the Elkhart/Goshen employment indicators declined in February. In that community, the February nonmanufacturing employment index led the way with a full 1.1% decrease from the previous month. Wholesale and retail trade as well as educational services each recorded 100 worker declines in February. In absolute terms, manufacturing employment rose during the month; however, after seasonal adjustment, the indicator fell by a fraction of 1 percent.

Remaining Elkhart/Goshen indicators were mixed when compared to January 1991. Energy sales rose, car registrations were up modestly, and the average value of housing permits increased. However, new truck registrations dropped 14.5%, and housing indicators—both new and resale housing—gave noticeably negative readings. As with its St. Joseph

**Table**
**Economic Indicators: South Bend/Mishawaka-Elkhart/Goshen**

| | South Bend/Mishawaka | | | | | Elkhart/Goshen | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Change | From | | | | % Change | From |
| | February 1991 | January 1991 | February 1990 | January 1991 | February 1990 | February 1991 | January 1991 | February 1990 | January 1991 | February 1990 |
| *Employment Indicators* | | | | | | | | | | |
| Nonagricultural employment[1] | 113.4 | 114.3 | 113.8 | -0.8% | -0.4% | 111.5 | 112.0 | 117.8 | -0.4% | -5.3% |
| Manufacturing Employment | 88.7 | 89.5 | 95.3 | -0.9% | -6.9% | 102.5 | 102.6 | 110.2 | -0.1% | -7.0% |
| Nonmanufacturing Employment | 121.2 | 121.1 | 119.5 | 0.1% | 1.4% | 122.2 | 123.5 | 127.2 | -1.1% | -3.9% |
| Unemployment Rate | 6.3% | 6.3% | 4.6% | | | 8.4% | 7.9% | 4.1% | | |
| Help Wanted Advertising[2] | 65.3 | 67.5 | 105.5 | -3.3% | -38.1% | 47.3 | 53.4 | 87.4 | -11.4% | -45.9% |
| *Utilities*[3] | | | | | | | | | | |
| Industrial Electricity Sales | 94.2 | 99.9 | 105.5 | -5.7% | -10.7% | 102.4 | 102.8 | 110.7 | -0.4% | -7.5% |
| Commercial Gas Sales | 100.1 | 96.4 | 106.0 | 3.8% | -5.6% | 97.6 | 94.7 | 104.7 | 3.1% | -6.8% |
| Industrial Gas Sales | 65.8 | 64.7 | 82.1 | 1.7% | -19.9% | 58.8 | 55.3 | 65.4 | 6.3% | -10.1% |
| *Car and Truck Registrations*[1] | | | | | | | | | | |
| New Passenger Cars | 53.7 | 51.9 | 59.9 | 3.5% | -10.4% | 42.2 | 41.9 | 77.8 | 0.7% | -45.8% |
| New Trucks | 61.9 | 58.0 | 75.5 | 6.7% | -18.0% | 48.8 | 57.1 | 84.7 | -14.5% | -42.4% |
| *Housing Construction Data*[4] | | | | | | | | | | |
| Estimated Value of Permits | 108.2 | 51.1 | 118.2 | 111.7% | -8.5% | 146.7 | 151.5 | 230.6 | -3.2% | -36.4% |
| Number of Permits Issued | 95.4 | 46.6 | 96.2 | 104.7% | -0.8% | 80.8 | 88.6 | 166.7 | -8.8% | -51.5% |
| Average Value per Permit | 112.8 | 94.8 | 106.8 | 19.0% | 5.6% | 177.9 | 169.2 | 137.9 | 5.1% | 29.0% |
| *Residential Real Estate Data* | | | | | | | | | | |
| Number of Active Listings | 1,268 | 1,231 | 1,060 | 3.0% | 19.6% | 1,781 | 1,733 | 1,386 | 2.8% | 28.5% |
| Average Days Listed | 96 | 86 | 68 | 11.6% | 41.2% | 92 | 85 | 70 | 8.2% | 31.4% |
| Average Market Price | $70,797 | $72,508 | $67,384 | -2.4% | 5.1% | $68,733 | $69,975 | $66,663 | -1.8% | 3.1% |
| % of Sale to List Price | 95 | 96 | 95 | -1.0% | 0.0% | 95 | 95 | 96 | 0.0% | -0.1% |

*All figures except for Unemployment Rate and Residential Real Estate Data are seasonally adjusted index numbers with base year 1986 = 100.*
[1] *St. Joseph and Elkhart Counties*
[2] *From South Bend* Tribune *and Elkhart* Truth.
[3] *Electricity Sales are South Bend and Elkhart. Gas Sales are St. Joseph and Elkhart Counties.*
[4] *St. Joseph County, excluding cities of South Bend, Mishawaka, Osceola, Walkerton, and New Carlisle. Elkhart County, excluding cities of Elkhart, Goshen, Nappanee, and Millersburg.*

County neighbor, Elkhart County year-to-year comparisons were significantly depressed across the board.

