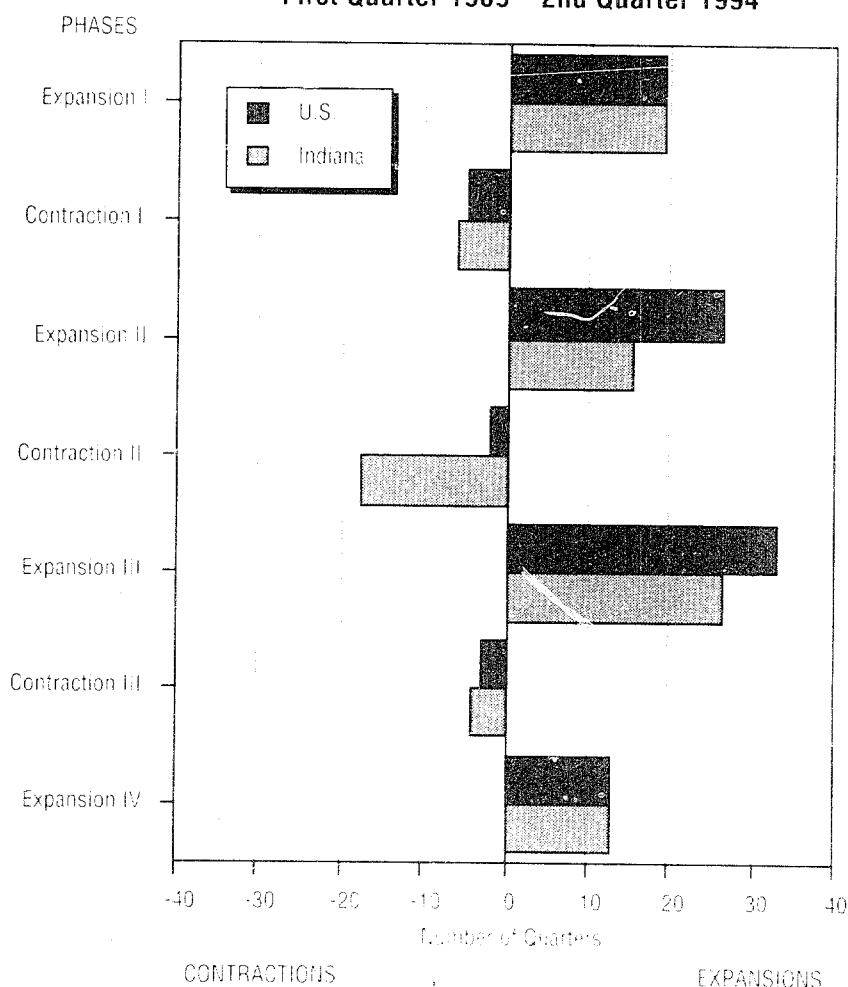


# Indiana

## Business Review

**Duration of Expansions and Contractions  
in Indiana and the United States**  
First Quarter 1969 – 2nd Quarter 1994



A publication of the  
Indiana Business  
Research Center,  
Indiana University  
School of Business

**The 1995 Outlook**

**Winter 1994-95**

# Contents

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Please note that this  
issue completes  
Volume 69.

- |           |   |           |   |
|-----------|---|-----------|---|
| <b>1</b>  | R. Jeffery Green<br><b>Consumer Spending and Business Investment</b>                | <b>15</b> | Maurice Tsai<br><b>Evansville</b>                               |
| <b>2</b>  | Carol A. Lehr<br><b>Monetary and Fiscal Policy</b>                                  | <b>17</b> | Barry Ritchey<br><b>Anderson</b>                                |
| <b>3</b>  | Michele Fratianni<br><b>The International Economy</b>                               | <b>18</b> | Dilip Pandse<br><b>Kokomo</b>                                   |
| <b>5</b>  | Michael Simkowitz<br><b>Corporate Profits, Interest Rates, and the Stock Market</b> | <b>21</b> | John E. Peck<br><b>South Bend/Mishawaka-Elkhart/Goshen</b>      |
| <b>6</b>  | Jeffrey D. Fisher<br><b>Housing</b>   | <b>22</b> | Marvin Fischbaum<br><b>Terre Haute</b>                          |
| <b>7</b>  | Morton J. Marcus<br><b>Indiana</b>  | <b>24</b> | Patrick Michael Rooney<br><b>Columbus</b>                       |
| <b>10</b> | Bob Kirk<br><b>Indianapolis</b>   | <b>25</b> | A. Charlene Sullivan<br><b>Lafayette</b>                        |
| <b>12</b> | Leslie P. Singer<br><b>Northwest Indiana</b>  | <b>26</b> | Ashton L. Veramailay<br><b>Richmond-Connersville-New Castle</b> |
| <b>14</b> | Thomas L. Guthrie<br><b>Fort Wayne</b>  |           |   |

# The 1995 Outlook

## Consumer Spending and Business Investment

**T**he total domestic demand for goods and services in the economy is the sum of consumer spending on goods and services and gross private domestic investment. In real terms, after adjusting for inflation, total domestic demand in 1993 amounted to more than 80% of real gross domestic product (real GDP). Over the last four quarters for which we have data, real total domestic demand has risen 5.9% while real GDP has grown by 4.3%. Clearly, the recent strength in the economy is being led by consumer and investment spending. Why the strength? Can it last?

**R. Jeffery Green**

*Professor of Business Economics and Public Policy and Co-director, Center for Econometric Model Research, Indiana University School of Business*

### Real Consumer Spending

Real consumer spending has increased by 3.6% in the past 12 months, led by an 8.5% increase in spending on durable consumer goods. Reflecting the strength in the new housing market, real spending on furniture and household appliances has been rising at more than a 10% annual rate. The strength in consumer spending, particularly on durable goods, is the result of good employment and income growth and relatively low interest rates. Employment has increased by more than 3 million jobs in the past year, producing a rise of more than 3% in real disposable personal income. Additional income is the prime determinant of consumer spending. The growth in employment has an added stimulative effect beyond increasing income. As employment expands and the unemployment rate declines, the risk of layoff declines. This reduction in uncertainty encourages consumers to expand their purchases of durable goods.

Interest rates have also been favorable for spending on durable consumer goods. While it's true that interest rates rose during 1994, a combination of fairly low but rising rates may be the most stimulative set of circumstances for durable goods spending. This is because interest costs remain moderate and consumers are encouraged to spend now before rates get much higher. As a result, consumer credit has been increasing at double-digit rates over the past year.

We expect the growth in real consumer spending to slow in 1995 for several reasons. Interest rates are expected to continue to increase through 1995; this will both raise borrowing costs for consumers and cool the housing industry, thus reducing additional demand for furniture and appliances. Consumers have been borrowing extensively through 1994, and we expect them to curb borrowing in 1995 as debt loads get larger. The recent spurt in spending on durable goods is classic. Precisely because these

goods are durable, once consumers buy them they will not need to replace them for some time, so at least the growth in demand should slow.

Our forecast is for real consumer spending to rise at about 2.2% in 1995. That is a considerable slowdown from its recent performance but still represents a continuation of the recovery. In fact, a slower rate of growth for consumer spending in 1995 will actually increase the likelihood that the recovery will continue for an extended period. Slower growth in consumer expenditures will enable consumers to control borrowing and prevent excessive debt burdens from strangling the recovery.

### Investment Spending

Real gross private investment spending can be disaggregated into four major components: real business spending on equipment, real business spending on structures, real residential investment spending, and the real change in business inventories. These four components usually exhibit very different cyclical behaviors, and this year has been no exception. In the last four quarters real gross private domestic investment has increased by an impressive 17.2%. Broken

down into the four components, this translates into an increase of 15.5% for real equipment spending, 0.9% for real spending on structures, 8.8% for real residential investment spending, and more than triple the rate of real inventory investment.

More than half of total investment spending goes for nonresidential equipment. Within that sector, by far the fastest growing component is spending for computing and information processing equipment,

which increased by almost 20% in the last year. Thus, one major story behind the acceleration of economic activity in the last year is the boom in computer and related spending. Why now, and why is it so strong? Two major factors are the recovery in profits and large declines in computer prices. Corporate profits have risen by more than 15% in the past year, and nonfarm proprietors' income has risen more than 8%, so firms have a growing source of funds with which to finance new capital. And computer prices have been declining sharply for years, with no end in sight. This combination of growing profits and declining prices enables firms to acquire large quantities of new computers and information processing equipment.

The price declines for computers and information processing equipment will likely continue over the next year, but with the economy growing more slowly profit growth will also slow. As a result, real

*"Clearly, the recent strength in the economy is being led by consumer and investment spending. Why the strength? Can it last?"*

spending on business equipment will grow, but at a slower rate than 1994. We expect that growth to be in the 7-9% range.

Real investment in structures has been weak since the end of the construction boom in the 1980s and the subsequent savings and loan scandal. Although the large declines appear to be over, there is little chance of significant growth in the coming year, particularly in light of our forecast of rising interest rates. We predict real investment in structures to show little or no growth. Residential investment has been very strong this past year, but with rising interest rates and slower income growth we expect the housing sector to show little or no growth in 1995.

Inventory accumulation has been spectacular this year. We have not seen this rate of stock building since the early days of the recovery from the 1981-82 recession. This rate is not sustainable, so we expect inventory accumulation to be lower this year.

Putting all these component forecasts together yields a picture of continuing growth in total real domestic demand to average 2-2.5% this year, but at a rate that is considerably slower than we saw last year. Nevertheless, this is a very favorable forecast because the economy is currently very near full employment. Consequently, a slowdown in growth next year will lower the likelihood of higher inflation rates while allowing economic recovery to continue.

A final note of caution is in order. Spending on durable consumer goods, business plants and equipment, and housing is interest-sensitive. If the Federal Reserve decides it must raise interest rates even higher than we expect in order to slow the economy and prevent a rise in inflation, it is precisely these interest-sensitive sectors that will feel the pinch. In that case, the rate of growth of total real domestic demand may be lower than we forecast.

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## Monetary and Fiscal Policy

Carol A. Lehr

*Assistant Professor of Business Economics and Public Policy, Indiana University School of Business*

Current trends in output growth, unemployment, and inflation are quite favorable. Since 1992, output growth has averaged 3.4%, compared to a disappointing 1.1% coming out of the 1990-91 recession.

Moreover, the unemployment rate, after hitting a peak of 7.7% in mid-1992, has dropped steadily and is now below the 6% rate.

It should be noted that there was a break in the unemployment series in January 1994 due to changes in the survey technique. The alterations raised the measured unemployment rate by 0.5%, so current unemployment may be even lower relative to 1993 rates. Typical estimates for the "natural rate" of unemployment (that is, the rate of unemployment below which inflationary pressures accelerate) fall into the 6% range. The dip in the unemployment rate below this level, along with rising factory orders, increasing incomes, strong retail sales, relatively high-capacity utilization numbers, and a myriad of other strong signals, has made market participants nervous that inflation will soon pick up.

However, the most recent inflation numbers show no current tendency toward accelerating inflation. In fact, the CPI inflation rate for third quarter 1994 was 3.2%—virtually unchanged from the previous quarter. But the markets look forward and current third quarter numbers only reflect activity prior to September 30. Future inflationary pressures will depend on the Federal Reserve's decisions concerning interest rate movements as well as the economy's ability to increase productivity and capacity.

### Monetary Policy

With this scenario in mind, the Fed made several moves this year to raise short-term interest rates. As is usually the case, the rate changes have been small and gradual as monetary policy attempts to balance possible future inflation costs against a slowdown in current growth arising from a higher cost of funds. At the last meeting of the Federal Open Market Committee (FOMC) in November, the committee voted to raise short-term interest rates yet again, by three quarters of a percentage point.

Although the Fed does not directly control nominal long-term interest rates, it can influence them indirectly through the yield curve and, more important, through its effects on expected inflation. The recently improved output growth rates are undoubtedly linked to lower long-term interest rates, which encouraged the investment-led growth spurt. Moreover, net investment in new machinery and equipment adds to capacity, which in turn helps keep inflationary pressures low in the long run.

Therefore, in an effort to keep currency spending within current capacity and to restrain expectations of inflation, the Federal Reserve will probably continue to raise short-term interest rates gradually into 1995. The outlook projection is that short-term rates, such as the three-month Treasury bill rate, will increase nearly 1%.



### Fiscal Policy

As of March 1994, the federal debt totaled close to \$4.6 trillion, which is 68% of GDP. In 1989 the federal debt was 55% of GDP. The 1992 elections brought the issue of the federal budget deficit and debt to the forefront of popular debate. High levels of government spending relative to revenue have limited fiscal authorities in their ability to manipulate spending and taxes to influence the business cycle. Therefore, the thrust of fiscal policy in this decade has not been to use the budget deficit to smooth out business cycle fluctuations. Instead, emphasis has been placed on budget reduction. The implementation of the 1993 budget plan reduces the deficit by \$500 billion over a five-year period. These measures—along with a growing economy and, hence, growing tax revenues—helped bring down the deficit in 1993 and 1994. The government's fiscal year ended on September 30, and reports show that the deficit declined from the previous fiscal year, which is the second year-to-year drop.

The outlook for calendar year 1995 is for the deficit to increase slightly. The projection is based on slowing economic growth. However, the failure of health care reform this year helped keep the projected deficit lower than otherwise thought. If health care reform returns to the agenda, it is again unlikely that major initiatives could be put into place next year, thus delaying the initial increased cost to government. On the other hand, one of the major reasons for the explosion of the deficit in the 1980s was the sharp increase in health care costs. This drove spending on Medicare and Medicaid to unprecedented levels, and reductions in the deficit are inextricably tied to lowering the growth of health care expenditures.

