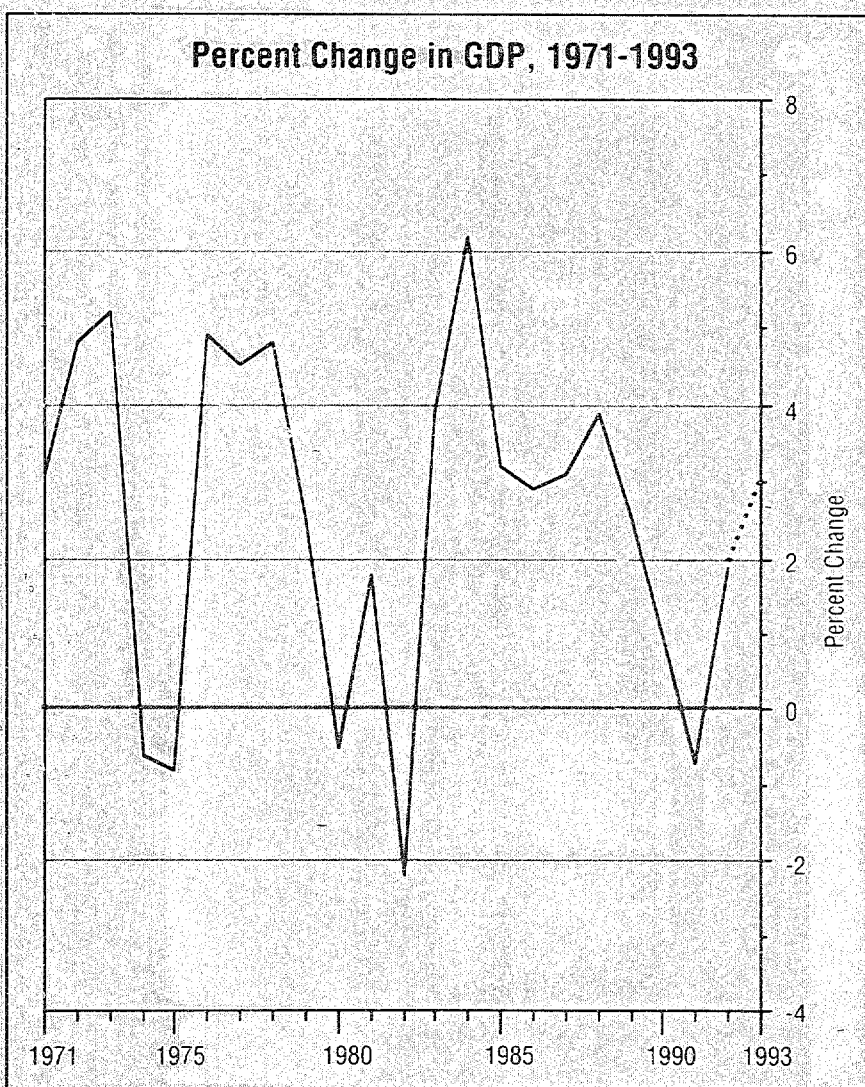


Indiana

Business Review



The Outlook for 1993

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

December 1992

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Indiana Business Review

Volume 67, Number 4
December 1992

Published six times each year by
the Indiana Business Research
Center, Graduate School of
Business, Indiana University.

Jack R. Wentworth, Dean;
Morton J. Marcus, Director and
Editor; Brian K. Burton, Managing
Editor; Melanie Hunter, Senior
Editorial Assistant; Melva
Needham, Dorothy Fraker,
Circulation; Jo Browning, Office
Manager. Printed by Indiana
University Printing Services.

Unless otherwise noted,
information appearing in the
Indiana Business Review is
derived from material obtained by
the Indiana Business Research
Center for instruction in the
School of Business and for
studies published by the Center.
Subscriptions to the *Indiana
Business Review* are available to
Indiana residents without charge.

The I.U. Business Outlook Panel, which attracts standing-room-only crowds each year when it tours Indiana cities, will appear at the Annual Business Conference at the Indiana Convention Center in Indianapolis on February 23 to extend their forecast for the next five years. The conference will also feature Federal Express CEO Fred Smith, Ben Lytle, CEO of the Associated Group, and Mike Walsh, CEO of Tenneco. If you would like to request a copy of the brochure or if you have questions about the conference, please call 1-800-824-3044.

The National Economic Outlook for 1993

Introduction and Overview



Although the national business downturn that began in July 1990 ended during first quarter 1991, growth in the last two years has been sluggish. Between 1990 and 1991, constant dollar gross domestic product (GDP) declined by 1.2%. Between 1991 and 1992, we expect this national aggregate to grow by only 1.9%, just slightly below the 2.1% rate of growth we predicted last year at this time. Our forecast for real GDP growth in 1993 is 3%—not an extraordinary rate of growth for the early expansion phase of the business cycle, but certainly a lot better than we have seen in the last three years. This growth forecast, however, is predicated on relatively strong growth in the investment and personal consumption sectors of the economy. The latter, which compose approximately two-thirds of GDP, are expected to grow at a 2.4% annual rate in 1993 after declining by approximately 0.6% in 1991 and rising by only 2.0% in 1992.

The strongest-growing sector of the economy is expected to be investment. Overall, we expect the sector to grow by an inflation-adjusted rate of 9.5%. We see relatively strong growth in all segments of the investment sector, but especially strong will be business equipment. Residential investment, which has been in the doldrums for the last few years, should finally turn around significantly in 1993. We expect housing starts to increase by about 10%. Even business investment in structures should start to improve, albeit after depression-like declines (especially in the office sector) in the last few years. For 1993 we expect business structures to grow at about 3%.

This relatively positive outlook for consumer and investment spending depends on improvements in business and consumer confidence. However, with a new administration in Washington, the major declines in short-term interest rates we have seen in the last six months, continued low inflation, and modest improvements expected in employment, we think business and consumer confidence levels are likely to rise substantially, especially early in 1993. The new administration is also likely to advocate an investment tax credit as another type of stimulus to private investment spending and a quick increase in government purchases of goods and services, although the bulk of the impact will not occur until the latter half of 1993 and even 1994. The increase in spending will occur by direct federal government spending, transfers of spending from the defense to the non-defense area, and targeted grants to state and local governments. We expect that all government purchases will increase at approximately a 1.4% rate in 1993 after declining by about 0.6% in 1992.

In percentage terms, the weakest sector of the economy is likely to be net exports. Whereas we expect U.S. exports to increase by approximately 3% in

1993, imports are likely to increase at a faster rate, about 5% in our forecast. As a result, our trade deficit is likely to increase significantly in percentage terms in 1993. But this will only have a relatively modest effect on the national economy because our net export balance now is relatively small. The U.S. economy has become much more competitive in the last few years, but major weaknesses in the economies of our major trading partners are likely to be a significant constraint in generating near-term increases in our exports.

The modest 3% real GDP growth we predict should have a slight positive effect on reducing the overall unemployment rate. However, we still expect it to average approximately 7% in 1993. This continued slack in the labor market, coupled with persistent efforts by American businesses to restructure, improvements in productivity, and the continued openness of the U.S. economy to world trade, will likely lead to relatively low wage increases and a good outlook for inflation. Nevertheless, we expect the inflation rate to be slightly higher in 1993 than it was in 1992 because of the increased growth rate and modest increases in energy prices, especially natural gas.

We expect short-term interest rates to hit the bottom in fourth quarter 1992 at about 3.0% and end 1993 at about 4.3%. However, on a year-over-year basis short rates in 1993 will be only slightly above their 1992 levels because these rates declined considerably during 1992. We also expect long rates to rise by the end of 1993. Thirty-year treasury bond rates at the end of 1992 averaged about 8.0%, and we expect them to reach about 8.5% by the end of 1993.

Corporate earnings are likely to be strong in 1993, so the stock market will be buffeted by two opposing forces: rising earnings but rising interest rates. On balance, we see a good but not spectacular year for the stock market.

A number of problems will likely continue on into 1993 that have proven to be of economic and political concern for the last few years. The federal budget deficit will probably not change very much and should remain in the \$275-\$325 billion range in 1993. A broad range of health and medical issues facing the nation will likely be major topics on the legislative agenda in 1993, as will family leave and worker retraining. Consumer and business debt remain near their peak levels. On balance, we see 1993 as a good year, but one in which the economy still shows some slowness in recovering from the recession and adjusting toward a less defense and production-oriented structure.

Table 1 shows a detailed breakdown of GDP and its components. Figures 1 and 2 show the volatile pattern of GDP growth and inflation we have experienced in the last 20 years.

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Table 1
GDP and its Components

	1991 (\$ bil. 1987)	% Change from Previous Year*	
		1992(est.)	1993 Forecast
GDP	4,821	1.9	3
Personal Consumption Expenditures	3,241	2	2.4
Gross Private Domestic Investment	661	7.4	9.5
Nonresidential Fixed	500	2.9	6
Residential Fixed	170	11	5.8
Change in Business Inventories	-9	\$6	\$31
Net Exports	-22	-\$39	-\$53
Exports	539	5	3
Imports	561	7.9	5
Federal Government Purchases	388	-4	2
State and Local Purchases	553	1.8	1

*Except for Change in Business Inventories and Net Exports, both of which are in billions of 1987 dollars.