### Outlook

It continues to be our feeling that the recession will bottom out in the South Bend/Mishawaka and Elkhart/Goshen areas during the summer of 1991. Consecutive increases in the Department of Commerce's leading indicators, and accommodating monetary policy on the part of the Federal Reserve, tend to support this view for the nation as a whole. The dominance in St. Joseph County of industries (e.g., educational and health services industries) less sensitive to the business cycle than heavy manufacturing, and the tendency in Elkhart County for the recreational vehicle industry to lead the cycle, are local factors that help bolster this optimism.

# Terre Haute

**Marvin Fischbaum**

*Professor of Economics, Indiana State University*

Six months ago it looked as if Terre Haute would weather the recession relatively unscathed. As of two months ago, signs still pointed to smooth sailing. It now appears that although the recession was slow to arrive in the area, and although its impact has not been severe, recovery may be gradual.

Unemployment estimates for the Terre Haute MSA released over the past three months have risen more than seasonally. During 1990 the unemployment rate generally tended downward, falling to its minimum level of 3.7% in December. The usual seasonal pattern in Terre Haute is for unemployment to spurt upward in January to its highest level of the year, and to remain high for the remainder of the winter quarter. The increase in the unemployment rate to 5.5% in January somewhat exceeded the normal seasonal pattern. February saw a further increase to 5.7%, and March a jump to 6.3%. One has to go back to February 1989 to match the March rate of unemployment, or to find a lower level of employment.

That March unemployment level combined a 5.4% rate in Vigo County with a 10.1% rate in Clay County. The unemployment rate in Clay County had been 3.6% as recently as November. Much of that spurt can be traced to layoffs at Great Dane, but that builder of truck trailers recently announced a pickup in sales, the rehiring of workers, and the startup of a second shift.

Preliminary estimates of establishment employment for April point to at least a seasonal improvement. Jobs increased by 800, or 1.3%, over the previous month, and by 600, or 1.0%, over the level of April 1990. Employment gains were concentrated in the government services sector. On a month-to-month basis there were scattered gains elsewhere. On a year-to-year basis scattered gains were offset by small losses in construction and transportation.

For the city of Terre Haute, and the rest of Vigo County, a rapid further rebound in employment levels is not likely, as prospective losses are more palpable than prospective gains. Still ahead lies much of the effect of the gradual and civically responsible phase-out of operations at the downtown plant of Pillsbury, as well as the stealthy shutdown of Terre Haute Coke and Carbon. Orders for plastic film are weak, and scattered layoffs among firms in that industry might become more general. Retail sales, particularly of automobiles, have also been weak, reflecting existing softness in the economy, while presaging a possible source of further cutbacks. On the other hand, offsetting positive developments regarding industrial or commercial expansion have been largely absent. Plasma Fusion remains interested in Terre Haute, but progress towards a deal has been slow. The plan of Tri-Industries to add 25 jobs this year stands out as an isolated bit of good news.

Construction activity remains strong, but a gradual decline may set in. Building permits issued in the 12 months ending March 1991 held up well. The value of residential construction fell 9.5%, but nonresidential construction rose 303%. Perusal of permits issued in April and May discloses no dramatic change in the pace of building activity. A permit for the expansion at Bemis, issued in November, and for a new middle school, issued in May, dominate the value of nonresidential construction. However, little in the way of industrial or commercial construction is likely to commence in the second half of the year. Maintenance of the current pace of building activity will depend on actions taken in Indianapolis. Expectations are that construction of a new state prison in Sullivan County will be funded, but that Indiana State University will probably be denied additional bonding authority.