**Table 1**  
Growth of World Output, 1975–1994 (%)

	1975–89					
	Average	1990	1991	1992	1993	1994
World	3.5	2.0	0.6	1.8	2.2	3.0
Industrial Countries	2.8	2.1	0.2	1.5	1.2	2.4
US	2.7	0.8	-1.2	2.6	3.0	3.9
Japan	4.2	4.8	4.0	1.3	0.1	0.7
Germany	2.0	5.1	1.0	2.0	-1.2	0.9
France	2.4	2.2	1.1	1.6	-0.7	1.2
Italy	2.7	2.1	1.3	0.9	-0.7	1.1
UK	2.3	0.5	-2.2	-0.6	1.9	2.5
Canada	3.4	-0.5	-1.7	0.9	2.4	3.5
Developing Countries	4.7	3.7	4.2	6.1	6.1	5.5
Asia	6.7	5.7	5.8	7.9	8.4	7.5

Source: International Monetary Fund, May 1994

## The International Economy

Michele Fratianni

*AMOCO Professor of Business Economics and Public Policy, Indiana University School of Business*

Economic growth around the world improved in 1994. **Table 1**, based on data available in May 1994, indicates that world output is growing at 3%—still below the long-term trend. This performance, in turn, reflects the fact that several industrial countries are in a down phase of the business cycle. Over the period of 1975–1989, world output of goods and services grew at an average annual rate of 3.5%. Industrial countries, which account for the lion's share of world output, grew at an average of 2.8%. Of the so-called G7 countries—the elite of the industrial countries grouping—only Japan and Canada grew faster than the industrial average. Developing countries, which account for a relatively small share of world output, grew almost twice as fast as industrial countries. Asian countries grew faster than that, and Pacific Basin countries even faster.

In 1990 the United States went into a recession that lasted through part of 1991. During that year the growth of U.S. gross domestic product was approximately 4 percentage points below trend. Canada and the United Kingdom mimicked quite closely the U.S. business downturn. Continental Western Europe slid into hard times in 1991 and Japan in 1992.

Germany paid the front-loaded costs of German monetary unification. The policy goal of raising almost overnight the standards of living of the former East Germany put pressure on government spending and real rates of interest in the country. The Bundesbank, the German central bank, tightened monetary policy to offset the inflationary effect of the higher expenditures. Interest rates rose and stayed high as a consequence.

Countries participating in the European Monetary System had a choice of either maintaining existing exchange rate parities and thus importing the high interest rates, or adjusting the parities. Political leaders and central bankers opted for the credibility of the European Monetary System and had to tighten monetary policy. This was not a good choice, because of its deflationary implications.

In mid-September 1992 there was a currency crisis, the result of which was forced parity adjustments by some countries and the decision of Italy and the United Kingdom to abandon the exchange rate mechanism that kept exchange rates within a narrow

band of fluctuations. Neither of these two countries has returned to the system. At the end of August 1993 a second currency crisis centered around the French franc. The French authorities were unwilling to adjust the par value of their currency, and the collapse of the exchange-rate mechanism was averted by a compromise of widening the bands from plus or minus 2.5% to plus or minus 15%.

The September 1992 and August 1993 events provided the impetus for a more expansionary policy in Western Europe. Short and long-term interest rates fell and stock market prices boomed in anticipation of the business recovery. Germany, France, and Italy were at the bottom of the recession; in contrast, the United States, Canada, and the United Kingdom were enjoying business expansion. Most recent data suggest that economic activity has picked up considerably in Germany (estimates of real GDP growth are around 2.5% on an annual basis), France (2.0%), and Italy. Thus, business cycles are converging among the G7 countries.

Japan continues to experience its worst economic performance since World War II, with the exception of 1973. The factors at work are the deflation of the real estate price bubble; the deterioration of the quality of bank assets, which has led to a credit crunch; the sharp slowdown of Japanese exports following an appreciating yen; declining output growth rates in the rest of the world; and pressures on Japan to reduce its current-account surplus. In February 1994, the Japanese government announced its fourth fiscal stimulus package since 1992. Despite these measures, economic performance so far remains very disappointing. Economic growth, on the other hand, is proceeding at a "booming" pace in the Pacific Basin countries.

Matters have turned around in Central Europe which as a whole is now recording the first positive economic growth rates since the breakdown of communism. Official output continues to decline in the former USSR, although at a declining rate. It should be noted that official output understates the true but unknown output because of underground activities.

Average inflation rates in the industrial countries remain at historically low levels—below 3% (see Table 2). Inflation rates in the developing world which have been much higher historically, are coming down. In the fast-growing Asian countries inflation averages approximately 7%.

Market rates of interest are rising in the United States, both in absolute value and in relation to interest rates in the G7 countries. Whether U.S. real rates of interest are also rising depends on expected inflation rates. The U.S. bond market is jittery and does not seem to believe that low inflation rates will persist in the future. We shall assume in the forecast that

monetary policy in the United States will tighten relative to monetary policy elsewhere in the G7 group.

### Forecast

The forecast for the current-account balances of selected countries is shown in Table 3. Beginning with 1989, U.S. trade and current-account balances have been improving markedly in response to the declining value of the U.S. dollar in the exchange markets and lower economic growth in the U.S. relative to that of our trading partners. This trend seems to have stopped in second quarter 1992, when both trade and current-account deficits rose relative to the values in the first quarter. The reason lies in the slowdown of output growth abroad relative to output growth in the U.S.—thus reducing the growth of our exports while raising that of our imports. The noted higher economic growth abroad will mean higher growth of U.S. exports. Our assumption is that U.S. exports and imports in 1987 dollars will be rising at an average rate of 8% per annum. Despite these developments, net exports in 1987 dollars will go from -\$106 billion in 1994 to -\$133 billion in 1995.

It is instructive to reflect on the prospects of the United States for eliminating its trade deficits. Since 1985, the U.S. government, both alone and in cooperation with the other members of the G7 group, has pursued a policy of dollar depreciation with the aim of correcting its external imbalance. Furthermore, the U.S. government has progressively engaged in an active trade policy, particularly with respect to Japan. The motivation underlying this policy is the belief that the U.S. has a trade deficit because other countries, especially Japan, do not play "fairly." This is a misguided concept. Our trade deficit has little to do with unfair trade practices and a great deal to do with the fact that the United States saves too little relative to its investment needs. For example, in 1993 the private sector saved \$1 trillion and made gross private domestic investments of \$882 billion, whereas the federal, state, and local governments dissaved \$215 billion. The result was an excess of investment over total savings of \$95 billion, which was financed by the rest of the world. This external financing implies a net capital inflow or a deficit in the current account of the U.S. balance of payments. Trade deficits will persist as long as the saving-investment imbalance remains. Further devaluations of the dollar and a more aggressive trade policy are a minor force in rectifying our trade deficit.

As to the value of the U.S. dollar in the exchange markets, the fundamental factors move in opposite directions. The expected improvement in the German cyclical position relative to that in the U.S. favors an appreciation of the German mark, or a depreciation of the dollar. The more restrictive monetary policy in the

**Table 2**  
Inflation Rates (%)

	CPI (Estimated)	
	1994	1995
Industrial Countries	2.5	2.6
US	2.8	3.2
Japan	0.9	0.9
Germany	3.0	2.2
France	1.9	2.1
Italy	3.8	3.1
UK	3.2	3.0
Canada	0.5	1.7

Source: IMF, May 1994

**Table 3**  
Current-account Balances  
(In billions of dollars)

	1993 (Actual)	1994 (Est.)	1995 (Est.)
US	-109.2	-140.3	-165.9
Japan	131.4	133.4	125.7
Germany	-21.9	-13.0	-10.6
France	10.5	10.3	13.4
Italy	10.6	26.2	30.7
UK	-15.0	-19.4	-19.7
Canada	-19.5	-14.5	-13.8

Source: IMF, May 1994

**Table 4**  
**Summary of the International**  
**Economic Forecast**

(In billions of 1987 dollars; N/A)

	1994 Estimated	1995 Forecast
Exports (avg)	643	697
Imports	759	830
Net exports	-106	-133
Yen/dollar	Unchanged	
Mark/dollar	Unchanged	

U.S. relative to monetary policy in Germany and Japan favors an appreciation of the dollar. The large Japanese trade surplus favors an appreciation of the yen. It is beyond our knowledge to determine which of these forces will prevail. Hence, we call for an approximately constant value of the dollar.

The summary of our international forecast is shown in **Table 4**.

## Corporate Profits, Interest Rates, and the Stock Market

**Michael Simkowitz**

*Professor of Finance, Indiana University  
School of Business*

Another year is passed and my mother's foolish son is again sitting down to make a forecast of the financial markets. The past year has been characterized by a number of surprises. The economy was much stronger than expected at the end of 1993; interest rates went up much more than expected at the beginning of 1994; and the economy stayed stronger than expected in the face of this rise in interest rates. The short-term financial scene is dominated by two stubborn forces: Chairman Greenspan's insistence on getting inflation down under 2.5%, and the economy's stubborn refusal to slow down significantly in the face of rising interest rates. This tug of war will continue at least into the first part of 1995. I'm betting my money on Greenspan. Anybody who can spend as much time as he does in front of Senate committees without cracking a smile has got more than enough fortitude to defeat inflation. After all, I keep getting confused between C-Span and the Comedy Channel.

Corporate profits began to expand rapidly as 1993 progressed, and continued to expand in 1994 at a reasonably good rate of approximately 10%. This kind of profit expansion is expected to continue at a high single-digit rate. My estimates for the operating earnings on the S&P 500 are shown in **Table 1**. These earnings will be above what are reported, because reported earnings include write-offs whereas operating earnings reflect the profitability of current operations.

Dividends have begun to increase. After remaining nearly constant from 1990 to 1993, they expanded by about 5% in 1994 (see **Table 2**). Similar growth in 1995 should be expected.

Autos, metals, and computer equipment should be the relatively stronger sectors. Tobacco, beverage, and personal product firms are beginning to benefit from the expanding economies in Europe. A new conservative Congress in Washington indicates that if health care is revisited, any resulting legislation will be more benign to the health care sector than what was envisioned about a year ago.

Interest rates have risen dramatically in the past year. On the short end of the yield curve, another 50 to 100 basis point rise is to be expected. This will bring the 90-day T-bill rate to about 6%. Most of the damage on the long end has been done, and as I write this, the 30-year treasury bond is yielding 8.05% and most likely doesn't have much more than another 20 to 40 basis points to go. Our expectation is that the long rate will most likely peak out sometime in second quarter 1995. In fact, long rates may be on their way down by the end of 1995.

The equity markets present a dilemma: As I mentioned a year ago, since World War II the tops of bull markets have been extended plateaus, and this one appears to be no exception. By any reasonable measure the stock market is currently at least fully valued. The current dividend yield on the S&P 500 is around 2.83%. This is a rather lofty level from which to expect a significant upward price movement. This past year has been characterized by an equity market in which the S&P 500 has been bounded by 440 on

**Table 1**  
**S&P 500 Operating Earnings**

Year	Earnings	% Change
1990	\$24.75	---
1991	22.50	-10.3%
1992	24.65	11.0%
1993	28.50	15.6%
1994 (est.)	32.00	12.3%
1995 (est.)	34.50	7.8%

**Table 2**  
**S&P 500 Dividends**

Year	Dividend	% Change
1990	\$12.10	---
1991	12.20	0.8%
1992	12.38	1.5%
1993	12.58	1.6%
1994 (est.)	13.20	4.9%
1995 (est.)	13.90	5.3%

the low side and 490 on the high side. It is a rare year in which the total swing of the market is less than 10%. It would be extraordinary if we had two such years back to back. The concern we should have for the market is that by the time interest rates top out, investors may be looking ahead into late 1995 and 1996 and seeing a weakening economy.

It would appear that the equity markets will have real difficulty appreciating by more than the 5-6% growth in dividends. The current yield of 2.83% plus a hopeful 6% appreciation totals to less than 9%. With U.S. treasury bonds at 8.05%, it is a sanguine observer who views equities as the dominant risk-adjusted investment vehicle. I still believe that in the short run the downside risk is greater than the upside potential in the market. But for the long-term investor, selling equities can be a trap; it takes quite a bit of courage to get back in the market.

In summary, short-term investors may want to be nimble, reducing their equity exposure as the S&P index climbs over 480 and increasing it if the S&P index falls below 450. For longer-term investors, I am hesitant to recommend heavy selling of equities because of the difficulty of getting back in at the right time. Still, for long-term investors who are quite nervous in this market it may be time to reduce their equity exposure by 20 or 30%.

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## Housing

**Jeffrey D. Fisher**

*Associate Professor of Finance and Real Estate  
and Director, Center for Real Estate Studies,  
Indiana University School of Business*

The rise in mortgage interest rates during 1994 (about 200 basis points higher than a year ago, when mortgage rates hit a 28-year low) has had a dampening effect on housing activity. Pent-up demand from the recession of the early 1990s had helped propel

single-family housing over the million-unit mark during 1993-94, but it will have only a negligible presence in 1995's more restrained economic climate. The good news is that the principal home-buying age group—those 35 to 54 years old—has expanded by 10 million people during the first half of the 1990s, implying continued demographic support for this market.

On balance, single-family construction should remain fairly flat during 1995, and may even experience a slight decline. Multifamily housing is likely to continue to benefit from the increased availability of capital from banks and other sources for new construction. Total housing starts (single and multifamily) are likely to remain flat during 1995 at an annual rate of about 1.4 million units. Housing starts peaked at 1,972,000 in January 1972 and reached a low of 837,000 units in November 1981.

To mitigate the rise in the rate for fixed-rate mortgages, many borrowers have taken advantage of the steep yield curve by choosing adjustable-rate mortgages (ARMs) rather than fixed-rate mortgages in recent months. About 43% of loans closed in recent months were ARMs, compared to 16% a year ago. This is the highest share since June 1989. Of course, the price these people must pay is increased uncertainty as to what their payments will be in the future if interest rates, especially short-term rates used to index the ARMs, continue to rise.