Figure 1
Percent Change in GDP, 1971-1993

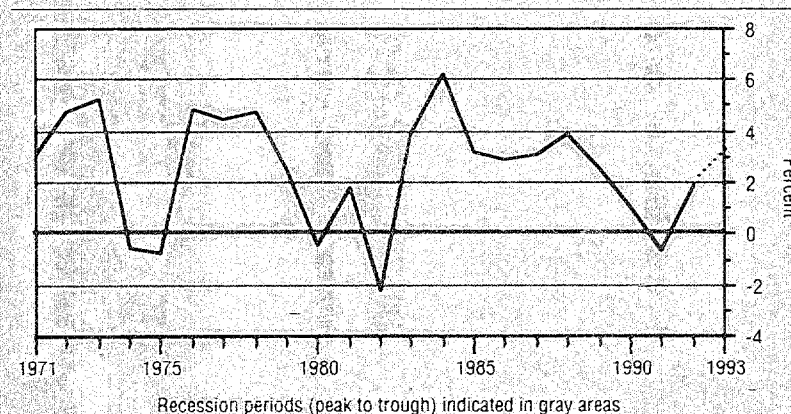
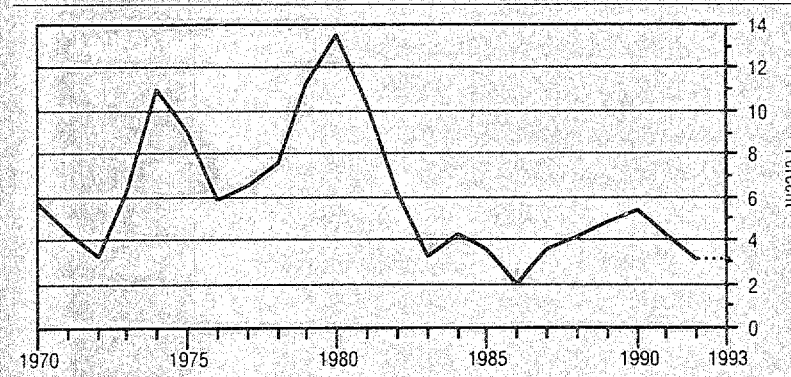


Figure 2
Percent Change in CPI, 1970-1993



Consumer Income and Expenditures

R. Jeffery Green

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Consumer spending represents about two-thirds of real output (real GDP), so the forecast of consumer spending will have a large impact on the overall forecast of real GDP. The main determinant of consumer spending is disposable personal income. To understand where consumer spending might go, we must first understand how consumers' income will change over the coming year. To understand the coming year, we must understand the recovery so far.

Income

The current economic recovery probably began in first quarter 1991 (the National Bureau of Economic Research has not yet made its final determination of the date when the current recovery began). Thus second quarter 1992 is the fifth consecutive quarter of economic recovery. To date this economic expansion has been extraordinarily weak. Over the five quarters of recovery, real disposable personal income increased only 2.6% in contrast to an increase of 7.1% during the first five quarters of the last recovery, which began in fourth quarter 1982.

The largest component of personal income is employee compensation. During the five quarters of the current recovery, real employee compensation increased only 0.7%, while in the 1982 recovery it rose 5.9%. Real compensation is the product of the average real wage rate and the total number of hours worked. In the first five quarters of the 1982 recovery, hours increased 6.0% and the real wage rate declined 0.1%. In this recovery, hours are up only 0.3% while the real wage rate is also up 0.3%. The big difference between the current recovery and the 1982 recovery is the slow growth in hours worked. Those who are employed are actually doing better in this recovery. Obviously the slow growth in hours worked reflects slow growth in employment growth.

Why are firms so reluctant to hire during this recovery? One reason is that firms are increasingly competing in global markets and, as a consequence, are restructuring to raise productivity and lower costs. Another drag on employment has been the cuts in defense spending as a result of the breakup of the Soviet Union.

Employee compensation is not the only part of personal income that is growing slowly in this recovery. Real interest income is the second largest component of real personal income, and in the first five quarters of this recovery it has actually fallen 7.5%. In the first five quarters of the 1982 recovery, interest income rose 10.4%. The current decline in interest income is a result of the decline in interest rates and has hit many retirees for whom interest is a major income source. It is ironic that the interest rate reductions that may ultimately stimulate economic growth initially depress income.

We expect income growth to improve somewhat over the next year but not to grow rapidly. Employment growth will continue to be slow, so employee compensation will probably not increase more than 2% in real terms in 1993. However, interest rates are expected to reach a trough soon and then rise during 1993. As a result, interest income will no longer be a drag on income growth but will contribute to its increase. Overall real disposable personal income should rise by about 2.5% in 1993.

Consumer Expenditures

Since the economy began to recover in first quarter 1991, real consumer expenditures have grown by only 2.0%. Five quarters into the 1982 recovery, real consumer expenditures had grown by 6.5%. The difference is the much slower growth of income in this recovery.

Spending on durable goods was a major source of expansion in the 1982 recovery, increasing 21% in the first five quarters of recovery. This time around durable goods spending has grown only 4.1% during the first five quarters of expansion. Auto sales have been particularly disappointing. Total unit sales were about 8.5 million at an annual rate in second quarter 1992, whereas at the comparable point of the 1982 recovery unit sales stood at 10.4 million. The only bright spot is that imports are no longer taking a growing share of total sales.

Why aren't auto sales growing more rapidly? The first reason is job uncertainty. In an economy in which employment is growing rapidly, the threat of job loss is relatively small and consumers are more willing to buy such big-ticket durable goods as autos. In our current situation wherein job growth is very slow, the threat of being laid off or fired is higher and consumers are much more cautious. This caution is reflected in the low levels of consumer confidence reported throughout this recovery. A second reason is that auto firms have worked very hard to improve the quality and hence durability of their cars; as a result, people are driving them longer.

We expect real consumer spending to rise about 2.4% in 1993, about in line with the increase in real

disposable personal income. Some improvement in the employment picture should increase consumer confidence, reduce uncertainty, and lead to improved auto sales. Total auto sales are forecast to rise to 9.8 million units in 1993, above the level of 8.7 million units expected for this year but still not up to the performance of the mid-1980s, when sales averaged more than 10 million units for four straight years.

Gross Private Domestic Investment

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Gross private domestic investment (GPD) is the formal term for the spending that leads to changes in the nation's stock of capital. Broadly speaking, a nation's capital stock is composed of its past accumulation of plants, office buildings, equipment, tools, apartments, condominiums, houses, and inventories. GPD, which measures the current purchases of these items, is therefore often broken down into three parts: nonresidential fixed investment (NRI), residential fixed investment (RI), and inventory change. The Table shows the relative importance of each of these three categories.

GPD amounted to \$688 billion or 16% of all spending in second quarter 1992. While GPD is typically a minor portion of total spending, its swings are often large enough to account for a much larger proportion of the year-to-year changes in GDP. It is not unusual for GPD to swing 20-30% in a very good or bad year. In 1974-75, 1980-82, and again in 1990-91, GPD took large downward swings that greatly contributed to the severity of the recessions in those

Table
Percent of GPD in Second Quarter 1992

Nonresidential Fixed Investment (NRI)	69%
Equipment	46%
Plant	23%
Residential Fixed Investment (RI)	26%
Inventory Change	5%
Total GPD	100%

years. In the recoveries following the first two episodes, GDP increased greatly and was largely responsible for the beginnings of strong business expansions.

Last year at this time, an election-year cloud of uncertainty hung over forecasts of 1992. We were not convinced that President Bush would or could spur the economy toward a strong recovery as the November election date approached. As things have turned out, we observed what we expected—a slowly growing economy, one that was clearly climbing out of a recession but not in the typical fashion. If 1992 was the first full year of a recovery, it was a very slow move forward. We predicted last November that NRI would grow by a little less than 3% in 1992; last summer we amended this to 2%.

These predictions turned out to be quite accurate. Although data for all of 1992 are not yet in, if we measure from the middle of 1991 to the middle of 1992, NRI grew by just a little more than 2%. Though investment in structures fell by more than 12% during that time period, the larger category, equipment spending, increased by almost 6.5%. The net result of these two performances combined to yield an NRI growth of around 2.3%. Residential investment also snapped back over this same time period, expanding at a 14.6% clip. Firms generally added to inventories over this time interval as well. Bringing all this together means that GDP grew by around 10% from second quarter 1991 to second quarter 1992.

We believe that GDP will be the main engine of growth in 1993, increasing at an annual rate of 9%, with NRI up by 6%, RI up by 5.8%, and strong inventory accumulation of around \$30 billion. Though this sounds pretty good, it is a humble path for GDP compared to previous double-digit increases in past recoveries. We believe that GDP growth will continue to be atypical in 1993 for several reasons. First, despite all the political statements one heard in this election year, this past recession was not the worst economic performance since the Great Depression. GDP often experiences dramatic growth upon exiting a recession precisely because it contracted so sharply during it. While GDP did contract in 1990-91, the annual reductions were on the order of half or less of the typical GDP decreases of past recessions.