Real estate activity, as in much of the Midwest, has been a bright spot locally. For ten years in Terre Haute, buyers had the upper hand as an initial overhang of 2,000 unsold homes had worked down in rather gradual fashion. This spring, those wishing to sell and those wishing to buy came close to being in balance, at least for trade-up as opposed to starter homes. One sign of this was a marked increase in homes "for sale by owner." Realtors still listed 1,339 homes for sale at the end of the first quarter, but of these, approximately 180 homes were listed at $60,000 or higher. The median sales price remained at $50,000. In the first quarter 252 homes were sold, up 11% from the corresponding period in 1990, and the pace seems to have quickened in the spring.

Terre Haute did not, after all, escape the recession of 1990-91. But the impact to date has been mild, and this contrasts markedly with the severe hardships the region faced from economic dislocations in the 1980s.

## Northwest Indiana

**Leslie P. Singer**

*Professor of Economics, Indiana University Northwest*

Our 1990-91 forecast predicted a mild recession terminating in about the third quarter of the current year. That appears to be about correct. We have slightly overestimated the level of steel employment, partly because of some structural changes that have taken place at Inland Steel. The current level of steel employment of just under 33,000, along with a slightly lower work week, is likely to continue for most of 1991, except for little seasonal swings. Autos are still weak and the replacement cycle for automobiles will not kick in until about mid or late 1992. The demand for structural steel will also rise toward the end of 1991, but that market has increasingly less influence on Northwest Indiana steel output.

In the longer run, the prospects for steel are less attractive than they were just a few years ago. The

**Table 1**
**Seasonally Adjusted Data for Northwest Indiana (Employment in 000s, Forecast 1991-92)**

| | *1Q 1990* | *1Q 1991* | *2Q 1991* | *3Q 1991* | *4Q 1991* | *1Q 1992* | *2Q 1992* | *3Q 1992* | *4Q 1992* | *Ave. Annual Growth 1991* | *Ave. Annual Growth 1992* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Employment | 241.8 | 244.0 | 244.6 | 245.1 | 245.7 | 246.9 | 248.0 | 249.1 | 250.8 | 1.49% | 1.63% |
| Nonmanufacturing | 185.0 | 189.4 | 190.5 | 191.4 | 192.3 | 192.7 | 192.6 | 194.3 | 196.2 | 1.60% | 2.05% |
| Manufacturing | 56.8 | 54.6 | 54.1 | 53.7 | 53.4 | 54.2 | 55.4 | 54.8 | 54.6 | -0.04% | 0.84% |
| Steel | 34.9 | 32.7 | 32.9 | 32.7 | 32.9 | 33.8 | 33.6 | 34.1 | 34.4 | -0.09% | 0.07% |
| Non-Steel | 21.9 | 21.9 | 21.2 | 21.0 | 20.5 | 20.4 | 21.8 | 20.7 | 20.2 | 0.00% | 0.49% |
| Non-Goods Producing | 172.7 | 174.8 | 175.7 | 176.3 | 177.5 | 175.1 | 176.9 | 177.3 | 178.6 | 1.66% | 1.99% |
| Trade/Finance/Health | 68.9 | 66.2 | 65.1 | 67.3 | 70.0 | 68.0 | 68.6 | 68.9 | 69.4 | 1.69% | 1.99% |
| Government/Education | 33.7 | 33.7 | 34.0 | 34.1 | 33.9 | 33.7 | 33.9 | 33.7 | 34.0 | 0.89% | 0.85% |
| Miscellaneous/Services | 55.9 | 58.4 | 58.9 | 57.3 | 57.8 | 57.6 | 58.0 | 58.9 | 58.6 | 1.49% | 1.59% |
| Transportation/Utilities | 14.2 | 16.5 | 17.7 | 17.6 | 15.8 | 15.8 | 16.4 | 15.8 | 16.6 | -4.43% | 5.06% |
| Construction | 12.3 | 14.6 | 14.8 | 15.1 | 14.8 | 17.6 | 15.7 | 17.0 | 17.6 | --- | --- |
| *Annualized Payroll ($ billion)* | | | | | | | | | | | |
| Manufacturing | 2.430 | 2.014 | 2.086 | 2.106 | 2.108 | 2.136 | 2.215 | 2.239 | 2.252 | 4.69% | 5.45% |
| Steel | 1.327 | 1.145 | 1.271 | 1.251 | 1.213 | 1.232 | 1.251 | 1.273 | 1.297 | 4.83% | 5.32% |
| Non-Steel | 0.679 | 0.668 | 0.691 | 0.701 | 0.709 | 0.719 | 0.749 | 0.752 | 0.756 | 4.93% | 5.18% |
| *Manufacturing Average Weekly Hours* | | | | | | | | | | | |
| Total Manufacturing | 43.9 | 40.6 | 39.3 | 39.1 | 39.1 | 41.8 | 41.9 | 42.3 | 42.1 | --- | --- |
| Steel | 45.5 | 39.1 | 38.8 | 39.1 | 39.5 | 39.9 | 40.8 | 41.2 | 41.3 | --- | --- |