Sales of existing homes rose unexpectedly in recent months despite the climbing interest rates. In the Midwest, sales rose about 8% in August. The National Association of Realtors expects 3.97 million existing homes to sell this year—almost as high as the record level of 3.98 million sold in 1978. This pace will probably not continue on into 1995, however, because of the rising interest rates.

The median home price in Indiana was \$75,000 during second quarter 1994, which was an increase of 2.88% from second quarter 1993. The median home price is still considerably less than that for the rest of the nation, which was \$109,800 for second quarter 1994. The gap between home prices in Indiana and those of the rest of the nation suggests much room for growth, especially if the Midwest economy remains strong compared to the rest of the country.



# Indiana



When one examines the record of change in personal income in our economy since 1969, it is clear that Indiana has had two dramatic recessions. It is more difficult to observe that same distress in the national economy (see **Figure 1**). In the mid-1970s, Indiana experienced a sharp drop in real personal income associated with the first Oil Shock; the second decline began in the late 1970s and extended well into the 1980s. This was Oil Shock II, followed by a major restructuring of industry, particularly steel.

An examination of the data shows seven alternating phases of expansion and contraction in the Indiana and U.S. economies from first quarter 1969 through second quarter 1994. In **Figure 2** the number of quarters for each of these phases is represented. The most obvious feature of these phases is that Indiana has experienced longer contractions and

shorter expansions than the nation. Hence, if we try to date these contractions and expansions, a question arises: Should they be dated in terms of Indiana's experiences or in terms of the nation's?

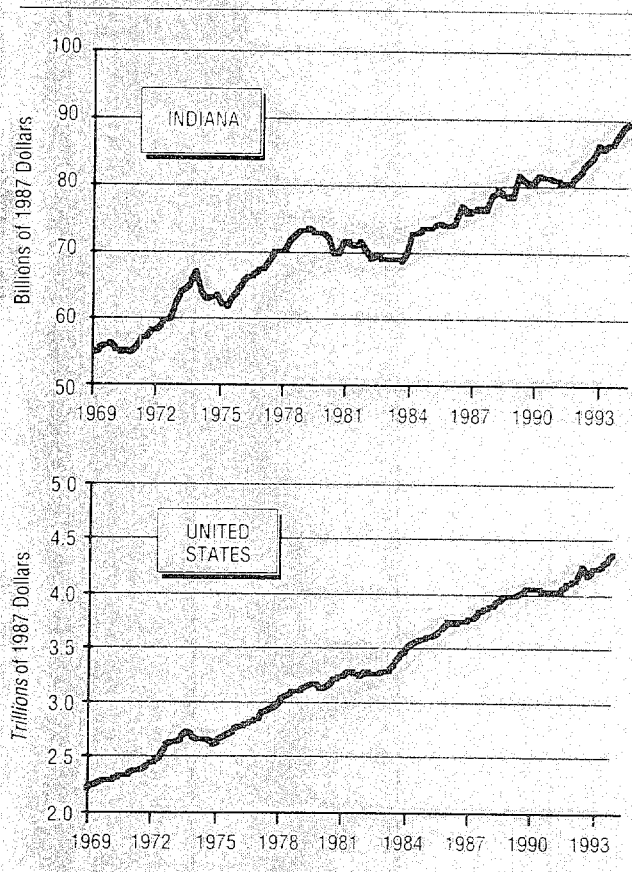
**Table 1** offers both interpretations. But first, note that in the period from first quarter 1969 through second quarter 1994—just over a quarter of this century—Indiana has had an average annualized growth rate of 1.99% in real personal income. This is three-quarters of a percentage point below the nation's growth rate for the same period. Among the 50 states, plus the District of Columbia, Indiana ranked 44th in the nation in growth.

This comparatively poor record is the result of the first two contractions found in **Table 1**. Whether measured in terms of Indiana or the nation, contractions have been stronger in this state, as well as longer, than in the nation as a whole.

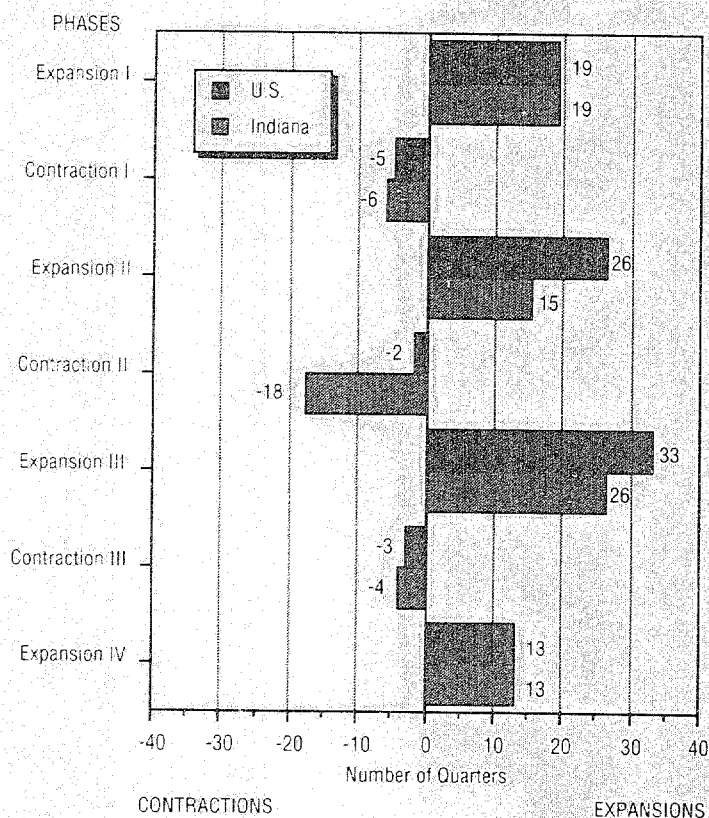
**Morton J. Marcus**

*Editor, Director, Indiana Business Research Center; Co-director, Indiana Center for Econometric Model Research, Indiana University School of Business*

**Figure 1**  
Real Personal Income in Indiana and the U.S.: 1Q69-2Q94



**Figure 2**  
Duration of Expansions and Contractions in Indiana and the U.S.: 1Q69-2Q94



**Table 1**  
Average Annual Rates of Change in Real Personal Income During  
Expansion/Contraction Phases, Indiana and the U.S.: 1Q69-2Q94

Quarter/Year	Phase of Cycle	Number of Quarters	RATE OF CHANGE		U.S.	Difference (IN-US)
			Indiana	Rank in U.S. *		
1Q69-2Q94		101	1.99	44	2.74	-0.75
INDIANA-BASED CYCLES						
1Q69-4Q73	Expansion I	19	4.46	35	4.42	0.04
4Q73-2Q75	Contraction I	6	-5.66	45	-1.68	-3.99
2Q75-1Q79	Expansion II	15	4.89	24	4.35	0.55
1Q79-3Q83	Contraction II	18	-1.50	48	1.45	-3.05
3Q83-1Q90	Expansion III	26	2.77	27	3.15	-0.38
1Q90-1Q91	Contraction III	4	-1.52	36	-0.64	-0.89
1Q91-2Q94	Expansion IV	13	3.39	17	2.59	0.80
U.S.-BASED CYCLES						
1Q69-4Q73	Expansion I	19	4.46	35	4.42	0.04
4Q73-2Q75	Contraction I	5	-6.43	43	-2.86	-3.58
2Q75-1Q79	Expansion II	26	2.29	40	3.48	-1.20
1Q79-3Q83	Contraction II	2	-7.17	49	-1.88	-5.29
3Q83-1Q90	Expansion III	33	2.01	33	2.77	-0.77
1Q90-1Q91	Contraction III	3	-1.23	34	-1.15	-0.08
1Q91-2Q94	Expansion IV	13	3.39	17	2.59	0.80

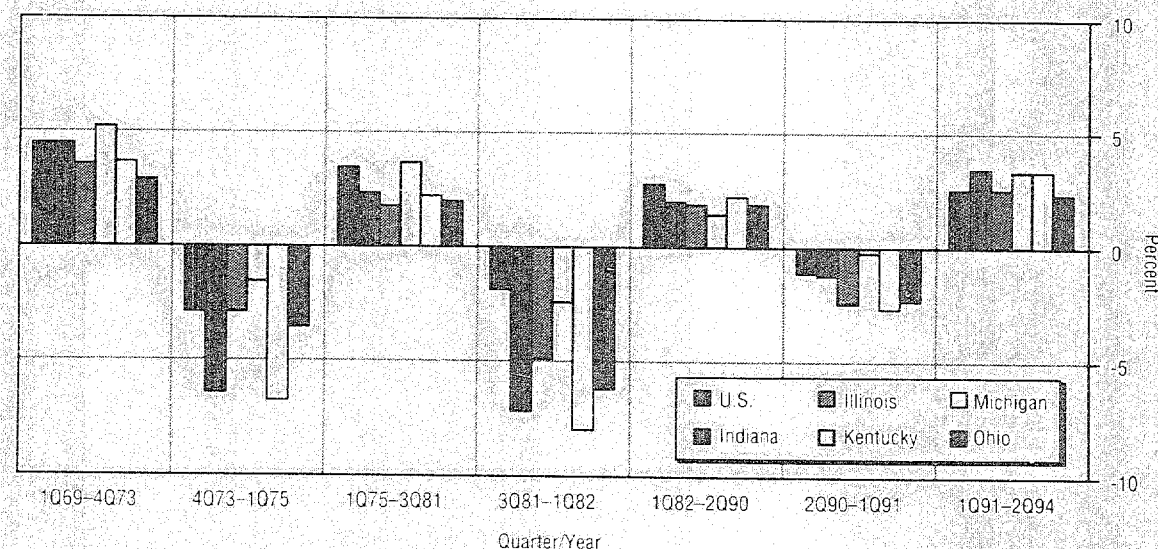
\*50 states plus the District of Columbia

A positive feature of this analysis is found in the most recent phase of the business cycle. Both the nation and our state have had 13 quarters of expansion between first quarter 1991 and second quarter 1994. During that period, Indiana has ranked higher in its growth rate (17th in the country) than in any other expansion period. In addition, the positive difference between Indiana and the rest of the nation is greater than in any previous expansion period.

Figure 3 illustrates the rates of growth for the U.S., Indiana, and our neighboring states during the phases of recent business cycles (measured in national terms). In all but the current expansion, Michigan has had stronger responses to expansions and contractions than Indiana. Kentucky shows less response on the down side than the nation in each contraction.

One reason we would expect to see strong responses in the Indiana, Michigan, and Ohio economies is the dependence of these states on earnings from the manufacture of durable goods. These three states occupy the top three positions in the nation in percent of earnings derived from durable goods (see Table 2). Thus, when interest rates rise and consumers and businesses cut back on goods financed by borrowed funds, these states tend to feel the effects. This year is expected to be that kind of year.

**Figure 3**  
Average Annual Percent Change in Real Personal Income During  
National Expansions and Contractions: 1Q69-2Q94



Indiana's real personal income, which is expected to increase by nearly 3.5% in 1994, could have difficulty realizing a 2% growth in 1995. This is not a recession, but a definite slowing of the state's growth rate. Employment gains, strong in 1994, should be trimmed in 1995. Where the state will probably record

a gain of 50,000 jobs in 1994, that advance could be reduced to about 40,000 jobs gained in 1995.

Just as the differences among the states are particularly strong, so too within Indiana. Each area has a different set of expectations for 1995, as the following articles demonstrate

**Table 2**  
**1993 Earnings in Durable Goods Manufacturing as a Percent of Total Earnings, and Rank in U.S.**

	Percent	Rank		Percent	Rank
<b>NORTHEAST</b>	9.87	---	<b>MIDWEST</b>	16.46	---
New England	13.79	---	Great Lakes	18.52	---
Maine	9.14	30	Ohio	19.09	3
New Hampshire	16.42	5	<b>Indiana</b>	<b>22.84</b>	<b>2</b>
Vermont	15.32	7	Illinois	11.71	22
Massachusetts	12.70	17	Michigan	25.43	1
Rhode Island	14.01	10	Wisconsin	17.33	4
Connecticut	15.84	6	Plains	11.29	---
Mid-Atlantic	8.49	---	Minnesota	13.05	12
New Jersey	6.36	40	Iowa	13.54	11
New York	7.25	37	Missouri	11.34	23
Pennsylvania	12.54	18	North Dakota	3.96	46
			South Dakota	7.34	36
<b>SOUTH</b>	8.56	---	Nebraska	6.60	39
South Atlantic	7.25	---	Kansas	11.08	25
Delaware	7.48	34			
Maryland	5.43	43	<b>WEST</b>	10.24	---
Dist of Col	0.30	51	Mountain	8.27	---
Virginia	7.01	38	Montana	5.20	45
West Virginia	9.00	31	Idaho	12.74	15
North Carolina	11.72	21	Wyoming	2.15	48
South Carolina	10.05	28	Colorado	8.00	33
Georgia	7.36	35	New Mexico	5.25	44
Florida	5.97	41	Arizona	11.19	24
East South Central	12.98	---	Utah	10.96	26
Kentucky	12.73	16	Nevada	2.81	47
Tennessee	13.00	14	Pacific	10.85	---
Alabama	12.02	20	Washington	13.03	13
Mississippi	15.16	8	Oregon	14.23	9
West South Central	8.55	---	California	10.83	27
Arkansas	12.49	19	Alaska	1.53	49
Louisiana	5.46	42	Hawaii	1.05	50
Oklahoma	9.71	29			
Texas	8.55	32	<b>UNITED STATES</b>	11.07	---



# Indianapolis

Bob Kirk

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Employment for the economy of the Indianapolis metropolitan area (Marion County and the surrounding eight counties) is expected to increase 1.25–1.75% in 1995. This is down from the slightly more than 2% rate of increase for 1994. Nominal personal income is expected to increase 4–5%, or 1–2% adjusted for inflation.