Second, longer-term problems continue to plague investment spending. The growth rate of GDP has been low and generally declining since it took a large jump in 1984. A large burden of consumer and business debt, the savings and loan crisis, a housing slowdown (RI grew by only about 1.5% per year from 1984 to 1989), changes in tax laws dulling incentives to invest in housing and business plant and equipment, overbuilding of office space, banking problems followed by new regulations in the banking industry,

an intensification of international competition, and a generally worsening economic outlook have all contributed to an environment that has kept GDP growth subdued for the past six to eight years.

Third, though falling interest rates have contributed to a housing comeback in 1992, it is not clear how much further this benign impact of financial conditions will go. Taking yearly averages implies lower short-term interest rates in 1993 than in 1992. At the time of this writing, however, interest rates may have already hit a trough and are heading higher. They will therefore probably be higher in 1993 than they were in third quarter 1992. Although the falling interest rates of 1992 seemed to resuscitate RI, they didn't do much for NRI. Furthermore, real interest rates, which remove the effect of expected future inflation on the cost of capital, remain high by historical standards. Modestly stronger growth in the economy and an attendant rising confidence will lead to GDP growing faster in 1993—but financial factors should not provide much of a boost beyond that.

Finally, the election factor will continue to exert a retarding influence on investment decisions well into 1993. Even having a new president won't eliminate the uncertainty about how government will affect the economy in 1993. How businesses invest in 1993 will depend very much on how they expect new government programs to affect their bottom lines in general and the cost of capital in particular. They will slowly discover all this as a new president interacts with a new Congress.

A lot of promises were made this year. Legislation to watch for includes changes that affect GDP directly, such as the investment tax credit, rules for speeding up depreciation write-offs, special tax provisions affecting passive losses in housing, a capital gains tax, changes in the corporate tax rate, and any special tax provisions for first-time home buyers. Other legislation that would affect business costs and profits and therefore decisions about investment would include declines in the defense budget, converting defense production to non-defense uses, health care, new environmental protection, auto emission standards, and employee leaves. New legislation in any of these areas could directly affect the cost of labor, the cost of capital, and cash flow as well as profitability.

Although we cannot say right now how much of this new legislation will actually be enacted and how it will affect investment spending in 1993, we can say that the expectation of it will keep the lid on spending for at least the first half of the year. Our best expectation, due to the controversial nature of these changes and the usual pace of legislative action, is that they will not cause large changes in our basic projections for 1993. But watch out for 1994!

Fiscal and Monetary Policy Outlook

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Fiscal Outlook

Next year will mark the end of the 12-year Republican reign in the White House. The new president will likely face both an increasing deficit and ever more insistent clamors that the federal government "do something" to yank the economy out of its doldrums. The task will be all the more challenging because any plan must take care not to upset the already jittery financial markets, a fact recently acknowledged by the Clinton camp.

Bill Clinton as president will be working with a Democratic Congress. Traditionally, the first 100 days of the administration are ones of quick strike as the new president attempts to exploit the "honeymoon" euphoria following the inauguration. Clinton may try to initiate several of the following new programs:

- *Rebuild America:* Includes new spending on transportation, a national information network, environmental technology, and "defense conversion".
- *Invest in communities:* Involves community development block grants, a national network of community development banks, a National Police Corps, urban enterprise zones, and the Community Reinvestment Act.
- *Encourage private investment:* Provides for a "targeted" investment tax credit, a 50% tax exclusion for long-term capital gains, a permanent R&D tax credit, and a civilian R&D agency that unites universities with businesses. (The latter would target biotechnology, robotics, high-speed computing, and environmental technology).
- *Lifetime learning:* Includes spending on security for some "high-crime" schools, and creating the Youth Opportunity Corps, a National Apprenticeship Program and a National Service Trust Fund (which will replace the existing student loan program).

Other spending increases include expanding the Earned Income Tax Credit and creating a "workfare" system (to replace welfare).

According to the Clinton plan, these new spending programs would cost \$41.9 billion. These would be offset by \$26.1 billion in spending cuts, \$19.8 billion in new taxes on the wealthy, \$11.3 billion in "closing corporate loopholes," and \$.6 billion in entitlement reform. Thus, the Clinton plan projects a

1993 budget deficit of \$295.7 billion (assuming moderate growth), which would be a reduction from projected 1992-levels (see **Table 1**). (These numbers come from Clinton's published plan. However, I recently heard numbers from Clinton campaign operatives that claim a larger revenue boost from closing corporate loopholes.)

However, the spending cuts necessary to achieve the Clinton projections include savings of \$8 billion in defense department procurement and inventory reform, as well as \$4 billion in RTC management reform. In addition, it is probably unlikely that close to \$20 billion in taxes can be raised simply by taxing the wealthy. (Unless, of course, one is given some latitude with which to define wealthy.) Therefore, it seems reasonable to conclude that the budget deficit will come in over \$300 billion in 1993.

Monetary Policy

The discount rate has fallen from 6.5% in January 1991 to a near 30-year low of 3%. Accordingly, three-month commercial paper and Treasury bills also earn about a 3% return. The low short-term rates have led to double digit M1 growth rates and sluggish M2 growth. Moreover, the yield curve has steepened, with long-term high-grade bonds returning about 8%. This seems to indicate that market participants expect the current low inflation rate to be only a temporary phenomenon.

Despite what has been a decidedly expansionary effort by monetary authorities, economic growth has not picked up as hoped. Explanations for the inability of the low interest rate environment to generate much economic activity include (1) continued high real interest rates, (2) paying down of debt loads, (3) the unwillingness of consumers and businesses to take on more debt (accompanied by an early conservative attitude by banks and regulators), and (4) low consumer confidence.

Because of the cumulative size of interest rate cuts already undertaken (as well as their ineffectiveness), the Federal Reserve has recently been reluctant

Table 1
Past and Projected Budget Deficits (in billions of dollars)

1989	122.3
1990	166.2
1991	210.4
1992*	297.4
1993**	305.7

* Partially forecasted

** Forecasted

Table 2
Past and Projected Unemployment, Inflation, and Monetary Growth Rates

Year	Unemployment	Inflation	M1	M2
1989	5.2%	4.0%	0.8%	4.8%
1990	5.8%	4.7%	4.8%	4.0%
1991	6.7%	2.8%	9.5%	3.1%
1992*	7.5%	2.5%	10.7%	2.4%
1993**	7.2%	3.0%	4.8%	5.9%

* Partially forecasted
** Forecasted

to make any further expansionary moves. **Table 2** illustrates the continued high level of unemployment rates despite lower inflation rates. The incidence of permanent separation (rather than temporary separation) has been very high during this period, reinforcing beliefs that the unemployment rate will be difficult to lower (particularly through the use of monetary policy).

If in 1993 the budget deficit begins to increase under the Clinton administration, both short- and long-term nominal rates will likely begin to creep up. It is expected that the Fed will not continue its expansionary trend, because some expansionary impact of fiscal policy can be anticipated and inflationary fears will begin to dominate. In particular, we expect that M1 growth should average about 4.7% while M2 growth will begin to hit the midpoint of its target range, approximately 6%. That is, M2 growth should begin to pick up as interest rates begin to increase. Short-term rates will increase slightly to about 3.5% and long-term rates to about 8.5%. However, if inflation increases to 3% there will not be much change in real returns.

The International Economy

Michele Fratianni

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The United States is enjoying a period of economic expansion, albeit at a slower pace than in previous expansion periods. Abroad, within the group of the seven most industrialized countries—the so-called G7—there are signs of an economic slowdown (see **Table 1**).

The latter is particularly evident in Japan, Germany, and the United Kingdom. Japan, like the United States, is experiencing an unfavorable cyclical movement in output accompanied by significant restructuring (such as in real estate). Germany is paying the up-front price of German monetary unification: the benefits of unification will accrue later. The cost of raising living standards in the former East Germany to the level of West Germany has placed a great burden on public finance. Much of the expenditure is showing up in larger budget deficits. The Bundesbank, the German central bank, has tightened monetary policy to offset the inflationary effect of the higher expenditures. The divergences in economic performances among the European countries participating in the European Monetary System and the tight German monetary policy—excessively tight, according to many experts—precipitated the currency crisis that took place in the middle of September. As a result of this crisis, the United Kingdom and Italy have abandoned the exchange rate mechanism that keeps exchange rates within a narrow band of fluctuations. Both countries are expected to return to the system, although the timing has not been set.