principal problem is the weakening financial position of steel and difficulties with reinvigorating the local labor force. Aging steel employees are being replaced by a less skilled junior force at a time when the demand for technically skilled personnel is rising. Steel companies have experienced gradually declining operating incomes per ton of steel since 1988, when net unadjusted income per ton was 44 dollars. In 1991 there was a loss of 52 dollars per ton and the situation has not yet stabilized. Automobile companies, which have their own price pressures to contend with, in turn put pressure on steel companies to cut prices—as much as 3 to 4 percent. With steel prices steady, both union and management wages moderately rising, and few new technological breakthroughs, we foresee a slow recovery in steel profits.

Steel companies have succeeded in almost completely eliminating labor-intensive processes such as bar and structural mills. They made great productivity gains by concentrating on capital-intensive and technologically advanced flat-rolled products. However, for the next decade they are facing a dilemma: What can be eliminated next, if the pressures on net operating incomes continue? Capital intensive processes such as flat-rolled products are very sensitive to slow-downs in demand, because of rising average unit costs when plants are underutilized.

It seems that both steel and automobile companies have given up on countering international competition by increasing domestic productivity. They appear to rely on "a tidal wave of suits," to use their own words. They hope to win protection from foreign competitors. In the long run such an attitude will benefit no one except the legal establishment.

At present, Northwest Indiana is not feeling the full impact of declining steel employment. We have turned from a high wage economy to a high pension economy. We are the beneficiaries of high steel employment of the past; however, that source of outside income is cresting and will diminish in the next decade.

Where will the new growth impetus originate? The politically correct view is that the push will come from a new regional airport. The reports estimate an increase of 140,000 local jobs and a $3 billion payroll over several years. The local non-goods-producing work force would have to almost double. Over 14,000 homes will have to be replaced, including noise corridors, and almost 40,000 new homes will have to be built along with new schools, new public parks, and a large infrastructure. Tax rates will soar. Numerous urban neighborhoods will be eliminated and their tax base reduced. Populations from Gary, where housing values are low, will seek replacement housing in Hammond. Hammond residents, where property values and incomes are higher, will seek replacement housing in south Lake County and Porter County. The airport will attract hotels, convention centers, and some industry. Almost all will locate outside the remaining urban belt, as far west as possible, because the center of gravity of the airport's drawing range will be metropolitan Chicago.

How many potential jobs will be filled from local supply? I estimate not more than 20 to 25%. There will be a few thousand semi-skilled jobs during the construction phase. Unskilled jobs, such as baggage handlers, custodians, etc., will be available when the airport becomes operational. However, most of the labor force at airports is young, skilled, and educated. Most will be imported by the airlines.

Ultimately a new airport will be a boon to Northwest Indiana, and to its universities, regardless of its eventual location. As far as reviving the city whose name the airport may carry, the prospects are much less certain. The airport spans several jurisdictions. One possible benefit might be a realization that the large population influx induced by the airport and the secondary commercial and industrial development may indeed require more efficient metropolitan government in Lake County.

In the short run, however, we still have to deal with the tail end of a recession and a slow recovery. Retail sales will start edging up in the third and fourth quarters. We should have a good Christmas in Northwest Indiana. Big-ticket items will lag other retail categories for most of 1991. The overexpansion in supermarkets in some areas is driving food prices higher, but that will level off in 1992—which looks like a good year, in spite of continued lethargy in local manufacturing.

The energy and health care sectors show continued growth. Housing, which slowed slightly in 1990-91, will also rebound in 1991-92. Commercial construction will be at a high level.

Burns Harbor continues to attract small industrial plants in Porter County, most steel related and some partly foreign owned. This trend is likely to continue, eventually adding up to 2,000 new manufacturing jobs. Small plants in south Lake County, Crown Point, and elsewhere are also planning modest expansions as the national recovery progresses. A major discouragement to industrial entry is the continuing fiscal exigencies in Lake County's expanding public assistance programs.