## Uncertainties

The Federal Reserve is using higher interest rates to slow the rate of growth. The interest rate-sensitive sectors expected to be most affected are consumer durable goods (autos and appliances), residential construction, and business equipment spending. Historically, increases in short-term interest rates have resulted in small increases in the ten-year treasury yield and flattened the yield curve. However, since 1985 the ten-year yield has responded more strongly to increases in the federal funds rate with less flattening occurring. If this pattern continues, the rise in longer-term interest rates could be greater than expected and the forecast may be optimistic.

## Comparative Performance

The Table shows how Indianapolis has performed compared to other metropolitan areas in the Midwest in terms of employment. The Midwest has been highlighted nationally for its relative strength in this recovery. However, as the Table indicates, there have been differences in employment growth within the region.

**Table**  
**Percent Change in Employment for Selected Metropolitan Area, 3Q93–3Q94**

Area	Total	Manufacturing
	Employment	Only
St. Louis	2.7	-0.1
Detroit*	2.1	3.0
INDIANAPOLIS	2.1	1.3
Chicago	1.9	0.0
Cincinnati	1.6	-0.1
Columbus, OH	0.5	1.0

*Source: Establishment data from state departments of employment, July and August only.*

At the metropolitan level, specific events have stimulated employment growth, such as the construction of a new downtown football stadium and the arrival of TWA's corporate headquarters in St. Louis. The strength in the automotive sector benefited Detroit. In the 1980s, Indianapolis and Columbus competed neck and neck; recently, however, Indianapolis has been the stronger economy.

A closer examination of the Indianapolis employment data indicates that the leading sectors this past year were general construction, primary metals, chemicals, wholesale, and retail (building materials and general merchandise). Construction and primary metals reflect the strength in residential housing and the automobile industry. However, these sectors are sensitive to interest rates. In 1995, housing permits issued are expected to decline from a very high 1994 level.

Many new members of Congress and the state legislature have been elected to reduce the size of government. If financial markets see significant federal deficit-reducing efforts, then long-term interest rates may fall, with the housing industry being a primary beneficiary. In 1994 there have been small reductions in federal, state, and local government employment in Indianapolis due to cost containment efforts.

The employment growth in general merchandise and building materials reflects the entry of new retailers during the year. With factory outlets, warehouse clubs, category killers, home centers, discount stores, catalogues, and TV shopping networks, the retail sector has become increasingly competitive.

## Big Employment Impacts

There will be some major employment impacts in 1995. Functions of Fort Benjamin Harrison are being shifted to other sites, so 1,350 people will no longer be employed there. At this time, an undetermined number may remain in the Indianapolis area as they take jobs with other government agencies or the private sector. An additional 1,000 United Airlines employees will be employed at the UAL maintenance center by the end of 1995. This should give some support to the housing sector, although the mechanics will come in with a 15.7% pay cut due to the new UAL employee ownership arrangement. With the opening of the Circle Centre Mall in September, approximately 1,500 retail jobs will be created—though at the same time many of the construction workers on the project will have completed their work.

How will the Circle Centre Mall be different from suburban malls? According to the marketing people, it will be "upscale" with a mix of goods and services not found in other shopping locations, and it will be architecturally unique with a "European" ambience.

narrower walkways, and a sense of the vertical dimension.

Market analyses of the mall call for it to capture 4.6% of the metropolitan retail market. Downtown hotels, which are expecting a strong 1995 convention schedule, won't have to use buses to take their convention guests to suburban malls. Downtown office workers will have a place to spend their money during the lunch hour. For others who live in the metropolitan area and throughout Indiana, the Circle Centre Mall will become a shopping and entertainment center that will complement other downtown attractions, such as the professional football, basketball, and baseball venues, the symphony, the zoo, Eiteljorg Museum, White River Park, Union Station, and the Children's Museum. In other words, the mall is another element in achieving the "critical mass" for reviving the downtown area. New downtown housing is being built; other investment is expected to be stimulated too.

The financing of the mall involves the Circle Centre Development Corporation, a group of 17 local firms that have shown their support via a \$65 million equity investment that includes the developer, Melvin Simon and Associates, Inc., a couple of European bank loans totaling \$45 million, and \$187 million of City of Indianapolis Tax Increment Revenue Bonds.

On the supply side, then, a lot of new retailers have been entering the marketplace. What about the demand side? Retailing has been supported by relatively strong employment and income growth, housing starts, and the benefits from mortgage refinancing. These stimuli are expected to weaken somewhat in 1995.

In the longer run, what are the implications of the baby boom generation for consumption and saving? Average annual household income is highest for the 35-44 and 45-54 age groups. Much has been written about the low saving rate; the new Congress will pay attention to ways of increasing saving. Because high-income households account for a disproportionate share of total savings, the "typical" household is better represented by the *median* personal saving rate. This rate increases by about 1 percentage point for the 45-54 age group compared to the 35-44 age group. In 1990, the baby boomers (25-44 age group) headed 50% more households than did the preceding generation (those who were 25-44 in 1970). As they age, there will be some increase in the aggregate savings, but it will be modest because of the growing importance demographically of two older generations that have lower saving rates.

Spatially, Indianapolis promotes its many interstates that pass through the city. They have made Indy an attractive wholesale distribution center (as evidenced by the employment growth in wholesaling

mentioned above), but they have also made it easy for households to live in lower-population-density communities (the suburbs). Many of the residents of these recently constructed communities are baby boomers who experienced their adolescence by jumping into a car and traveling to the nearby suburban mall located near an interstate. One such place is The Fashion Mall/Keystone at the Crossing—another "upscale" mall on the north side. In addition, with two-earner households, time has become increasingly valued, which means that people have become more focused in their shopping trips by patronizing specialized stores that provide a wide range of choices—Office Depot, Toys R Us, and the like. A reading on the success of the Circle Centre Mall will not come until after we see how competing malls respond to try to maintain market share, and whether the mall can continue to attract customers after its first birthday.

#### **Automobile Industry**

Indianapolis has benefited from the strong sales in automobiles, light trucks, and sports utility vehicles. How will the industry do in 1995? Leading indicators can be classified into two categories: *ability* to buy, as measured by disposable income, household debt burden, interest rates, and price pressures; and *willingness* to buy, as measured by consumer attitudes, unemployment claims, length of work week, and the stock market. Higher interest rates, reduced overtime, and stock market uncertainties are three cautionary flags waving for 1995. In addition, this year we will see if leased cars coming back to dealers could make leasing more costly and reduce the value of used cars. If the return of these cars puts downward pressure on used-car values, then payments on future leases could be forced upward because the monthly lease payment is based on the difference between the car's selling price and its projected value at the end of the lease. The maintenance of high resale value is particularly critical in the luxury car end of the market.

#### **Health Care**

The Indianapolis health care industry began making adjustments prior to last year's health care debate in Congress. With changes in Medicare and Medicaid reimbursement schemes, hospitals have downsized, shifted to outpatient care, and formed cooperative relationships. Health care was a major source of employment growth for Indianapolis in the 1980s; in the past year, its contribution was very small.

#### **Productivity**

We have heard much about the rate of growth in labor productivity being higher in the manufacturing sector than in the service sector. Some have expressed concern because if more of the labor force is shifting to

services, then improvement in economic well-being is undermined, with stagnation a possibility. Let's examine the implications of this issue for Indianapolis. Two factors that may contribute to the differences in productivity growth are recategorization and unmeasured output.

**Recategorization.** Some of the growth in business services has been due to outsourcing in manufacturing. Functions of the manufacturing firm, such as accounting, legal, advertising, custodial, and landscaping, have been outsourced to specialized service companies. Thus, some of the measured productivity growth in manufacturing reflects the recategorization of some jobs with lower productivity growth from manufacturing to a service industry.

**Unmeasured productivity growth.** An alternative way to think about the difference in labor productivity growth is that service output is *undercounted*. We can count the output of the auto industry, but how do we count the output of the financial service industry? If we have difficulty defining and counting output, then perhaps our measure of productivity growth in services is inaccurate. Another way to measure growth of productivity is to use the income payments generated by the factors of production as a measure of

output. The assumption is that the source of growth in real labor compensation over the long run is growth in labor productivity. When measuring output by income generated, one researcher gets a different picture—namely, that productivity in services has increased faster than in manufacturing. If we are undercounting service output, then (a) the shift of employment to the service sector does not necessarily mean that our economic well-being is being undermined, and (b) the challenge is to develop better measures of output.

## Northwest Indiana

Leslie P. Singer

*Professor of Economics, Indiana University Northwest*

The Northwest Indiana economy fully participated in the recovery that began in third quarter 1991. Steel, which still remains the local economy's principal driving force, was buoyed by the rapidly rising automobile and transportation cycle, causing local sheet and strip lines to operate at almost full capacity during most of the current cyclical upswing. Domestic autos sold 6.7 million cars in first quarter 1992 and 7.1 million in second quarter 1994.

Low interest rates and continued demographic immigration from Illinois spurred residential construction in numerous suburban and semirural regions of Northwest Indiana. The principal commercial tracts along Highway 30 in southern and central Lake and Porter counties continued to experience retail expansion. This expansion is likely to continue, albeit at a somewhat slower pace, in 1995.

Employment figures—both actual and forecasted—for the region are detailed in **Tables 1–4**. Both manufacturing and nonmanufacturing payrolls are growing and are likely to advance at a steady pace. The latter will fuel sales at the commercial centers dotting the retail, service, and health care corridor that extends south of Highway 30. We do not foresee much change in the local economy in 1995; there could possibly be a slightly slower expansion in residential construction and a modest reduction in outputs of some manufacturing sectors. We are now at a very high plateau in practically all segments of the economy. The automobile cycle has at least one more year to go and may start winding down in 1996. Some segments of the automobile market, such as luxury cars, will begin to recede in 1995.

**Table 1**  
**Northwest Indiana Employment: 12-month Moving Averages**

Quarter	Total	Manufacturing	Steel	Nonsteel	Nonmanufacturing
3Q94	243,067	53,210	30,808	22,200	190,333
4Q94	243,699	53,254	31,010	22,244	190,445
1Q95	244,189	53,297	31,010	22,287	190,891
2Q95	244,680	53,341	31,010	22,331	191,339
3Q95	245,172	53,385	31,010	22,375	191,787
4Q95	245,665	53,429	31,010	22,419	192,236
1Q96	246,159	53,472	31,010	22,463	192,687

*Note: 3Q94 figures are actual numbers; the others are forecasts.*

**Table 2**  
**Northwest Indiana Employment by Sector: 12-month Moving Averages**

Quarter	Trade	Service	Health	Government	Local Govt.	Education
3Q94	57,900	58,000	24,240	34,530	28,670	16,870
4Q94	58,073	58,260	24,365	34,534	28,679	16,884
1Q95	58,247	58,522	24,349	34,539	28,689	16,898
2Q95	58,421	58,784	24,616	34,543	28,698	16,912
3Q95	58,596	59,048	24,742	34,543	28,708	16,926
4Q95	58,771	59,313	24,869	34,552	28,717	16,939
1Q96	58,947	59,579	24,997	34,556	28,727	16,953

*Note: 3Q94 figures are actual numbers; the others are forecasts.*



**Table 3**  
**Northwest Indiana Annualized Payroll:**  
**12-month Moving Average (in \$billion)**

Quarter	Manufacturing	Total	Trade & Service
3Q94	2.123	4.502	1.403
4Q94	2.142	4.561	1.421
1Q95	2.162	4.620	1.438
2Q95	2.181	4.681	1.456
3Q95	2.201	4.742	1.474
4Q95	2.221	4.803	1.493
1Q96	2.241	4.866	1.511

*Note: 3Q94 figures are actual numbers; the others are forecasts*

**Table 4**  
**Hourly Wages and Hours Worked in Northwest Indiana:**  
**12-Month Moving Average**

Quarter	# of Hours in Steel	NOMINAL HOURLY WAGES		
		Steel	Nonsteel Mfg.	Nonmtg.
3Q94	44.2	\$19.82	\$14.27	\$8.08
4Q94	43.7	\$20.10	\$14.43	\$8.18
1Q95	43.3	\$20.39	\$14.60	\$8.27
2Q95	42.8	\$20.68	\$14.77	\$8.37
3Q95	42.4	\$20.98	\$14.94	\$8.47
4Q95	42.0	\$21.28	\$15.12	\$8.57
1Q96	41.5	\$21.59	\$15.29	\$8.67

*Note: 3Q94 figures are actual numbers; the others are forecasts*

The coming year will not quite match the performance of 1994 compared to the preceding year. In 1992, automobile companies purchased 10.7 million tons of steel. In 1993 the number jumped to 12.2 million tons, a whopping 14.2% increase. We forecast purchases of 12.5 million tons in 1994 and 12.2 million in 1995. Much of the steel purchased for auto manufacturing comes from Northwest Indiana. Service center sales are also expected to be flat because of a projected slowdown in housing starts brought about by rising long-term interest rates in 1995. Thus, we expect local steel output, which rose to 21.5 million tons in 1993 from 20.5 million in 1992, to reach 21.4 million tons in 1994 and 21.3 million in 1995. These figures are still quite high and suggest a high rate of capacity utilization. If there is any caveat here, it is that local steel companies are running their plants too hard with inadequate time allocated to proper maintenance. This could result in more frequent and longer breakdowns in 1995.