Prospects for a return to more stable exchange rates in Europe are uncertain and are complicated by the fact that the growth of economic activity is slowing. Italy, for example, has a government debt that exceeds the value of GDP and a budget deficit that is 11% of GDP. Real interest rates (interest rates adjusted for rates of inflation) exceed the growth rate of the economy and thus raise the ratio of debt to GDP. To stabilize the latter, drastic expenditure and tax actions are required; but as we know from our own experience in the United States, there is very little consensus in addressing the inevitable consequences of a rising level of indebtedness. Crises seem to be required to get the attention of the public and the politicians. Using 1991 data, the average ratio of debt to GDP in the EC was 60%, ranging from 35% in the United Kingdom to 132% in Belgium. In comparison, the U.S. ratio was 58%.

Table 1
Growth of Real GDP in the G7 Countries

	1984-90 Average	1991	1992 Estimated
U.S.	3.2	-0.7	1.9
Japan	4.7	4.5	2.0
Germany	2.9	3.6	1.0
France	2.7	1.2	2.0
Italy	2.9	1.4	1.5
U.K.	3.1	-2.2	-0.8
Canada	3.7	-1.5	2.5

The U.S. government has signed an agreement with Mexico and Canada that, if ratified by the U.S. Congress, will make the North American continent one integrated market. Both Mexico and the United States will benefit from the accord. Inevitably, some sectors in the United States will suffer and lose employment, but others will gain. The overall net effect is to create jobs and not lose them. Despite the protectionist mood of Congress we expect the agreement to be ratified.

Inflation rates in the G7 group remain at historically low levels. Markets, however, look at future inflation rates, which are largely determined by monetary policies. U.S. monetary policy in 1992 has been very aggressive, having expanded bank reserves at annual rates of 18% and placed short-term interest rates at historically low levels. The difference between real rates abroad and in the United States is positive and has increased in 1992, particularly with respect to German rates. Reflecting the differences in the stance of monetary policies in the United States, Germany, and Japan, the U.S. dollar has depreciated vis-à-vis both the yen and the mark starting with second quarter 1992.

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 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 first quarter 1992. 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. We foresee a reinforcement of this cyclical position in the next 12 months; consequently, we are forecasting that U.S. net exports of goods and services will deteriorate by \$14 billion from a projected level of -\$39 billion in 1991 to -\$53 billion in 1993.

As for the value of the U.S. dollar in the exchange markets, there are two conflicting forces. The expected improvement in the U.S. cyclical position relative to trading partners argues for an appreciation of the dollar; on the other hand, the relative expansion of U.S. monetary policy argues for a depreciation. To complicate matters, one cannot extrapolate current U.S. monetary policy into the future. How will the Fed react to more robust U.S. economic growth? We take the position that it is more likely the Fed will tighten rather than continue with the present course. Consequently, we forecast that the dollar will appreciate by 10% vis-à-vis the German deutsche mark and the Japanese yen in 1993.

The summary of our forecast is presented in **Table 2**.

Table 2
International Forecast Summary

	1992 (estimate)	1993 (forecast)
Exports in 87 dollars, NIA	566	583
Imports in 87 dollars, NIA	605	636
Net exports in 82 dollars, NIA	-39	-53
Yen/dollar, dollar appreciation	10%	
mark/dollar, dollar appreciation	10%	

Financial Markets

Robert C. Klemkosky

Associate Dean of Research and Operations and Fred T. Greene Professor of Finance, School of Business, Indiana University

Interest Rates

Interest rates have probably reached their low point for this phase of the economic cycle. The Federal Reserve has cut short-term interest rates 24 times over the last three years and short-term rates are now the lowest they've been since the days of Camelot—1962. Long-term rates have also fallen during 1992, though not nearly as much as short-term rates because investors are concerned about the potential of increased inflation in coming years.

Given the decline in interest rates over the last three years, the bond market has been the place to invest. Bonds have actually outperformed stocks in the last five years. On a total return basis, this relative performance will probably not be repeated in 1993 for the following reasons.

- High rates abroad, especially in Germany, restrict how accommodating the Fed can be in lowering short-term interest rates further. It would be a big help if the German Bundesbank would lower its rates significantly, but it appears to be reluctant to do so.
- With interest rates at 30-year lows, a reasonable question would be whether the Fed is pushing on the proverbial string. The financial markets fear that a further cut in short-term rates might be inflationary, which would result in higher long-term interest rates, already at historical high levels compared to short-term rates.
- The recent instability in the European currency markets serves to heighten the risk of a domestic currency crisis if short-term rates decline further. This could also prove to be inflationary, as imports will

cost more because of a weaker dollar.

• There is also concern that the new administration might opt to provide some fiscal stimulus to the economy if monetary policy does not seem to be working. The cost of that might entail a federal budget deficit greater than the \$290 billion just experienced in the fiscal year ended September 30, 1992. A budget deficit in the magnitude of \$500 billion or so would definitely raise inflationary expectations as well as result in higher long-term interest rates, which would certainly not be helpful to growth of the private sector of the economy.

In summary, we predict that short-term interest rates will rise approximately 100 basis points from fourth quarter 1992 to fourth quarter 1993 and long-term rates will rise by 50 basis points during the same time period. Although these increases are not that large, they do mean that total returns from investing in fixed income securities will not be as favorable on a relative basis as they have been in the past five years.

Stock Market

The stock market has not turned in a sterling performance thus far in 1992. Most of its appreciation occurred in the first quarter and the market has basically gone sideways since then. The Dow Jones Industrial Average has performed a little better than the S&P 500 stock index this year because investors have expected cyclical stocks, which are more heavily weighted in the Dow Jones, to do better because of an improving economy in 1992.

Usually coming out of a recession, the stock market is driven by lower interest rates initially, then the earnings phase kicks in as the economy improves and earnings expectations increase. We have experienced the lowering of interest rates, so that phase was responsible for the initial increase in stock prices in 1991 and 1992. But the lagging or slow-growth economy has not provided the stimulus to earnings-per-share growth one would normally expect to see in an economy with six quarters of economic growth. The trouble is that the six quarters of economic growth have been very lackluster and thus the market has drifted sideways during much of 1992.

Although not reflected in the popular stock market averages, what appears to be a rather dull stock market on the surface has in fact been a mine field beneath the surface. At one point in 1992, almost 40 percent of the stocks listed in the New York Stock Exchange had declined at least 20 percent from their highs of 1992. Of particular note, several of the once bellwether stocks, such as IBM, have traded at levels not seen since 1982.

Some of the factors that have had an impact on the stock market thus far in 1992 have included the

uncertainty of the presidential election, the lackluster economy, and the European currency crisis. If anyone questions whether or not we truly are in control of our economic destiny in the United States, all one has to do is look at the events that have occurred around the world recently, especially the rigorous anti-inflation policy adopted by the German Bundesbank. Corporate earnings, which had been in a downturn since the late 1980s, had been expected to rebound sharply this year largely because of improving export demand. Since the European countries were forced to endure higher interest rates to keep their currencies in line with the exchange rate mechanism, their no-growth economies have hampered corporate America's ability to meet investors' earnings expectations.

Even though we do not predict robust economic growth in the next year, corporate America has restructured to such an extent that only a modest increase in economic growth should result in strong earnings growth for the coming year. We predict that earnings (after write-offs) on the Standard & Poors 500 stock index will increase from \$22 in 1992 to \$26.50 in 1993. A healthy earnings increase should result in modest increases in stock prices. We would predict that stocks would probably earn what they have experienced over the long term, which is approximately 10% on an annual basis. So in reality, what we have in 1993 will be a gentle bull market. While this rate of return is substantially less than what has been earned in the last decade by investing in common stocks, it certainly beats the alternatives, including bonds yielding about 7.5% and money market instruments yielding around 3%. Although the modest rise in interest rates could hurt the stock market, the increase in earnings should more than offset the rise in interest rates.

Real Estate Markets

R. Brian Webb

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Residential Real Estate

The economy remains in a purgatory somewhere between the recession that "officially" ended in the spring of 1991 and the recovery that is supposed to have followed. Residential construction activity historically leads the United States in economic recovery.

but housing starts in 1991 fell to their lowest level since World War II even though housing affordability was on the rise. Citing fundamental changes in demographics and the structure of the economy, economists (and politicians) began to search for a new engine to drive the recovery (with exports a likely candidate). Exports have not been able to sustain momentum, however, and the economy appears to have waited for modest gains in residential construction during 1992 to lead the recovery once again.

Housing starts were an anemic 1 million units in 1991 and were almost certain to rebound from this low level in 1992. Housing starts are on target to reach 1.2 million units in 1992 and are expected to improve to 1.32 million units in 1993. This remains below the level of housing starts during the last period of economic recovery in the United States (1983-1989)—possibly because of changing fundamentals as cited above, but more likely because of low consumer confidence and the resulting low demand for new housing. Pent-up demand from consumers who have remained on the sidelines for the past two years suggests that a level of 1.5 million housing starts per year is sustainable through 1994 and into the next century.

While housing starts have been sluggish the past two years due to low consumer confidence, a record \$588 billion in mortgages were originated in 1991, primarily due to refinancing activity. Refinancing continues at a record pace and is expected to push mortgage originations to \$700 billion in 1992. This activity is a boon for mortgage banks, but it will not produce substantial economic growth until consumers start responding to lower mortgage rates by buying new homes rather than refinancing existing ones. The hesitancy of consumers to buy a new home can be attributed to the fear of becoming unemployed, as well as to declining inflation rates that have kept "real" borrowing rates at fairly high levels and have driven down expectations about the future appreciation of housing. Recent declines in housing values in many parts of the country have reminded potential buyers of the risks associated with home ownership that had been mitigated by the consistent appreciation of housing from 1945 through the 1980s.