**Table 1**
**Louisville Metropolitan Area Establishment Employment,[1] 1987-1991**

| | *Total Farm* | *Manufacturing* | *Nonmanufacturing* |
|---|---|---|---|
| *Annual Averages* | | | |
| 1987 | 437,400 | 87,100 | 350,300 |
| 1988 | 454,600 | 88,500 | 366,100 |
| 1989 | 467,200 | 88,800 | 378,400 |
| 1990[2] | 479,800 | 89,000 | 390,800 |
| *Quarterly Averages[2]* | | | |
| 1Q 1990 | 476.5 | 88.7 | 387.9 |
| 2Q 1990 | 477.6 | 89.1 | 388.5 |
| 3Q 1990 | 479.4 | 88.9 | 390.5 |
| 4Q 1990 | 485.5 | 89.2 | 396.3 |
| 1Q 1991 | 490.5 | 88.1 | 402.4 |

*[1]Employment in establishments located in Clark, Floyd, and Harrison counties in Indiana, and Jefferson, Oldham, Bullitt, and Shelby counties in Kentucky.*
*[2]Subject to revision by data source in 1992.*
*Source: Kentucky Cabinet for Human Resources.*

# Louisville/Jeffersonville/New Albany

**Fay Ross Greckel**

*Professor of Economics, Indiana University Southeast*

The Louisville metropolitan area appears to have weathered the recession fairly well. Although some sectors were seriously affected by the national downturn, the local economy as a whole continued to grow slowly through early 1991.

Recession is not easy to track on the local level. Nationally it is identified and measured by declines in total output (real GNP), but total output is not really reported or calculated for local areas. The most comprehensive local data available on a fairly current basis are employment statistics. Because employment and unemployment tend to be lagging indicators (meaning that output changes generally persist for a while before people are fired or rehired), they are likely to reflect what happened to output a few months earlier.

The seven-county metropolitan area added 12,600 jobs in 1990—the same moderate growth that occurred in 1989. (The seven counties are Clark, Floyd, and Harrison in Indiana, and Jefferson, Oldham, Bullitt, and Shelby in Kentucky.) More important, as **Table 1** shows, after adjusting for normal seasonal variations the number of jobs in the metropolitan area increased quarter by quarter throughout 1990 and early 1991. In fact, employment in first quarter 1991 averaged a healthy 14,000 jobs ahead of first quarter 1990. However, the gap between 1991 employment and employment in the same month of 1990 was greatest in January and narrowed each month thereafter, with preliminary April statistics showing only 10,600 more jobs than 12 months earlier. While this may indicate a lagged response to the national recession, the fact that employment totals keep increasing, albeit more slowly than previously, is still quite encouraging.

Manufacturing employment, which had inched upward for the past three years, declined in recent months. By April it was running about 1,000 jobs

**Table 2**
**Establishment Employment in Clark, Floyd, and Harrison Counties (IN)**

| | *Total Nonfarm* | *Manufacturing* | *Nonmanufacturing* |
|---|---|---|---|
| 1Q 1990 | 63.0 | 13.6 | 49.3 |
| 1Q 1991 | 60.5 | 13.7 | 46.8 |

*Data subject to revision in 1991.*
*Source: Indiana Department of Employment and Training Services.*

**Table 3**
**Residential Building Permits, 1987-1991 (Number of Dwelling Units)[1]**

| | *Jefferson Co. Kentucky* | *Clark Co. Indiana* | *Floyd Co. Indiana* | *Harrison Co.[2] Indiana* | *4-County Total* |
|---|---|---|---|---|---|
| *Total for Year* | | | | | |
| 1987 | 3,169 | 224 | 397 | 157 | 3,947 |
| 1988 | 2,686 | 341 | 387 | 148 | 3,562 |
| 1989 | 2,304 | 321 | 548 | 140 | 3,313 |
| 1990 | 2,481 | 322 | 470 | 189 | 3,462 |
| *Total for First Four Months* | | | | | |
| 1987 | 1,816 | 72 | 127 | 50 | 2,065 |
| 1988 | 601 | 64 | 141 | 46 | 852 |
| 1989 | 645 | 93 | 212 | 41 | 991 |
| 1990 | 1,048 | 55 | 209 | 38 | 1,261 |
| 1991 | 614 | 71 | 106 | 53 | 841 |