Productivity in local mills, which increased 8.5% over the 1992-94 period, is expected to slow down to about 2.3% in 1995. During the cyclical recovery we estimate that 4.3% of the rise in productivity could be attributed to increased use of capital and about 1.9%

to improved technology and better floor management and scheduling. In 1995-96 we do not foresee much further growth in capacity utilization. Thus, most increases in productivity will have to come from technology, in which advances are likely, and from greater efficiency of human resources. In this respect, Northern Indiana manufacturing may soon expect a setback due to expected shortages of highly skilled human resources. Without significantly more training and importing of skilled labor, Northern Indiana manufacturing plants will not be able to replace retiring or otherwise exiting workers with people of equal skill levels and work habits.

Steel output by local integrated mills was very impressive, however. Indiana melt mills, such as Nucor, did even better. Comparing the first three quarters of 1994 with the same period in 1993, Nucor plants produced 5.2 million tons of steel in 1994 compared to 4.2 million the year before—an increase of almost 22%.

#### **The Foreign Sector**

Northwest Indiana is an active participant in international trade. Steel mills have imported more than 1.2 million tons of slabs from Mexico, Spain, Greece, and Europe (via Belgium). Among Northwest Indiana firms, 21.1% sell their goods to Latin America, 64.9% export to Canada, 21.1% to Europe, 24.6% to Japan, 24.8% to the Orient (other than Japan), 12.3% to the Middle East, 3.5% to the former Soviet Union, 19.3% to Australia and New Zealand, and 5.3% to Africa. Moreover, 67.3% of firms involved in international trade export to three or more countries. Some 3.3% export to as many as 15 countries. Four-fifths of exporting firms were established after 1960, almost a third are in manufacturing, 13.3% are in fabricating, and 56.7% are in other categories, including agribusiness. Exports constitute 16% of the total sales for the average Northwest Indiana exporter; export shares range from a low of 4% to a high of 41%. The size of exporting firms ranges from a low of four employees to a high of 1,700.

In today's global economy, Northwest Indiana is favorably located to attract exporting companies, particularly manufacturing firms. This will be of increasing importance in sustaining the economic viability of our industrial base, which is currently too closely tied to the automobile market.

#### **Retail and Service Sectors**

Aggressive pricing by several local department stores has raised 1994 sales over those in 1993 by about 9%, and by as much as 18% in the discount department stores. There were significant increases in electronics, and modest increases in foods and restaurants of about 7%. The current level of retail sales,

which was boosted by the recovery from the 1993 slump and by credit expansion, will expand at a diminishing rate in 1995, except for food, electronics, and appliances. The latter retail sectors are likely to remain close to their 1994 levels.

Local retail stores have some excess capacity; thus, the growth in retail employment came mostly from new entrants and will be moderate in 1995. On the other hand, the financial, personal service, and health care sectors will show moderate but steady growth in employment in 1995 as new entrants become better established in their respective markets. Some job losses will occur in the urbanized regions north of Interstate 94; however, we see no acceleration in urban job losses in 1995.

On the negative side, we do not forecast any rejuvenation of the aging housing stock in the urban neighborhoods. As in the past, 93% of all new residential dwelling units and 84% of commercial construction occurred in the predominantly white, non-urban regions of Northwest Indiana.

## Fort Wayne

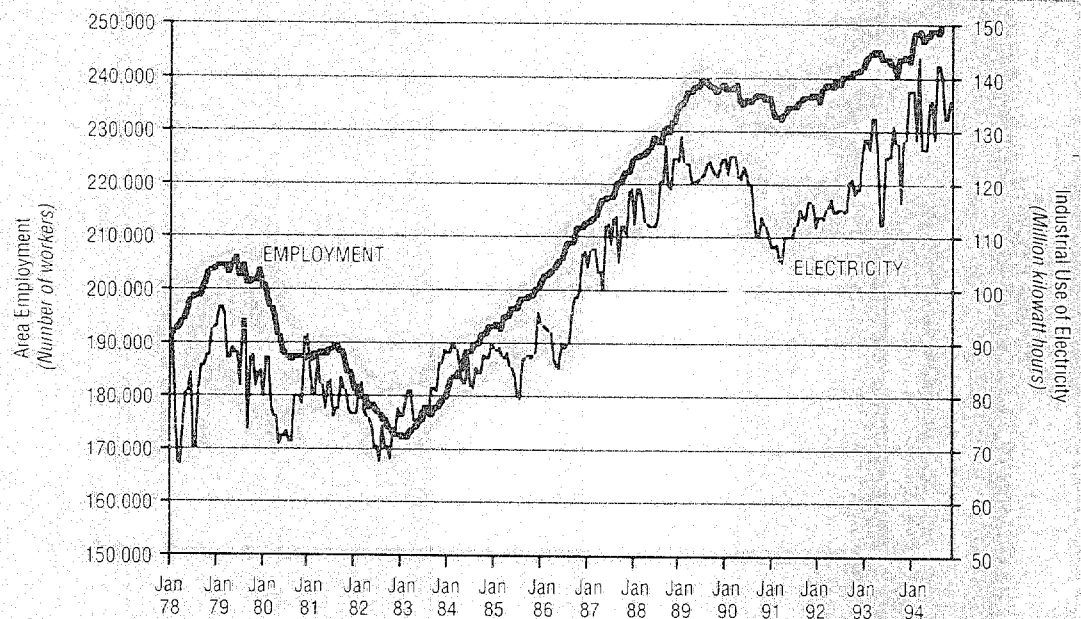
Thomas L. Guthrie

*Professor of Economics, Indiana University-Purdue University at Fort Wayne*

As suggested by the **Figure**, the Fort Wayne area economy is entering 1995 on an upbeat note. The current expansion continues unabated, having added approximately 30,000 jobs since first quarter 1991. Employment currently is almost 250,000. It also appears from the Figure that the 1994 employment data have a good chance of being revised upward when the annual revision occurs in March-April.

Growth in the transportation sector of the national economy has been one of the major contributors to area economic growth over the last two years. Given the interest rate increases already engineered by the Federal Reserve in 1994, it is difficult to envi-

**Figure**  
Fort Wayne Metropolitan Area: Payroll Employment and Industrial Use of Electricity



Data seasonally adjusted by the Community Research Institute, IPFW.  
Source: Indiana Department of Workforce Development and Indiana Michigan Power



sion a third year of increased auto and light truck sales. In fact, total domestic sales are forecast to be flat this year. However, because of forecast increases in export sales and the continuing growth of transplant capacity, growth is still likely for the numerous OEM manufacturers located in northeast Indiana.

Because of interest rate sensitivity, area housing construction in 1995 will probably lag behind 1994 activity. However, *total* construction activity in the area this year is apt to escalate primarily because of increased spending by the business sector. Although it will not appear in county construction statistics, Allen County is likely to be a major beneficiary of the steel mini-mill currently under construction in DeKalb County. The size of the construction project is of a magnitude similar to the GM light truck assembly plant project in 1985.

The areas of forecasted strength for the national economy in 1995 include capital goods and exports. Increased capital goods spending is being driven by both the need to expand capacity and the wherewithal to finance it internally—strong profit growth over the last two years. Increased exports are being driven by what is quickly becoming a rest-of-the-world business expansion. Note that both of these sources of strength are (a) fairly immune—at least in the short run—to interest rate hikes in the U.S. and (b) areas in which Northeast Indiana participates disproportionately.

However, forecasting the Fort Wayne area economy suddenly has become more difficult because it is no longer just a question of projecting a national forecast onto the local scene. The problem is that the area economy has become increasingly supply-constrained. To the extent that supply-side constraints do exist, it makes little difference what the actual growth rate of the national economy is in 1995.

Much anecdotal information suggests that area companies currently are experiencing physical (machine and plant) constraints. These are being addressed (as suggested above), but they are not disappearing instantaneously.

The greater problem in terms of our ability to solve it is an increasingly evident labor constraint—or, probably more precisely, a constraint on adequately educated or trained labor. It may be foolish to consider the end of a labor trend that has served Northeast Indiana (and most of the Great Lakes states) well for almost a century, but that is what I am suggesting. The trend referred to is the movement of mechanically skilled labor from the farm to the factory. The trend is approaching bankruptcy for two reasons. First, there are no excess farmers left. The percentage of farmers in the work force has dwindled from more than 50% at the beginning of the century to fewer than 5% today, depending on how a farmer

is defined. Second, the new world of manufacturing puts as much or more emphasis on numerical skills as on mechanical skills.

In conclusion, the area economy is forecast to continue to expand in 1995—the fourth consecutive year. But the growth will likely be subdued because of the maturation of the national business cycle and the supply-side constraints faced by the area economy. Employment growth is forecast to be 1–1.5%, or 2,000–3,000 jobs. Furthermore, growth will be lower at the end of the year than at the beginning.

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## Evansville

Maurice Tsai

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The Evansville economy grew by 1.4% in 1994, following 2.8 and 2.7% growth in 1992 and 1993, respectively. This growth rate was below the national and state rates. The slowdown was caused by no growth in trade and services and declines in financial activities and local employment. Manufacturing and construction activities were strong enough to offset declines in other sectors.

In 1994, industrial production continued its growth for the third year with a 3.5% rate. The Whirlpool plant went through its retooling process for new product models, but it is ready for production for the coming year. Since the aluminum price ceased its downward slide, the local Alcoa plant should be ready to move forward again. Other major manufacturers in the area have been growing steadily. Continued growth in personal incomes and a low inflation rate have sustained the demand for consumer goods produced in this region.

Trades and services have been a solid base for regional growth for many years. But in 1994, for the first time, this sector showed no growth. From August 1993 to August 1994, retail employment fell by 400 and service employment by 200. One possible cause could be restructuring and adjustments in retail trade. The health-care sector, however, maintained its steady activities. Car sales were also brisk throughout the year. Thus, no growth in the trade and service sector provides no real concern for alarm.

Despite slowly rising interest rates, construction activities registered 9.3% growth in 1994. Housing construction was active at least in the first half of the

**Table**  
**Evansville Area Business Index**

<i>Period</i>	<i>Industrial Production</i>	<i>Trade &amp; Services</i>	<i>Construction</i>	<i>Transportation</i>	<i>Finance</i>	<i>Employment</i>	<i>Composite Index</i>
<i>Quarterly Index</i>							
1Q93	126.84	135.41	120.14	104.84	137.12	122.51	127.81
2Q93	130.43	133.84	120.99	104.40	136.15	121.71	128.39
3Q93	126.96	132.39	112.78	109.76	136.12	122.66	126.80
4Q93	127.79	136.00	114.65	107.88	136.48	125.53	128.76
1Q94	127.36	134.77	129.81	107.65	132.76	122.66	128.84
2Q94	131.28	133.20	125.88	105.45	132.52	121.85	129.38
3Q94	134.92	129.20	127.52	109.32	133.34	121.85	129.09
<i>Annual Index</i>							
1990	124.06	128.82	112.62	112.25	121.64	118.35	122.11
1991	121.32	129.08	98.19	106.86	127.54	118.85	121.18
1992	5.01	131.10	112.24	106.62	128.52	121.13	124.56
1993	128.00	134.41	117.14	106.72	136.47	123.10	127.94
1994 (est.)	132.34	133.13	128.08	107.48	133.32	122.43	129.75
<i>Annual Growth Rates (%)</i>							
1990	0.4	5.8	-5.2	-1.4	-1.0	1.5	1.4
1991	-2.3	0.2	-12.8	-4.8	4.9	0.4	-1.4
1992	3.1	1.6	14.3	-0.2	0.8	1.9	2.8
1993	62.4	2.5	4.4	0.1	6.2	1.6	2.7
1994 (est.)	3.4	-0.1	9.3	0.7	-2.3	-0.5	1.4
1995 (proj.)	3.5	2.2	3.0	1.0	1.3	1.3	2.4

*Source: School of Business, University of Evansville*

year. Business construction was very active in the third quarter. Construction employment rose more than 8% during the year.

The transportation sector increased its activity level in 1994 compared to the previous three years. Air passenger loading increased 1.3% in the first nine months. This momentum should continue in the coming year.

Financial activities had a good year in 1993, with a 6.2% growth rate. However, activities in 1994 fell 2.3% because of rising interest rates. Bank deposits also fell 2.3% (after inflation)—the first decline since 1990. A revival of growth is expected for 1995.

Local employment was strong in the first half of 1994, but lost ground in the third quarter. From August 1993 to August 1994, service-producing employment declined by 1,400, while goods-producing employment rose by 300. The employment index for 1994 will be 0.5% below the 1993 level. The local unemployment rate averaged 5% in 1994 and will probably fall under 5% in 1995.

The national growth rate in 1995 has been forecast at 2-2.5%. The Evansville economy should be able to grow at 2.4%, following a slow 1994. Uncertain factors may modify this projection. For example, if the riverboat casino activities should begin in late 1995, Evansville would receive a new economic boost in terms of income, output, and taxes to the local government. The Republican legislators in Washington and Indianapolis will likely affect fiscal conditions in the local economy and government finance.

In 1995, the industrial sector will again play the leading role in regional economic growth. Most of the major manufacturing firms in Evansville are positioned to grow for another year. Construction activities will maintain growth, though at a slower rate of 3% or better. Trades and services will regain stability and grow at 2.2% or better. The financial sector will grow even though the interest rates are expected to rise another 0.5 or 1%. Regional employment will grow or at least be stabilized, and most sectors in the region are ready to experience moderate growth.



## Anderson

Barry Ritchey

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The past 12 months have not been a normal time for Madison County. Although some of the changes had been expected, their magnitude is indeed surprising. In evaluating the recent performance and looking ahead to the coming year, three areas warrant attention: local construction, the labor market, and local income.