On an encouraging note, fixed-rate mortgages have remained in the 8-9% range for more than a year and are expected to settle in the upper end of this range in 1993. Low mortgage rates have helped make housing more affordable to the average citizen than it has been in 20 years. As low consumer confidence

rather than affordability is keeping consumers on the sidelines, however, traditional home selling strategies such as buying down mortgage rates, adding amenities, or lowering prices are not working in the current environment. Buying down mortgage rates to even lower levels has little effect on the number of potential buyers, consumers are presently too cautious to be enticed by added amenities, and lowering the price only seems to raise concerns about true values and the direction of values in the future. Providing mortgage payment insurance or offering to repurchase the house if the purchaser becomes unemployed are strategies that ease concerns and are effective today.

The Midwest has been affected by the recession less than other regions of the country (for a change) and has witnessed the greatest increase in residential construction during the past year. Unemployment is on the rise in several Midwestern states, however, and it is not clear how much longer the local housing resurgence can continue without national economic growth to generate increased demand for the goods manufactured in these states. Because housing prices in the Midwest never went through a period of rapid appreciation, expect the gradual appreciation of prices to continue for the next several years.

Commercial Real Estate

Commercial real estate values and commercial mortgage rates have fallen to the point at which investment in this sector of the economy makes sense once again. Rental property can now be purchased with a reasonable expected return that is not dependent on future appreciation. Cash-on-cash returns on real estate relative to stocks and bonds are at their highest point in modern history (9.5% compared to 7% on long-term treasury bonds). The fact that vulture funds (funds acquiring existing commercial real estate at prices far below the cost to construct comparable space) are in vogue is an indication that the market has hit bottom and is ready to rebound. These funds are based on the premise that commercial vacancy rates, which average almost 20% today, will remain at high levels for several years due to the current oversupply of space and reduced demand driven by the merger and downsizing activities of businesses. Vulture funds only purchase when prices are low enough that current levels of cash flow are adequate to generate satisfactory returns on their investments. Expect new construction of commercial space to remain at very low levels for the foreseeable future as the economy attempts to absorb the existing supply.

The Recession Is Over, the Recovery Is Over— What's Next for Indiana?

It seems to be difficult for the press, the politicians, and the public to accept, but **THE RECESSION IS OVER!** It has ended in Indiana and it has ended in the nation. When measured by the level of real personal income, not only have the nation and this state seen the recession end, but the recovery has been completed as well. That fact is even more difficult to absorb when the end of the recession is not perceived.

To verify these facts, consider **Figure 1**. Indiana's total personal income, adjusted for price changes to 1987 dollars, reached a record high in second quarter 1992. The previous highs had been in the first quarters of 1989 and 1990. In both cases those highs were the result of government payments to farmers. The erratic course of real farm income is shown in **Figure 2**.

When only the non-farm sector is considered—when farming's 1% of the total is excluded—the story in **Figure 1** is clearer. The peak in Indiana's real non-farm personal income came in third quarter 1990. We then had a short, two-quarter recession that ended in first quarter 1991. The decline was 1.7%. (This was the second non-farm recession in two years. It had been preceded by a drop of 1% in 1989.)

The recovery began in second quarter 1990 and has been progressing since. In the first five quarters of that recovery, the gain was 2.9%. By second quarter 1992, Indiana's real non-farm personal income stood at \$81.8 billion, 1.2% and \$970 million above its previous peak in third quarter 1990. The recession (the downward movement) and the recovery (the

return to the previous peak) had been achieved.

How does Indiana compare with the rest of the nation? The answer to that question depends on the period of time under consideration. If we begin, as does **Figure 3**, in first quarter 1986, and compare real non-farm income in Indiana with the U.S., we have grown by 8.8%, while the nation has advanced by 9.9%. This can be separated into two periods. In 1987 we suffered a mild setback followed by a flatness in early 1988. Thus, by the start of 1989 we were already trailing the nation. Indiana had grown in three years by 6.8% and the nation by 7.6%. In the next three and one-quarter years, from the start of 1989, Indiana grew by 1.8% while the nation realized a 2.2% gain.

Clearly, we have not been doing better than the rest of the nation. But we have all told each other we are doing better and none of us is lying. How is that possible? Indiana's "superior" performance is derived from the following:

- The national recession is measured from second quarter 1990 to the bottom in first quarter 1991. During that period Indiana declined by 1.2% and the nation by 1.4%. Yet note in **Figure 3** that Indiana did not peak in second quarter 1990; it actually peaked later. Hence, for national comparison purposes, we are measuring our recession from a lower point, which reduces the magnitude of our decline.

- In the recovery, from the bottom in first quarter 1991 to the latest data (second quarter 1992), Indiana has performed better than the nation: 2.9% to 1.8%.

Where is this strength? **Figure 4** shows that the private sector of the Indiana economy has outperformed the nation for every quarter in the past year and one-half. All during the recovery phase of the latest business cycle, real private non-farm personal income has grown faster in Indiana than in the U.S. In fact, Indiana has grown faster in 14 of the past 25 quarters but has not been able to outperform the nation because, as **Figure 4** also indicates, we have suffered seven quarters of decline during a period in which the nation has slipped only 4 times.

If the private non-farm sector is doing so well, what contribution has government been making? The answer is that state and local governments in Indiana have not been adding to income growth in this state as much as they have in other states. This is true both over the longer period since 1986 and during the most recent recovery. In fact, during the last four quarters for which we have data, state and local governments in Indiana have seen real earnings decline by 2.7% while nationally such numbers have grown by 0.7%. This is to be expected when state employees have not had a salary raise in two years.

The source of Indiana's recent strength has been the earnings component of personal income (see

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Figure 1
Indiana's Real Personal Income