*[1]Number of residential units for which building permits were issued, including single-family dwellings, apartment units, and condominium uinits.*
*[2]Excluding Corydon, for which data were not available.*
*Source: Kentuckiana Regional Planning and Development Agency.*

behind the year-earlier total. As a result of the drop in home construction, both nationally and locally, employment declines occurred in such industries as lumber and wood products, furniture and fixtures, and electronic equipment (including home appliances). The impact of the national recession was also apparent in job losses in the industrial machinery sector and in brief temporary layoffs in the auto industry. Most other manufacturing industries, however, posted employment gains, and both average weekly hours and average weekly earnings were up in most manufacturing areas.

Employment gains were widespread outside of manufacturing. In early 1991, retail trade provided 5,000 more jobs than the year before, with increases concentrated in eating and drinking establishments, general merchandise stores, and food stores. Health services gained 3,400 jobs, other services added another 1,000 positions, and state and local government also employed 1,000 more workers than the previous year. Even construction and trucking/warehousing—sectors that ordinarily decline in a recession—employed several hundred more workers than in 1990.

When we narrow our focus to the metro area's Indiana countries—Clark, Floyd, and Harrison—we get a different employment picture. The Indiana Department of Employment and Training Services reported 2,500 fewer jobs in establishments located in those three counties in first quarter 1991 than a year earlier (see **Table 2**). As we have noted before, here manufacturing employment appears to be holding its own, with a gain of about 100 jobs over last year. The average factory work week is nearly an hour shorter than last year, but average weekly earnings are still up.

Most of the job losses in the southern Indiana counties occurred in federal and local government positions. The Census Bureau cut back its work force by about 900 with the end of the population census project; at the local level, most of the 1,000 positions lost were in educational services, an area that will continue to experience personnel reductions due to budgetary constraints. In the private sector, retail trade employment shrank by about 800 jobs, compared to first quarter 1990.

These statistics refer to jobs located in southern Indiana; they do not necessarily indicate the employment status of *residents* of southern Indiana, many of whom work elsewhere in the metropolitan area. In fact, the April unemployment rate estimated for residents of the three Indiana counties was slightly lower than for the rest of the metropolitan area. And both the Clark/Floyd/Harrison and the metropolitan area unemployment rate estimates have been running below the respective state unemployment rates and the national unemployment rate—and have averaged only slightly higher than last year. Whereas this again suggests that the Louisville area has fared relatively well in this recession period, it should be noted that the unemployment rate would have been higher if some job seekers had not become discouraged and dropped out of the labor force.

A particularly encouraging development is a reduced demand for the services of the emergency food distribution agency, Dare To Care. There was a 15% decline in food parcels distributed during the January-to-April period this year. The agency's statistics suggest that whereas fewer families needed aid this year, a larger percentage of the families needed help more than once.

Some sectors are clearly experiencing the national downturn. Home buying and residential construction are major examples. Nearly 40% fewer residential building permits were issued between January and April 1991 than in the first four months of 1990 (see **Table 3**). Permit issuance actually increased in Clark and Harrison counties (IN), but declined sharply in Floyd County (IN) and Jefferson County (KY). We should note, however, that in previous years the permits issued between January and April were not a reliable indicator of the number of permits issued in later months.

Between January and May, multiple listing home sales in the southern Indiana counties were nearly 10% lower than in the same period of 1990. However, since the average home price had risen about $4,000 (to $61,400), the dollar volume of sales was actually higher than in 1990.

As elsewhere in the nation, car sales are off sharply this year. New car and light truck sales in Clark, Floyd, and Jefferson counties were 21% lower in the first four months of 1991 than in the same period of 1990. Dealerships in the southern Indiana counties fared worse than those in Jefferson County.

The outlook for the remainder of the year entails a continuing pattern of strong and weak sectors, with moderate growth overall. Industries tied into the national economy will benefit as the U.S. pulls out of the recession. Building activity and related industries should pick up as the year progresses, but car sales will probably remain rather weak. Tight government budgets are likely to keep employment from rebounding in that area, but both heavy industry and consumer-related industries should see growth in the months ahead. All in all, 1991 is likely to record less vigorous growth than 1990, but it will still be a year of moderate growth for the Louisville area economy.

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| Race | Female householder | Vacant by type |
| Hispanic origin | Male householder | Units in structure |
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