Local construction is best understood by dividing this sector into residential and nonresidential. In the housing market, 1993 proved to be a good year, with 295 permits issued in the county for the entire year. We would have to go back to the 1970s to find comparable figures. The housing sector pumped more than \$29 million dollars into the local economy. But if 1993 was a good year for housing, we would have to say that 1994 has been a very good year. By the end of August, housing permits were ahead of the year before by 50. With 246 permits issued, \$25 million dollars has been pumped into the economy. This unusual amount of activity has occurred despite the recent rises in interest rates.

Nonresidential construction also had a good year in 1993. The \$10.8 million in permits issued was the best year locally since 1985. But in describing the performance of 1994, we may run out of adjectives. In the first eight months of this year, more than \$47.5

million dollars in permits were issued. This is more than the yearly totals for the past seven years combined. Major projects such as the Meijer store, the Anderson race track, the Payless supermarket on the north side, and expansion at Anderson University fueled the construction market.

Combining the two construction sectors, a total of \$73 million dollars in permits was issued in just the first eight months of the year. This activity has been an important boost to the local economy because construction tends to be high in value added. It also comes at a time when the labor market is not showing much dollar strength.

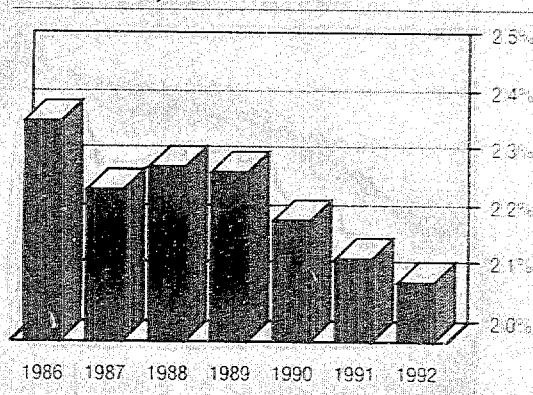
The unemployment figures for Madison County look good for 1993 and the first eight months of 1994. In 1993 we averaged 6.3%, which was about half a percentage point below the national average and slightly above the Indiana average. In 1994 we averaged 5.75% over the first eight months—still half a point below the national average. However, we begin to see some weakness in the numbers when we look at specific employment changes.

In the nonmanufacturing sector we gained more than 700 jobs in 1993. But in manufacturing we lost more than 1,400 jobs over the same time period. The reason the unemployment rate fell is because the jobs that were lost were due to retirement rather than layoffs. In the past, Madison County has suffered job losses in manufacturing during economic recessions. With the work force growing older, it now seems apparent that retirement will also be a major source of job loss. The dollar weakness behind these numbers is revealed in the mix of employment gains and losses. The jobs lost are in the high value-added manufacturing sector; the jobs gained are in the low value-added nonmanufacturing sector. Although retirees still contribute much to the local economy, this type of long-term transition may not bode well for local income.

Personal income is still rising locally into the 1990s. Despite job declines in manufacturing, payrolls remain high. The two most logical explanations lie in overtime and higher nominal wage rates. The relatively high income of retirees has also had an impact on rising personal income. However, there is a serious caveat to this encouraging news. Our share of state income has steadily been declining, likely reflecting the changing mix in employment away from the high value-added jobs. The **Figure** illustrates the most recent trend in our local share of state income.

Whether or not 1994 will turn out to be a pivotal year remains to be seen. The strong construction activity will certainly help offset the job losses in manufacturing, but the jobs ultimately created by these projects do not appear to be high in value added.

**Figure**  
**Madison County Share of State Income**



In 1995 I see little room for improvement in the unemployment figures. There appears to be very little slack in the local labor market. The situation in manufacturing may well be an issue of demographics, with retirements set at a pace determined by the mix of workers' ages. Local income is likely to remain high, with overtime continuing at the two GM plants and construction activity showing no immediate signs of slowing. For local construction, it would seem we have been following the national trend of ignoring higher interest rates. The coming year may well turn out to be another good one, since the desire to invest and live in Anderson appears to be stronger than the rising cost of funding represented by higher interest rates.

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## Kokomo

**Dilip Pendse**

*Professor of Economics, Indiana University Kokomo*

Kokomo's economy deserves an A+ for its overall performance during its sesquicentennial year. As the 150th birthday celebration wound down, a parade of economic statistics was calling for loud applause: the rebirth of the manufacturing sector, buzzing factories, the nation's most affordable housing market, surging single-family home construction, a perky job market, a growing retail sector, rising incomes, and, above all, the smiling faces of job holders.

The year just gone by was the best since 1978. The economic progress registered was phenomenal in a city that hit depression-like conditions in the early 1980s. During the severe downturn, which lasted 4-5 years, some pessimists even predicted the death of Kokomo's manufacturing machine. Now the manufacturing sector has reasserted itself as the locomotive of the area economy. Despite community efforts to diversify the economic base, manufacturing remains Kokomo's core sector, accounting for 42% of payroll jobs—the second highest in Indiana.

### The Manufacturing Sector

Kokomo's two largest employers, the Chrysler Corporation and GM's Delco Electronics, provided a much-needed boost to the area economy. The most uplifting news came from cash-rich Chrysler, which unveiled plans to pour \$600 million into modernization and expansion of its two local plants and injected nearly \$40 million into the Kokomo economy in the form of

profit-sharing bonuses to its employees—the best ever in anyone's memory. And there is more. Chrysler not only hired 200-300 workers at its transmission and casting plants, but also promised to retain more than 1,000 high-paying jobs and add a few hundred more in the immediate future. For the first time, the combined work force at the huge Chrysler complex exceeded Delco's local work force.

For its part, Delco operated in high gear and provided positive news. In February 1994, it unveiled plans to spend \$24 million on converting and upgrading its circuit board fabrication operation, which will help retain 360 high-wage jobs. In addition, the electronics giant accommodated 115 idle workers from downsized or closed GM operations. Businesswise, it was a very good year for Delco. Its sales volume each quarter totaled more than \$1 billion, and it registered hefty double-digit gains each quarter in revenues, net incomes, and operating profits. Delco also posted gains in non-GM business. It certainly is making headway in transforming itself from the electronic arm of GM into a global auto electronic parts supplier.

### Perked-up Job Market

Kokomo's job machine created 1,700 new jobs during the first 11 months of 1994—the third consecutive year of payroll growth. Although the job gains were broad-based, the service sector accounted for 60% of jobs, with the rest coming from the goods-producing sector. Within the service sector, government posted the largest percentage gain, followed by retail. Buoyed by the rising demand, the goods-producing sector hired 60 workers per month and beefed up payrolls by 700 during January-October 1994.

Unlike in the early 1980s, when many people bid goodbye to Kokomo, more people now seem to be flocking to the city in search of jobs. The labor force swelled to a new high of 45,230 in October—the best since 1979. On the average, 43,858 people per month remained in Howard County's labor force during January-October. This was 3% higher than the same period in 1993, and 11.5% above the level reached in 1990. A net addition of several hundred new jobs certainly helped nudge the unemployment rate down to a new monthly low of 5.4%, compared with 5.7% in 1993 and 8.7% during the recession year of 1991. The low unemployment is especially noteworthy given the ballooning labor force. It bodes well for Kokomo's revved-up job machine. With the average rate below the 6% level, Kokomo's economy certainly operated in the full employment zone in 1994.

In the early 1980s, layoff notices were routinely served for lack of work. In the 1990s, however, more people are getting jobs, and factory workers are logging record overtime. In April, the average factory work week in Kokomo was 49.1 hours, which repre-



sented a new all-time high both locally and statewide. Instead of complaining about lack of work, factory workers complained about excessive work. Local factories kept humming to keep up with the rising demand for products. The average work week scaled a new peak of 47.3 hours during January–November 1994, compared with 44.7 hours during the same period in 1993.

With nearly ten hours of overtime weekly pay, factory workers piled up a bucketful of money. Howard County factory workers earned \$1,188 per week during first quarter 1994, the highest in the Hoosierland and the best ever in the county's history. The county's first quarter weekly earnings remained 81% above the state average. What is interesting is that at the current pay scale the average factory worker in Howard County could pocket \$57,000 in 1994. And some employees, working seven days a week, could earn in excess of \$100,000.

Speaking of income, the average annual pay in Howard County stood at \$30,577 in 1993, which was 30% higher than in 1984. The gap between the aver-

*"Good times in manufacturing in recent days have sparked growth in Kokomo's retail sector, much of which is located in the 15-mile stretch of U.S. 31."*

age annual earnings in manufacturing and retail trade sectors is mind-boggling. In 1993, for example, employees in the manufacturing sector earned a whopping average annual income of \$46,646, while their counterparts in the retail trade sector earned \$11,640. This is a gap of 300%! The median spendable income in Kokomo was \$35,467 in 1993, fifth best in the state and 113th nationwide. Although Kokomo's state ranking remained unchanged from a year ago, the national ranking moved up 15 places. Households in Kokomo earning at least \$150,000 in spendable income increased by 100 in 1993, to 300.

#### **Housing and Construction**

A better job market and rising incomes fueled growth in the housing sector. The number of building permits issued, excluding sign permits, totaled 821, surpassing last year's total by 30%. Sixty-two percent of all building permits issued through November 1994 were for residential construction. The combined dollar value of all permits issued totaled \$87.3 million, compared to \$50.2 million in 1993. Among the major construc-

tion plans that got under way were 286 single-family dwellings, 40 new businesses or additions to existing businesses, 30 commercial storage units, 30 multi-unit housing complexes, and 10 restaurants.

Single-family home construction weathered a near stampede as the number of permits issued through November surged 31% above the 1993 total and remained the second highest since the boom period in 1979. The construction value registered on these permits averaged \$123,574—a new high. Certainly upscale and roomier houses are being built in Kokomo. Based on past trends, it is reasonable to predict that a total of 305 single-family home building permits should be issued for 1994—47% more than in 1993. The predicted number, however, will be 13% below the peak year of 1978.

Kokomo again received nationwide publicity for its affordable housing. In the National Association of Home Builders' quarterly survey, Kokomo's housing market was ranked the third most affordable in the country in the first quarter and the most affordable in the second quarter. The market for existing homes held up pretty well because of the strong economy, lower prices, and the proliferation of adjustable-rate mortgages. The resale of homes during the first nine months of 1994 totaled 766, just a shade higher than the year before. The dollar volume of existing home sales totaled \$50 million, which was the same as a year ago. About 60% of homes sold were priced below \$70,000, and the median price rose continuously from \$52,000 in the first quarter to \$61,250 in the third quarter, for a gain of 18%.

#### **Growing Retail Trade Sector**

Good times in manufacturing in recent days have sparked growth in Kokomo's retail sector, much of which is located in the 15-mile stretch of U.S. 31. The retail trade sector, with more than 600 establishments and employing 9,200 people, posted a total sales volume of \$920 million in 1993. Last year's retail sales per household in Kokomo ranked fourth among the state's 11 metropolitan areas and 107th nationwide.

The occupancy rate in the existing shopping malls has increased in recent years. Not only that, new malls have been built. Kokomo now has a variety of nationally known retail and wholesale stores, along with well-known fast-food chains and restaurants.

Meijer broke ground for its 225,000-square-foot megastore—roughly half the size of Chrysler's casting plant! And after rehabilitating and refurbishing old buildings uptown, widening thoroughfares, and sprucing up the area, the city bagged Walgreen's, the nation's biggest, 93-year-young discount store. Employing about 25 people, Walgreen's opened for business in November in the heart of uptown Kokomo.

Along with all kinds of merchandise, the new store has introduced Kokomo's first drive-in pharmacy service. With this acquisition, Kokomo's uptown area is poised to recapture some of the customer traffic lost to malls in the outlying areas and boost the marketability for future retail businesses there.

#### **Hellos, Goodbyes, and Other Developments**

While businesses such as the South Side Feed Store, Hynd's Pharmacy, Ponderosa and Hardee's on the northwest side, Magna Tek, Pittco, and Ameritech's service center actually closed or announced plans to depart in 1995, others—Discovery Zone, Dunham's discount store, Walgreen's, Ryan's Steakhouse, Checker's, Kenny Rogers' Roasters, Arby's second store, Burger King's third store, Olive Garden, Ruby Tuesday, Pastarrific (new location), Applebee's restaurant, and many more—have arrived or have announced plans to arrive soon in Kokomo. Another shopping center will open on the rapidly developing northeast side. And Holiday Inn, which bid farewell to Kokomo in the early 1980s, is soon to rejoin the crowded field of inns along U.S. 31.

Skyline Airlines, based in Milwaukee, announced plans to bring commercial air service to Kokomo. Also, Power Systems Engineering, a small designer and manufacturer of diesel generators, unveiled plans to move its Elkhart-based operation to Kokomo. But in October, the 52-year-old, 3,200-acre Grissom Air Force Base officially became the Grissom Air Reserve Base. Gone are the active-duty personnel, along with the noisy KC-135s and their trails of white smoke in blue skies.

The banking and finance sector, which employs about 550 people, registered several changes in the area, with new branches, mergers, and acquisitions. The health-care sector provided mixed news. St. Joseph Hospital laid off 120 employees early in the year, and Howard Community Hospital later announced plans to trim its staff roster by about 10%. However, both hospitals unveiled capital improvement plans totaling \$10 million.

#### **What's in the Karma for 1995?**

Will the boom times roll for yet another year in Kokomo? The economic radar shows no imminent signs of a downturn. On the contrary, the same factors that spurred growth in 1994 will also help the local area in 1995. The U.S. economy is unlikely to run out of steam this year. Auto production levels are not apt to decline dramatically. The retail sector will remain peppy because of rising incomes, more jobs in manufacturing and retail, and an inflow of spenders from the outlying areas. The housing sector, however, will likely feel the adverse impact of rising interest rates.