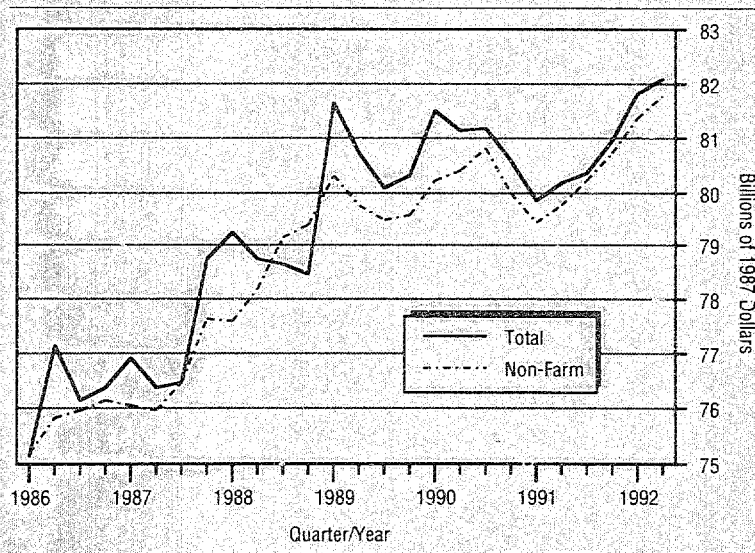


Figure 2
Real Farm Income, Indiana

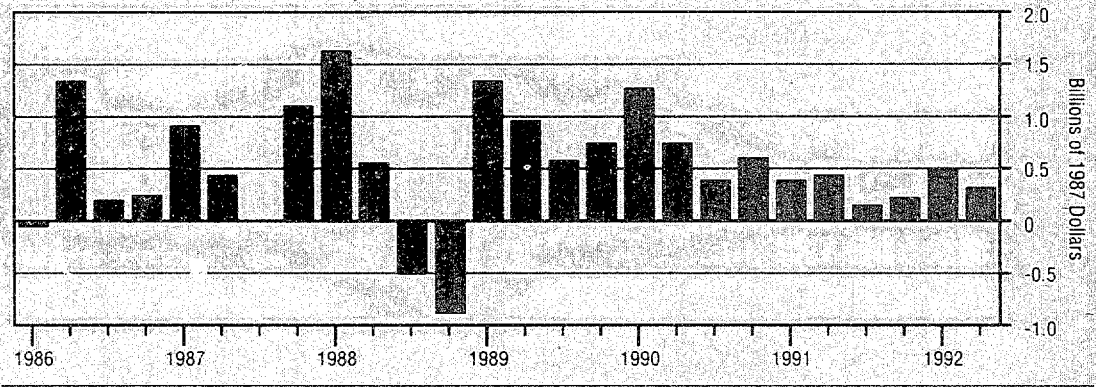


Figure 3
Index of Real Non-Farm Personal Income

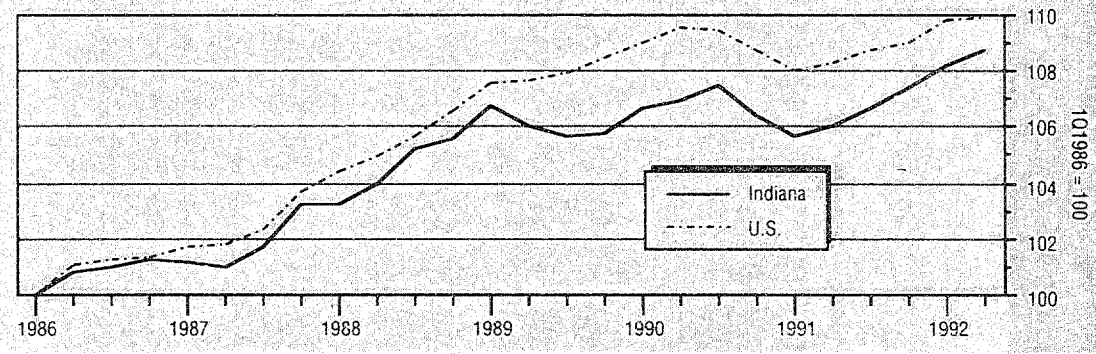


Figure 4
Percent Change in Real Private Non-Farm Personal Income

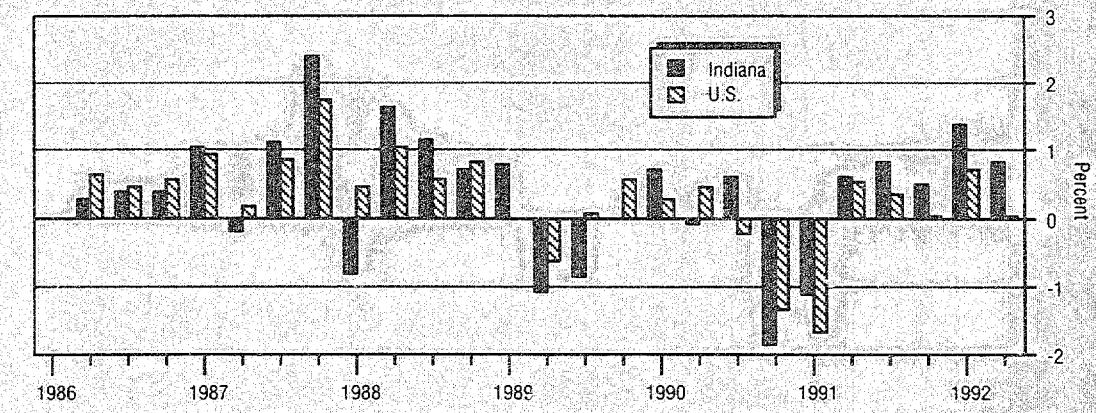


Figure 5). Clearly, in the recovery period the returns to labor in Indiana have exceeded those returns nationwide. We have had better employment growth and have erased whatever disadvantage had accumulated over the preceding years.

Indiana's recent growth in earnings has far outpaced advances in other components of personal income. This is the difference between Figures 3 and 5. We have not seen returns to assets (dividends, interest, and rent) equivalent to those in the nation, possibly because we have our wealth invested in less profitable assets. Second, we have not seen the growth in transfer payments (such as unemployment compensation) that has occurred in other states.

Where in the private sector has our comparative growth originated? In the recession from second quarter 1990 to first quarter 1991, construction was our strength—leading to a rise in our share of national earnings in this industry (see **Figure 6**). However, in the recovery, from first quarter 1991 onward, durable goods have outpaced the nation, increasing our state's share of earnings (see **Figure 7**).

In 1993 we can expect to realize further gains in durable goods manufacturing as auto sales improve and private sector investment, particularly residential activity, accelerates. Consumers who have refinanced their mortgages and paid down debt in the past two years will have more discretionary income for the goods made in Indiana. This should translate into more Hoosier jobs. How many? That depends on the statistical series you favor. In terms of household data used for unemployment estimates, Indiana added

more than 70,500 people with jobs in the past 12 months. We could see this number grow by another 85,000 to 100,000 by the end of 1993. However, establishment employment, a more reliable figure, has grown by just 35,400 in the same period. The same growth factor applied to this number would give us about 75,000 added jobs. In either case, the outlook for Hoosier workers is reasonably bright in 1993.

Figure 6
Indiana's Share of Real Personal Income: Construction

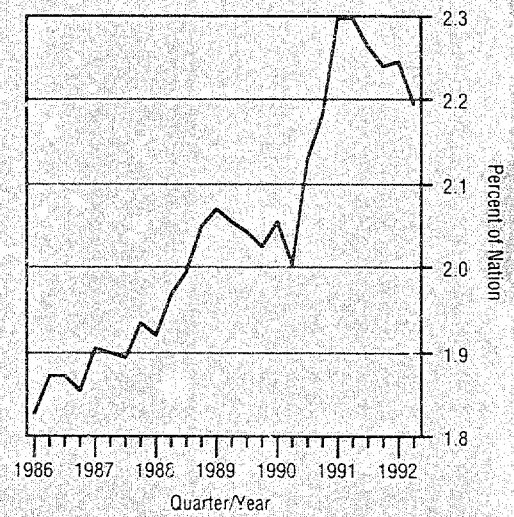


Figure 7
Indiana's Share of Real Personal Income: Durable Manufacturing

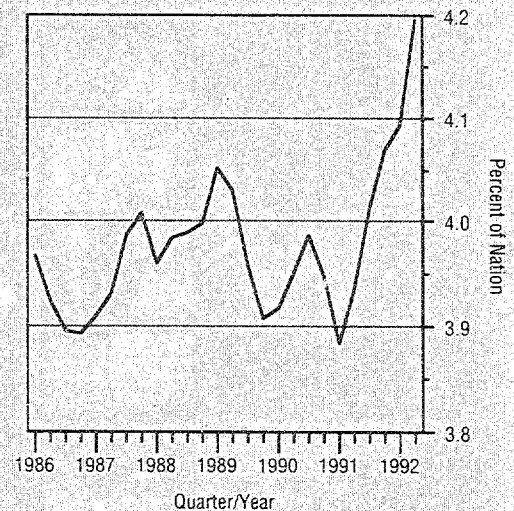
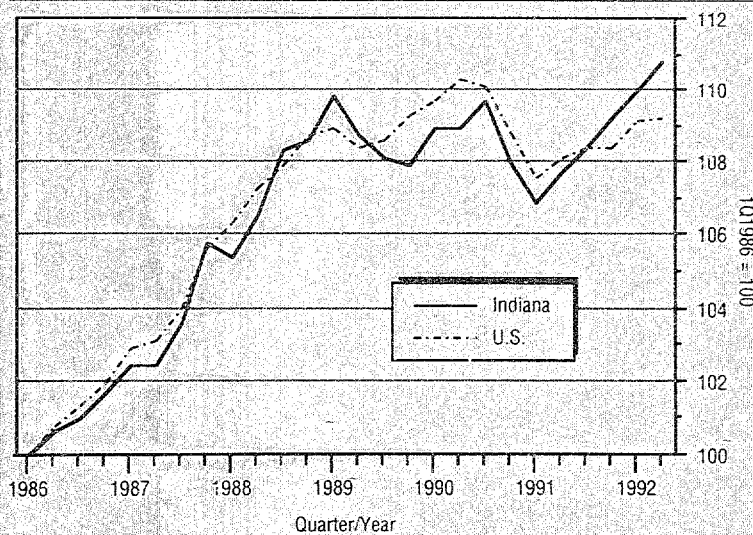


Figure 5
Index of Real Non-Farm Earnings



Indianapolis

Robert Kirk

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The economy of the Indianapolis metropolitan area (eight counties) is expected to continue to expand in 1993. The city's payroll employment increased by 15,000 (2.2%) in 1992 compared to 1991. In the coming year, the forecast is for an increase of 2.5-3.0%, or 17,000-20,000 jobs. These numbers do not include proprietors and other self-employed workers. Many white-collar employees were laid off during the recent recession and have little hope of returning to their former jobs. As a consequence, some have started their own businesses. By including the self-employed, the forecast is increased to a range of 20,000-25,000.

Indianapolis Performance

The Indianapolis economy has done very well compared to other major metropolitan areas in the surrounding states, as shown in the **Table**. From 1983 to 1990, Indianapolis employment increased by 33.2%. During the recession, employment increased rather than decreased, and it has continued to increase in recovery. Indianapolis is the only area to expand throughout the recession and recovery. The media have reported that the Midwest has been less affected by the 1990-91 recession than the 1980-82 one. This is certainly true. However, as the table indicates, the large metropolitan areas within the region have not moved in unison. Although Indianapolis and Louisville

Table
Change in Employment Over Business Cycle
(January 1983=100, seasonally adjusted establishment data)

Metropolitan Area	Peak 3Q1990	Trough 2Q1991	Recovery Jul-Aug 1992
INDIANAPOLIS	133.2	134.6	136.8
Columbus, OH	134.8	133.3	133.4
Louisville	128.8	128.0	130.3*
Cincinnati	130.9	129.8	129.1
Detroit	123.7	120.2	118.4
Chicago	121.2	121.7	118.2
St. Louis	120.0	117.3	116.6

* July only

Source: State Employment Departments

have expanded during the national recovery phase, others have not turned up yet.

In both the 1980-82 and 1990-91 recessions, Indianapolis lost employment in the durable goods manufacturing sector (primary and fabricated metals, nonelectrical and electrical machinery, and transportation equipment). The pace of the city's recovery in this sector will be determined by changes in national industry patterns as well as in the competitive factors that enable Indianapolis industries to increase their employment share. These competitive factors include changes in such costs as labor, energy, and taxes.

With investment in plants and equipment expected to be a leading sector in 1993 nationally, Indianapolis's durable goods industries should benefit. As the U.S. recovers while the economies of Western Europe and Japan slow, Indianapolis exports to these markets could be reduced. Truck sales have been strong, but automobile sales have lagged. Larger price increases for 1993 Japanese automobiles compared to U.S. increases could give U.S. manufacturers an opportunity to increase market share. The opening of the initial phase of the United Airlines Maintenance Facility in the fall of 1993 will generate some high-paying jobs, and will help to replace some of the \$18.00/hour jobs lost in durable goods manufacturing.

During the recession, the nondurable goods manufacturing sector (apparel, paper, and chemicals, for example) has been an important source of stability in Indianapolis manufacturing employment. How will the area be affected by the North American Free Trade Agreement? There will be both gainers and losers. Mexico's young and growing population represents a potentially large market for our businesses. Because of Mexico's trade barriers, some of our firms have already moved to Mexico. The critical factor is the productivity of labor, not the wage rate. As long as our labor is more productive (even though the wage rate is higher), our firms have little to gain by relocation.

Growth has been strong in food stores, restaurants, business services, and health services. New food stores and restaurants have been tied to the strong recovery in housing activity during 1992 in the sense that as new housing developments were built, retailing followed. Based on a forecast of rising interest rates, 1992's housing performance may be difficult to duplicate in 1993. However, demand for housing will be stimulated by people being transferred from San Francisco for the first phase of the United Airlines Maintenance Facility and possible congressional legislation. With financing finally secured, the construction of the Circle Centre Mall will begin. The mall will provide 675,000 square feet of retail space and generate construction employment.

Health Care

Health care has been a major contributor to growth in the Indianapolis area. Health services demand comes from not only local residents but also the rest of the state, other states, and even foreign countries. The health services industry has a high earnings multiplier, which means that each additional dollar of output in the industry generates a relatively large amount of earnings for households employed in the industry.

Under a "play or pay" program, employer costs would increase, with small firms experiencing the largest cost increases because many currently do not provide health insurance benefits. As health insurance costs or payroll taxes increase, the offset could be an increase in the product price, a decline in profits, or a decline in real wages. The use of the payroll tax as a financing mechanism could raise the cost of hiring the low-skilled worker and reduce employment.

Supply-Side Factors

How well Indianapolis responds to national economic change depends not only on its mix of industries but also on how well each one competes for market share at the national level. Thus, the real question is: Do local firms have the capacity to adjust to changing markets and technology? Are new goods and services being developed by existing Indianapolis firms? Here, the focus is on entrepreneurial talent and labor with the right skills. Entrepreneurial talent and highly skilled labor can be home-grown or imported. As a result of recent corporate mergers, acquisitions, and restructuring, new corporate cultures are being established that involve new faces and ways of doing things.

Whether existing firms stay and new ones are attracted depends, in part, on how well firms perceive that Indianapolis government works and is meeting problems constructively. Just as the private sector has been forced to restructure and reduce costs, directors of local government agencies are being required to develop performance measures to justify their budgets.

Infrastructure

Although the Clinton administration has mentioned state and local government infrastructure spending as a priority, the Goldsmith administration has already proposed a 1993-95 capital improvement program. The Indianapolis Chamber of Commerce study of infrastructure identified \$1.1 billion in infrastructure needs over the next ten years. The Goldsmith pro-

posal calls for a \$520 million plan that includes repairing bridges, sidewalks, and curbs, building police and fire stations, flood and drainage projects, public housing improvements, and park/recreation projects. The expenditures from these projects have multiplier effects with the magnitude based on their labor intensity and degree to which inputs are obtained from within the central Indiana area.

Financing Local Government

The issue of property tax incentives has arisen in the context of economic development strategies. In Marion County there are many property tax districts, each with a different mix of services provided and assessed valuations. Differences in assessed valuations reflect differences in land use patterns—residential, commercial, industrial, and tax-exempt. In Center Township, approximately 28% of the real property assessment is exempt, abated, or in tax increment financing districts. Property tax rates are higher than in suburban areas.

Further increases in property tax rates could decrease, rather than increase, tax revenue because higher rates may induce migration of firms and households and reduce the tax base. It has been observed that other cities with whom Indianapolis competes, such as Kansas City and Detroit, have lower property tax rates in their central cities compared with suburban areas. A primary reason is that Kansas City depends more on general and selective sales taxes and local income tax revenues and Detroit gets significant revenue from state government and local income taxes, compared to Indianapolis.

Property tax incentives have included abatement, tax increment financing districts, and enterprise zones. In Indiana's enterprise zones, the inventory tax credit for zone businesses accounts for the majority of the cost of the enterprise zone incentives to local governments. An alternative that may be considered by the Indiana General Assembly in 1993 is a credit for investment in depreciable personal property.

The establishment of tax-increment financing districts may shift burdens to other jurisdictions, such as school corporations, because the increased property tax revenue from the increased assessment due to redevelopment is captured for debt service on the redevelopment bonds. Awareness of these impacts is important for local government decision making. There will be increased attention given in 1993 to the role of property tax incentives used to finance cities and towns.

Northwest Indiana

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Table 1 provides a bird's-eye view of the 1990-91 mild downturn and the sluggish 1991-92 recovery. The first thing we note about the current business cycle is its shallow profile. In fact, if recessions are measured in terms of net losses of employment and income, there might not have been a recession in the overall economy, except in the manufacturing sector, where the downward trend in employment and income continues even through the present mild recovery. That is, year-to-year changes in both employment and income continue to be negative, as indicated in Table 1.

In the non-goods producing sector, there were gains in both employment and income throughout the entire business cycle, and we predict further gains throughout the recovery phase, as shown in **Table 2**. In this so-called "soft" sector of the economy, the downturn manifested itself essentially as a slowdown in the rate of growth; that is, instead of gaining an average of more than 6,000 jobs per year, the northwest Indiana economy had slowed down to an average of 3,000 to 3,500 jobs a year at the trough of the recession in fourth quarter 1990. Again, our predictions are of continued though not accelerated growth in 1993 and 1994.

For those who are impatient with the slowness of the recovery (which is mostly a national rather than a local phenomenon), let us suggest that a mild downturn usually generates a mild and often extended upturn. Compared to the present business cycle, the 1979-86 downturn in northwest Indiana lasted more than seven years, with total employment falling relentlessly during the entire period, except for minor upticks of short duration in 1983-84. The loss of about 55,000 jobs was dramatic. We have now regained and exceeded the employment levels of the cyclical peak in 1979. However, job distribution has changed dramatically. Currently, manufacturing employment represents less than 21% of total employment, while employment in our major industry—steel—accounts for just about 12% of total employment. We forecast no significant changes in these ratios.

We shall continue to rely on growth in the non-goods producing sector. The only bright spot in the goods-producing sector is construction, in which we forecast continued moderate but stable growth. The northwest Indiana economy will continue to gain employment in lower-paying service jobs and higher-paying skilled and professional jobs in finance, health care, education, and utilities. Industrial jobs will remain about constant or rise just very slightly as the national recovery in consumer spending (automobiles, appliances, housing) progresses. The construction sector will continue to gain from disurbanization in Chicago—that is, outflow of metropolitan urban residents from Chicago to northwest Indiana. Moreover, non-steel-related manufacturing in Indiana will also gain from disurbanization of the Chicago metropolitan manufacturing sector. The latter gain will accelerate in 1994-95.