The local auto parts plants will add to their employment rosters and share their riches with their employees. For the third consecutive year, Chrysler workers will earn profit-sharing bonuses, which should total \$33.5 million, or an average of about \$5,000 per employee—16% more than what they earned in January 1994. Like last year, Delco employees should also earn average bonus amounts in the range of 4–6% of their base salary.

Meijer-mania will dawn in Kokomo early this year. The megastore will employ 700 to 800 people, more than twice the work force at the rival Wal-Mart. It will replace Haynes International, one of Kokomo's oldest manufacturing operations, as the area's third largest employer. With an estimated payroll of at least \$10 million, Meijer will be the brightest and biggest jewel in Kokomo's retail crown, luring shoppers from a 20 to 25-mile radius area.

For the first time, Kokomo's labor market will remain tight, with "Help wanted," "Now hiring," and similar signs a common sight. Small businesses offering minimum wage will face difficulties in maintaining a stable work force of good employees. In order to lure good workers, some businesses will likely end up offering such incentives as a sign-up bonus, flexible hours, and hourly wage rates in the range of \$6.00–\$7.00. Local manufacturing operations will create 100–200 new jobs. All told, about 1,200 new jobs, 80% of them in the retail sector, will be filled in 1995. The fourth consecutive year of job growth should nudge the unemployment rate down into the range of 4.5–6.5%. The average unemployment rate in Howard County in 1995 will hit a record low of 4.7%. Overtime in manufacturing will decline to about six hours per week.

The housing market should show signs of buckling under the pressure of higher interest rates. The buoyant single-family home construction market of 1994 will show signs of slowing down. The number of building permits issued for single-family dwellings should fall 15 to 20% below the 1994 level. Permits issued for remodeling homes will remain high. The number of permits issued for multi-unit homes should decline considerably. Altogether, the total number of permits issued should remain 10–15% below the 1994 level. The market for existing homes in 1995 will post a 5–10% decline over 1994.

To sum it up, the economic fireworks that dazzled Kokomo during its sesquicentennial year will continue to do so in 1995, but with less glitter and zip than the year gone by. The groundwork has been laid for a strong, stable, and vibrant economy in the latter half of the 1990s. The message from the busiest 15-mile stretch of U.S. 31 running through Kokomo is bold, clear, and upbeat: No more bumpy ride.



# South Bend/Mishawaka-Elkhart/Goshen

John E. Peck

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This year-end 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 South Bend's Bureau of Business and Economic Research (BBER).

The **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 base year 1986 values. The latest month for which all indicators were available at the time of writing was September 1994. Note that comparative indicators along with percentage changes are given for August and September 1994. To highlight longer-term trends, the same figures are also given for September 1993.

## South Bend/Mishawaka

September employment in the South Bend/Mishawaka area rose to a near record high. Only June's index of 117.8 has been higher. When one takes a longer view back into the area's past, the recovery in the mid-1960s from the demise of Studebaker, the

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

	SOUTH BEND/MISHAWAKA					ELKHART/GOSHEN				
	September 1994	August 1994	September 1993	% Change From August 1994	% Change From September 1993	September 1994	August 1994	September 1993	% Change From August 1994	% Change From September 1993
<b>Employment Indicators</b>										
Nonagricultural employment	117.2	116.9	114.2	0.3%	2.6%	121.5	120.8	117.0	0.6%	3.8%
Manufacturing	91.1	92.0	89.5	-1.0%	1.8%	117.9	116.5	112.1	1.2%	5.2%
Nonmanufacturing	124.5	123.9	121.2	0.5%	2.7%	125.6	125.7	122.5	-0.1%	2.5%
Unemployment Rate	4.0%	4.2%	6.2%	---	---	3.3%	3.9%	6.0%	---	---
Help Wanted Advertising	116.6	112.5	83.9	3.6%	39.0%	168.6	150.3	132.1	12.2%	27.6%
<b>Utilities<sup>2</sup></b>										
Industrial Electricity Sales	105.4	113.4	101.3	-7.1%	4.0%	171.1	128.2	112.7	33.5%	51.8%
Commercial Gas Sales	103.2	103.0	94.0	0.2%	9.8%	143.6	110.5	66.0	30.0%	117.6%
Industrial Gas Sales	45.2	46.8	42.3	-3.4%	6.9%	63.2	59.4	52.7	6.4%	19.9%
<b>Car and Truck Registrations</b>										
New Passenger Cars	60.9	49.4	57.9	23.3%	5.2%	62.7	50.8	57.8	23.4%	8.5%
New Trucks	106.5	77.3	87.7	37.8%	21.4%	93.9	91.5	90.5	2.6%	3.8%
<b>Bankruptcies - South Bend Division<sup>3</sup></b>										
Business	53.0	34.3	100.0	54.5%	-47.0%	(Included in South Bend Division)				
Nonbusiness	173.8	183.5	183.5	-5.3%	-5.3%					
<b>Housing Construction Data<sup>4</sup></b>										
Estimated Value of Permits	171.2	169.1	243.7	1.2%	-29.7%	111.1	185.6	263.9	-40.1%	-57.9%
Number of Permits Issued	140.3	127.5	170.4	10.0%	-17.7%	175.2	245.4	148.9	-28.6%	17.7%
Average Value per Permit	154.6	131.7	141.7	17.4%	9.1%	57.0	78.2	160.8	-27.1%	-64.6%
<b>Residential Real Estate Data</b>										
Number of Active Listings	1,728	1,813	1,415	-4.7%	22.1%	1,214	1,300	1,533	-6.6%	-20.8%
Average Days Listed	61	66	78	-7.6%	-21.8%	83	90	105	-7.8%	-21.0%
Average Market Price	\$76,348	\$80,629	\$76,142	-5.3%	0.3%	\$79,623	\$79,880	\$78,603	-0.3%	1.3%
% of Sale to List Price	96.0	96.0	98.5	0.0%	-2.5%	97.0	96.0	96.0	1.0%	1.0%

NOTE: All figures except for unemployment rate and residential real estate data are seasonally adjusted index numbers with base year 1986 = 100.

<sup>1</sup>St. Joseph and Elkhart Counties.

<sup>2</sup>South Bend Tribune and Elkhart Truth.

<sup>3</sup>Electricity Sales are cities of South Bend and Elkhart. Gas sales are St. Joseph and Elkhart Counties.

<sup>4</sup>South Bend Division comprises Cass, Elkhart, Fulton, Kosciusko, LaPorte, Marshall, Miami, Pulaski, St. Joseph, Starke, and Wabash Counties.

<sup>5</sup>St. Joseph County, excluding cities of South Bend, Mishawaka, Oshtemo, Walkerton, and New Carlisle; Elkhart County, excluding cities of Elkhart, Goshen, Nappanee, and Millersburg.

community's then largest employer, shows a steady gain in overall employment to the present. Like this September's performance, however, when the gain in nonmanufacturing outpaced the loss in manufacturing, the structure of the area economy in 1994 is much different from what it was in 1964. Today we see much less heavy industry and much more service-oriented business.

From September 1993 to September 1994, the absolute numbers show an increase in overall employment of 3,100 jobs. Four hundred of these came in manufacturing, 400 in construction, and the remaining 2,300 in service-producing occupations. Other South Bend/Mishawaka indicators for September were generally quite favorable. New car and truck registrations rebounded from a two-month slide, the number of new housing permits issued rose 10% to 140.3, and residential real estate indicators were encouraging.

#### **Elkhart/Goshen**

As was the case in neighboring St. Joseph County, Elkhart/Goshen employment recorded a solid gain in September. This was particularly true in Elkhart County's manufacturing sector. About 69% of the 4,200 jobs that were added in the county from September 1993 to September 1994 came in manufacturing, and a significant proportion of these were in the transportation equipment subsector, which includes the area's dominant recreational vehicle industry. It is clear now that 1994 will turn out to be the best year for the RV industry since 1978.

This strong labor market is also reflected in the help wanted advertising index, which reached 168.6 in September. In that month, 68.6% more help wanted ads were counted than in an average month of the base year 1986. Nearly every other September Elkhart/Goshen indicator could also be viewed in a positive light. Energy sales were up and new car and truck registrations rose. Existing housing sales activity was favorable. Only the number of new housing permits issued dropped, and that was from a phenomenal reading of 245.4 in August to 175.2 in September.

#### **Outlook**

Both area economies looked quite strong as they moved into the fall months of the year. This strength was obviously being powered by the persisting strength of the national economy, which has exceeded that expected by most economic forecasters. The Fed's continuing policy moves to raise short-term interest rates is a recognition of that strength and an anticipation of resulting inflationary pressures. We expect these moves to ultimately slow the pace of growth, but not to the extent at which the economy is

pushed into recession. The coming year should be another one of positive growth, with notable job growth resulting as well. In St. Joseph County, that should translate into about a 2% gain in employment. In Elkhart County we expect the gain to be in the 3-4% range.

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## **Terre Haute**

**Marvin Fischbaum**

*Professor of Economics, Indiana State University*

It may be utterly unscientific, but Terre Haute has the *feel* of a community enjoying increased prosperity. Packed parking lots greet visitors to the rapidly expanding assortment of family restaurant chains, which provide a notch higher quality at a notch or two higher price than do fast-food establishments. Those in turn have largely replaced banners proclaiming "Value menu" with signs declaring "Help wanted"—sometimes at (perish the thought!) "competitive wages." In the newspaper, help wanted solicitations are clearly more numerous and more varied. In middle-class neighborhoods, "For sale" signs have all but disappeared, replaced in some measure by signs of home improvement contractors.

On a slightly more formal level, a recent survey conducted by William Minnis, director of the Center for Research and Services at Indiana State University, also pointed to an improving economy with a concomitant tightening of the labor market. Responding firms were fully twice as likely to have increased employment in the past year as to have cut back. Employment plans and sales expectations for the coming year were even more expansionary. According to Minnis, they were the most optimistic seen in the ten years he has conducted the survey. In the past, the business leaders surveyed expressed concern with the negative image of Terre Haute and with perceived fragmented leadership in economic development efforts. This year the focus of concern shifted to difficulty in securing qualified employees.

What makes this interesting is that data compiled for the U.S. Department of Labor fail to confirm that the local labor market has tightened, or even that employment has increased. While the MSA unemployment rate has trended downward during the year, it essentially repeated the pattern of 1993, and year-to-year comparisons have been flat. For much of the



year, Terre Haute—with an unemployment rate averaging in excess of 6%—recorded the highest rate of any of Indiana's 13 metropolitan areas. This contrasts with the situation during much of 1990 and 1991, when Terre Haute MSA unemployment was the fourth lowest in the state. Year-to-year comparisons of establishment employment have been steadily negative for two years, with September 1994 employment 2,100, or 3.2%, below September 1993. Year-to-year employment comparisons using CPS data turned negative in March, with the September-to-September decline registering 3,100, or 4.8%.

Which is it? Is the Terre Haute area facing a growing shortage of qualified labor? Or is the supply of jobs shrinking? Peggy Wessol, Region 7 labor market analyst, was able to provide some insight. In recent years the client list for the region at the state employment office has been flat at approximately 5,000; this year the number dropped to about 3,000. Employers increasingly complain that job candidates are not fully qualified—implying that unemployment is increasingly structural. This perception, however, may be based on risen expectations. Where employers once undertook on-the-job training, they have come to expect that the educational system, or PIC, or the State of Indiana, will provide that training.

Construction activity and real estate markets also present mixed signals as to the state of the local

*"Although educated individuals do find jobs here, they do so in numbers that are far smaller than those who leave."*

economy. In the face of rising interest rates, housing demand remained robust. The number of Multilist homes available for sale in Vigo County declined, as did the average number of days on the market. Average selling price in third quarter 1994 was 6% percent higher than the corresponding period in 1993. However, building permit data presage a decline in construction activity. Year-to-year comparisons of cumulative permits issued over the preceding 12 months peaked in April, and have since been trending sharply lower. For the value of residential construction, 48% in April declined to -10% in September. In terms of the number of units, the decline was from 65% to -8%. Nonresidential construction moved from 98% to 22%.

The coming year will see new construction and additional jobs, in concert with most of the industry. Great Dane has been producing truck trailers full tilt at

its Brazil facility. And the company has announced that it will renovate the long-idle J.I. Case plant in Terre Haute and employ 400 workers there. Applied Extrusion Technology, which recently purchased the plastic packaging business from Hercules, will invest \$45 million and employ an additional 45 workers in the production of polypropylene film.

Some jobs have left the region, and some are about to leave. Indiana Sportswear in Clinton announced a reduction in force from 175 to 12. It lost its two major contracts to suppliers elsewhere in the U.S., and announced that apparel firms employing union labor can no longer compete. Reuben H. Donnelley, the largest independent producer of telephone directories, will open a new facility in Raleigh, North Carolina in November 1995, and will phase out its Terre Haute operation by March 1996. At first blush this seems like an old story—"Firm Moves South in Search of Cheap Labor." However, Raleigh is a booming metropolis, and labor is hardly cheap there. Donnelley President Frank R. Noonan indicated that the business is changing and that the new facility will pave the way for the twenty-first century. At Terre Haute most employees keyboard input. New technology is eliminating much of the work, and increasingly fewer but more technically qualified personnel will be required. Donnelley cited proximity to customer base as well as to the technical resources of North Carolina's "Research Triangle" as the reason for its move.

When local employers complain about the declining quality of the local work force and cite possible deficiencies in education, the focus of their concern is the high school graduate who does not go on to, or quickly drops out of, college. These people constitute the great mass of the local labor force. Educators argue, quite plausibly, that the quality of this group has been falling, but simply because an increasing percentage of high school graduates do go on to college. Those terminating education with a high school diploma have become more and more concentrated in the middle to lower reaches of the barrel.

The Donnelley move spotlights a more troubling concern. Terre Haute has long exported the bulk of its children with college educations. Jobs using their skills and abilities were not and are not available locally. Although educated individuals do find jobs here, they do so in numbers that are far smaller than those who leave. Why are employers of highly educated workers not sufficiently attracted to the Terre Haute region? Continued prosperity in the long run requires an answer.

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# Columbus

Patrick Michael Rooney

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The Columbus area employment base has experienced tremendous growth for the past four years, especially for the first three quarters of 1994 (see the **Table**). The number of people employed grew 21% during those quarters, compared to the same period in 1993. Employment in third quarter 1994 was 16% greater than the employment average for third quarter 1993.

To demonstrate how much faster than usual employment has grown during this period, let us examine the historical averages. For the past two decades (1974-94), employment growth has averaged 2.4% per year. From 1974-80, employment grew 3% per year, on average. The 1980s averaged 1.2% per year. From 1990 to 1993, the growth rate picked up dramatically to 4.8% per year.

While the unemployment rate during the third quarter averaged a very low 3.5%—down from 4.3% in the first quarter and from 4% in the second quarter—it was up almost one-half of a percentage point from the year before. This is because of the 35% increase over third quarter 1993 in the number of workers unemployed for July-August 1994. This is

somewhat surprising, given the job growth and the low unemployment rate. Several local business people have said that the local unemployment rate "feels" lower than 3.5%.

No apparent explanation for the 35% increase in the number of unemployed can be found in the unemployment insurance data. The number of initial unemployment claims in the third quarter (248) was down slightly (1.2%) from a year before, and third quarter data were 20% lower than those of the second quarter. Even more baffling is the fact that the number of continued claims in third quarter 1994 (1,586) was down 27% from third quarter 1993 and 42% lower than in the second quarter of 1994.

The 3.5% local unemployment rate, though higher than a year ago, compares very favorably to the 6.0% national unemployment rate for the third quarter and the 4.7% average in July-August for the state unemployment rate. It should be noted that the national rate fell from 6.7% a year ago, but the state's unemployment rate is unchanged.

The effects of the Fed's preemptive strike against incipient inflationary pressures and/or expectations is clearly seen in the local residential construction market. Residential construction started 1994 with a bang. Estimated value of permits issued in the first quarter averaged \$4.3 million per month and \$118,900 per permit. Monthly construction was up 16.7% from the end of last year and 54% from a year ago. While residential construction continued to average an impressive \$4.5 million per month in the second quarter, the pace fell to \$2.6 million per month for July-August. This represents a 42% fall from the second quarter and a 45% decline from the year before.

The slowdown in residential construction has been more than offset by a huge jump in nonresidential construction this year. For the first eight months of the year, nonresidential construction averaged \$1.98 million per month, compared to \$650,000 per month for the same period last year.

The real estate market has continued to appreciate rapidly. Of those houses that sold in third quarter 1994, the average sale price was \$106,071, which is up 18% from a year ago and an incredible 13% from second quarter 1994. The number of houses sold in the third quarter was 281, and the average number of days on the market was 107; both are the same as the second quarter and somewhat lower than a year ago. Sellers continue to get top dollar; they received 97% of the list price in both the second and third quarters of this year, which is down slightly from an unsustainable 100% sales to list price ratio a year ago.

During this time, housing in Columbus has remained quite affordable. The Housing Affordability Index (HAI) dropped 11.5% from 207 in the first quarter to 169 in the second. This fall was due to both

**Table**  
**Columbus Area Employment Data**

Year/Quarter	Unemployment Rate (Mean)	Number Employed (Mean)	Average Annual Employment Growth Rate
1974-1994	6.7	27,600	2.4%
1974-1979	5.2	25,500	3.0%
1980-1989	8.2	27,700	1.2%
1990-1994	5.3	30,400	4.8%
1Q93	5.6	29,300	-0.8%
2Q93	4.9	31,400	2.2%
3Q93	3.1	33,200	8.5%
1Q93-3Q93	4.5	31,300	3.4%
1Q94	4.3	36,700	46.6%
2Q94	4.0	38,100	19.1%
3Q94	3.5	38,500	15.8%
1Q94-3Q94	3.9	37,800	20.5%

*Note: The local number of people employed and unemployed is based on county residents, not where workers are employed.*

an increase in mortgage interest rates and a 16% rise in the median home price from \$73,000 to \$84,900. The state's HAI as a whole also declined from 197 to 184 in the same period. Though Columbus is no longer more affordable than the rest of the state, it is still more affordable than the rest of the country. The national HAI in the second quarter averaged 131—down 11 points.

Thirty-year fixed mortgage interest rates are currently more than two points higher than they were a year ago, which would mean an additional \$150 per month on a \$100,000 mortgage. Given that local housing values have been appreciating at approximately 1.5% per month for the past year, a family able to afford a home worth \$100,000 a year ago could purchase only an \$85,000 home today, which would have sold for \$74,000 (or less) a year ago.

Both Cummins and Arvin had strong third quarters. Arvin's total net sales in third quarter 1994 were 12% above those of third quarter 1993, and net earnings were up 32%. For the first nine months of 1994, total net sales were up more than 8% over 1993, and net earnings were 3% lower. Cummins boosted its net earnings 52% from third quarter to third quarter on a 17% increase in net sales. Likewise, its net earnings for the first nine months were up more than 40% over the same period in 1993, on sales growth of slightly more than 10%.

#### Forecast

Using a simple econometric model, we can try to predict changes in the local unemployment rate associated with changes in the national unemployment rate. Since 1974, an increase of 1% in the national unemployment rate is associated with a 1.8% increase in the local unemployment rate, on average. Because the national rate fell from an average of 6.7% in third quarter 1993 to 6% for the same quarter this year, we can expect the local rate to fall by approximately 1.25%, compared to a year ago. It should be noted, however, that because the local unemployment rate is already quite low, this relationship may not hold for such low rates, especially since the local rate was hovering around 3% a year ago. On the other hand, this overall relationship between the local and national unemployment rates does reflect the procyclical nature of our local economy. This means that because much of the local employment base is dependent on durable goods manufacturing, the local economy tends to move in the same direction as the overall economy, only in a more pronounced fashion.

Initial unemployment insurance claims nationally is also a statistically significant predictor of the local labor market. Because the unemployment insurance claims nationally are down 11% from a year ago and were 5% lower in the third quarter than in the second

quarter, this predictor suggests a downward movement of the local unemployment rate and an increase in local employment.

Because so much of our local economy is driven by the demand for durable goods, it is also sensitive to fluctuations in interest rates. Another econometric model found that increases in the federal funds rate is associated with small but significant increases in the local unemployment rate and decreases in local employment. Because the Fed has raised interest rates several times this year, we can expect that some of the local growth will be weakened.

Overall, I am forecasting a continuation of the current recovery. I anticipate a 75% probability that the economy will continue to experience moderate, sustainable growth of about 3% for the next year or so. This implies continued downward pressure on the national and local unemployment rates but relatively little pressure on inflation.

There is a small chance (10%) that the economy will ignore the interest rate increases and grow more rapidly than expected. If this happens, the bond market will react unfavorably, and long-term interest rates will be driven higher fairly quickly as investors brace for an increase in inflation. This would soon choke off further excessive growth.

Finally, there remains a small probability (15%) that the interest rate-sensitive sectors, which have provided almost 80% of the growth this past year, will react violently to the current or any future interest rate increases. This would create "recessionary growth" (that is, real growth between 0 and 2%) or a recession (negative real growth), pushing the national unemployment rate back up. In this case, the local unemployment rate would worsen at almost twice the speed of the national unemployment rate.

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## Lafayette

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The economies of Lafayette and Tippecanoe County experienced above-average growth during 1994 as the nation continued to fight back from the last economic downturn. But the area reflected all the tugs and strains on the national economy as industries restructured and reengineered, searching for strategies that would ensure their long-term viability in the



face of an increasingly global marketplace for goods and services.

As the tinges of rust faded from the Midwest manufacturing sector, labor market conditions became tight in the local economy. The population grew as more people migrated to Tippecanoe County from the surrounding communities to take advantage of employment opportunities and social services. Service sector employment expanded, and local providers of health service restructured themselves to improve their cost structures. Hospital occupancy rates declined as demand for home health care and beds in rehabilitation centers increased. The ability to provide health care services at rates that would attract more such business to the community was at the heart of an attempt to merge local hospitals and was the driving force behind many statewide cooperatives of health service providers.

Nursing homes and restaurants competed furiously for low-skilled and entry-level employees. But new restaurants—and signs announcing more to come—lined the major roads leading into and out of town. Construction spending was strong for both residential and commercial structures, causing local prices for concrete and building materials to climb. Employees with skills in the building trades saw competitors sweeten their benefits packages. At the same time, the expanding number of large national retail and discount outlets establishing facilities in the local community put continued pressure to survive on small, locally owned establishments. And suppliers to major manufacturing facilities experienced enormous pressure to squeeze costs out of their operations.

The agricultural sector was weak in 1994. The harvest was so bountiful and livestock herds so large that prices paid to farmers for corn, soybeans, and meat hit lows that had not been experienced in years. Although the financial health of most family farms in Indiana has improved greatly in the last five years, the pressure on margins earned by farmers is enormous. Those pressures are the culmination of increased regulatory burdens, environmental concerns, competition from larger, low-cost national producers, and increasingly expensive inputs such as machinery, fertilizer, and labor.

The economic outlook for the Lafayette area in 1995 will be affected by the extent to which higher interest rates slow consumer demand for durable goods, especially cars and trucks. Higher interest rates, adjustable rate contracts, and an already significant debt payment obligation are likely to combine to slow the rate of increase in consumer spending in the entire nation. However, stronger state budgets for higher education and positive trends in the number of people graduating from high school are expected to have a positive impact on local educational institu-

tions, which represent some of the largest employers in the local economy. And strong international demand for agricultural products, large and small trucks, large engines, and aluminum products is expected to offset, at least partially, the effects on the local economy of a slowdown in domestic economic growth.

Although economic growth was strong and has been so in the local community for some time, there are still challenges that seem not to respond to economic stimuli. One such condition is the availability of affordable housing for low-income families. As the supply of such structures has declined, demand has increased. Cooperative ventures between local financial institutions and social service agencies have been organized to meet the very complicated demand for rental assistance, financial education, and information on repair and upkeep of residential real estate. Other challenges to the health and viability of the local economy come from demographic trends relative to the age of the population, trends in Hoosiers' educational attainment, and the continuing structural evolution of the Indiana family.

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## Richmond-Connersville-New Castle

Ashton I. Veramallay

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There is good news on the home front. The Richmond-Connersville-New Castle (RCNC) area economy can expect continuing growth in 1995. This forecast depends on national economic performance. As the current economic expansion continues with an expected real gross domestic product (GDP) of 2.7%, an inflation rate of 3.2%, an unemployment rate of 5.8%, and consumer spending at 2.2%, it will influence local economic activity.

Employment growth in the manufacturing sector will increase significantly as local firms, particularly in Richmond, complete their business expansions. The latter are at an all-time high, as predicted last year. The hiring of workers for high-paying jobs will proceed despite the current shortage of skilled workers. For the first time since 1988, I can say that the risk of manufacturing layoffs is extremely low. Thus, firms supplying valuable input to the transportation, hous-

ing, and information industries will benefit from increased sales, which in turn will brighten the employment picture. The unemployment rate is expected to remain in the single-digit range of 6-7% despite corporate restructuring, which is necessary to enhance business competitiveness. Cycles in unemployment emanate from the scale of hiring, firing, and job quitting relative to the fluctuations in real GDP and the pace of technological change.

Employment growth in the service sector will also register a gain due to the increased demand for various services, such as financial, health care, professional, recreational, and fast food. Such demand is an offshoot of economic growth. Moreover, it is important to note that the area's population of 190,000 is becoming older, with a decline in the youthful cohort. The median age is 34.4 years, which is higher than that of Indiana and the nation. As a consequence, resources are reallocated to meet the needs and wants of an aging population. This is consistent with the national trend. One out of every seven dollars spent on final goods and services in the U.S. economy goes to the health sector. People regard health care as an integral part of their economic bill of rights, and are willing to pay more for better quality. The value of better health is an indicator of consumption and production activity, which is a source of employment. If the demographic trend holds, the health sector will account for a larger share of GDP in coming years.

Gross fixed capital formation—that is, investment spending on equipment, commercial construction, and residential construction—should grow at a less robust pace than it did last year. This includes improvements on existing homes. Total investment in

RCNC is likely to exceed \$40 million in 1995. However, if the Federal Reserve pursues a tight monetary policy to restrain economic growth and dampen inflationary expectations, it will trigger an increase in interest rates. Such an increase will have concomitant effects on interest-sensitive sectors of the national economy, to which our local economy is not immune. The gross local product (GLP)—the total market value of final goods and services produced in a year—would grow at a real rate of about 2.5%.

With this GLP, consumer spending is expected to increase. Because of low inflation and attractive rates of interest, real consumer spending will rise by at least 2% in 1995. This means that along with employment creation, local aggregate demand for goods and services will rise at a modest rate. Consumers are still optimistic about the future course of the economy. Local merchants should therefore have had a very good fourth quarter as the holiday spirit permeated our consumer culture. There was no Grinch to steal Christmas from the retail sector. Maybe President Clinton's proposed tax cut for the middle class heralded the early arrival of Santa Claus to sustain the current economic expansion.

Finally, the implementation of NAFTA (North American Free Trade Agreement) and GATT (General Agreement on Tariffs and Trade) will increase business activity in RCNC. The removal or reduction of trade barriers among nations will reduce costs, bolster competitiveness, and provide consumers with wider choices of goods and services. Trade liberalization not only creates new markets but also generates more output, employment, and income for both the national and local economies.

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