Table 1
Northwest Indiana: Recession and Recovery in Review

	1989		1990				1991				1992		
	1Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	
<i>Year-to-Year Change in Employment</i>													
Total Employment		6,100	5,200	2,700	2,600	4,500	3,200	5,000	5,700	5,500	4,400	7,000	
Non-Manufacturing		7,000	6,100	4,600	3,100	5,600	4,200	5,600	6,000	6,400	6,600	8,700	
Miscellaneous Service	-200	1,000	400	304	400	287	600	191	200	800	300	700	
Manufacturing		-900	-900	-1,900	-500	-1,100	-1,000	-600	-300	-1,400	-2,200	-1,700	
Steel		-400	-500	-900	-500	-1,900	-1,700	-1,400	-1,300	-800	-600	-1,100	
<i>Employment Percentages</i>													
Annual % Change in Mig. Payroll		4.53	9.21	-0.16	8.34	-5.01	-8.92	-3.29	-2.52	-4.03	-5.06	-3.69	
Manufacturing as % of Total	32.38	23.26	23.01	22.86	22.76	22.39	22.32	22.17	22.13	21.37	21.06	20.91	
Steel as % of Total	22.19	14.41	14.16	14.08	13.97	13.40	13.30	13.25	13.14	12.81	12.83	12.46	
<i>Number of Hours Worked</i>													
Manufacturing	42.1	42.4	41.2	41.0	45.5	41.1	41.4	42.8	41.9	42.2	43.5	44.3	
Construction	-8.5	15.0	18.4	19.6	18.7	14.5	15.9	16.8	16.0	16.2	18.6	19.6	
Government Employment	28.5	32.4	31.7	31.5	32.2	33.7	33.3	32.8	33.5	33.7	33.5	33.8	
Trade Wholesale Plus Retail	45.4	57.2	59.1	58.2	59.1	56.9	58.7	58.6	61.4	58.9	61.2	61.8	

Table 2
Northwest Indiana Forecast

	1992		1993			1994	
	4Q	1Q	2Q	3Q	4Q	1Q	2Q
<i>Employment (in 000s)</i>							
Total Employment	257.9	259.0	260.6	262.2	263.7	264.3	266.1
Non-Manufacturing	203.9	204.7	206.6	208.1	209.7	210.4	212.0
Manufacturing	54.0	53.8	54.0	54.1	54.0	53.9	54.1
Steel Mills	32.2	32.3	32.4	32.1	32.0	31.8	32.4
Manufacturing Other Than Steel	21.8	21.5	21.6	22.0	22.0	22.1	21.7
<i>Employment Percentages</i>							
Manufacturing as % of Total	20.90	20.77	20.72	20.63	20.47	20.39	20.44
Steel as % of Total	12.48	12.47	12.43	12.24	12.13	12.03	12.17
Construction	18.91	19.24	19.57	19.89	20.23	20.56	21.01
Trade (Retail + Wholesale)	61.99	62.06	62.99	63.14	63.46	63.92	64.22
Government	33.98	33.84	34.01	34.17	34.33	34.50	35.01
<i>Payroll (\$billion)</i>							
Manufacturing	2.067	2.074	2.087	2.097	2.108	2.118	2.213
Services	1.372	1.382	1.393	1.403	1.413	1.423	1.433
Weekly Hours Manufacturing	43.7	43.9	44.1	44.2	44.4	44.6	44.9

Figures are seasonally adjusted

The Probable Impact of Charges in the Federal Budget

The low percentage of manufacturing and steel mill jobs is somewhat misleading. Not only do these jobs pay higher hourly wages, they also provide a longer work week—44-45 hours as compared to 35-37 weekly hours in the non-goods producing sector per job. Thus, in terms of FTEs (Full Time Equivalents) there are about 60,700 jobs in manufacturing and about 35,900 jobs in steel, compared to 198,700 jobs in nonmanufacturing. That is, the manufacturing share is, in reality, 25.9% and steel's share of jobs is 15.3%. In terms of payroll dollars, manufacturing's share of dollars is about 36%. In addition, the manufacturing sector provides significant pension and medical benefits much in excess of the flow of transfer income generated in other sectors of the economy.

Thus we estimate from extant records that the manufacturing sector consisting of both active and inactive employees (including management) still contributes close to 45% of northwest Indiana's income, in spite of its relatively low share of total jobs. The loss or significant reduction in this pivotal source of income may significantly slow down growth in northwest Indiana, as the number of retirees declines over time.

The new administration in Washington is likely to be a little more protectionist than was the Bush administration. There will also be a push to expand public expenditures in the infrastructure. Normally, northwest Indiana steel mills would capture the lion's share of public capital expenditures. However, over

the past decade integrated mills have been edged out of much of the commercial steel market by lower cost and more efficient melting mills, such as Nucor's mill near Crawfordsville, Indiana. Northwest Indiana mills have become suppliers of the consumer market by producing mainly flat-rolled high-quality products that serve the automobile and appliance markets. Thus, northwest Indiana mills will benefit less from the scheduled public capital expenditures than will Nucor and other melting mills.

Northwest Indiana steel mills will continue to be at a disadvantage because of diseconomies of scale, as modern steel-making technologies favor more compact plants. In a recently completed study, we project that by the next century most commercial products will be manufactured by mini-mills with high-grade scrap, supplemented by imported DRI (Direct Reduced Iron) along with improved refining, ladle metallurgy, and rolling technologies. Mini-mills with untapped funds and borrowing power will gradually expand into the integrated mills' traditional sheet markets, underpricing integrated mills because of lower labor costs and more flexible work rules as well as more advanced technology.

Prospects for Inflation

The coming year will probably experience somewhat higher inflation and interest rates. Local steel companies will benefit slightly from a less deflationary situation, which should make it possible for them to raise prices and thus terminate the long string of losses realized in the past. In a situation of inflexible labor costs and stagnant technology, profits can only be recouped by raising prices.

There is also pent-up consumer demand for durable goods and investment. Rising aggregate consumer demand is likely to raise the rate of inflation as well as nominal interest rates. Inflation tends to cause real wages in the service sector to lag behind real wages in other sectors of the economy. This scenario may adversely affect the northwest Indiana economy by slowing the rate of growth of real personal income.

Higher interest rates may eventually affect the housing sector, particularly multiple dwellings and the commercial housing sector, but not until the end of 1993. Otherwise, the various bank mergers that have been taking place locally are stabilizing. The banking sector is likely to continue prosperous and strong and will continue to provide the necessary financial support for our expanding service-producing economy. The main remaining problem is the impact of Indiana melting mills on northwest Indiana integrated steel-making. During the recession northwest Indiana mills lost 900 jobs, while our melting mills added 900 jobs—an increase of 18%.

INDIANA UNIVERSITY

Serving Indiana



Dear Friends:

Indiana University — One University with Eight Front Doors — is more than the sum of its parts. Each campus supports and enhances the others, each contributes to a strong University serving the State of Indiana.

Together, our campuses offer more than 700 IU degree programs. In the fall of 1992, a record 96,000 students enrolled at Indiana University; two out of every five undergraduates at public universities in Indiana are IU students.

Teaching and learning are our foremost priorities. The quality of an IU education is an extraordinary resource in preparing the young women and men — in all walks of life — who will shape this State in the next century.

In conversations with Hoosier citizens, IU alumni, and business leaders around the State, I hear again and again that higher education is a priority for them, for their children, for their employees. In an enterprise-based economy, an educated workforce is an engine for change — for the creation of new technologies, new industries, and new jobs. The Governor and the General Assembly stress the vital need to increase Indiana's competitiveness. IU contributes to the State across a spectrum of institutional strengths, and we can help significantly in that effort.

The University is working on many fronts to assist the State's business and industrial sectors — through our business research centers, regional economic development offices, and the work of faculty in business, economics, and public affairs at all campuses. Increasing products for export and enhancing foreign investments are central goals for Indiana's economic growth. The

international expertise of IU faculty may be the State's most significant single resource to meet these goals.

Another essential area of our service is health care. With the only medical school in Indiana, renowned research programs on cancer and other diseases, one of the largest nursing schools in North America, one of the top ten dental schools in the United States, one of the top five optometry schools in the world, and outstanding hospitals at Indianapolis, including a premier referral hospital for children, Indiana University is an unparalleled contributor to the health of Indiana citizens.

Environmental issues are increasingly at the forefront of concern for State and local government. Indiana University's multicampus School of Public and Environmental Affairs — one of very few schools of its kind in the country — was established with a specific mission of service to the State of Indiana through research and technical assistance. Faculty members in SPEA and the physical and biological sciences combine teaching, service, and research to develop practical solutions to actual situations affecting the State.

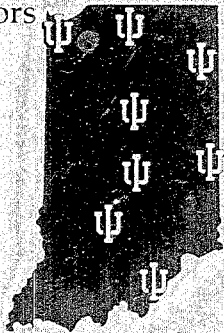
No less important are a host of cultural, artistic, and creative activities of Indiana University that contribute in key ways to the qualities that make Indiana a great place to live and work.

Indiana University provides thousands of services for the people of Indiana. The following pages highlight a few of those efforts.

Cordially,

Thomas Ehrlich

We Are
One University
With Eight Front
Doors



Indiana University's 3,800 full-time faculty members teach more than 96,000 students at campuses in Bloomington, Indianapolis, South Bend, Gary, Kokomo, New Albany, Richmond, and Fort Wayne. The University also offers programs in Columbus, Elkhart, and many other sites.





A Plan for Lake Monroe

For a million and a half people in southern Indiana, Lake Monroe is a weekend paradise—for swimming, fishing, and boating. For the city of Bloomington and eight rural water companies that serve surrounding counties, it is the sole source of drinking water.

But Indiana's largest inland body of water is suffering from a host of problems that threaten the health of the lake. Increased sedimentation has caused navigation problems, extensive growth of rooted vegetation limits access to certain areas of the lake, and changes in the water's chemical balance restrict habitats for fish and other organisms.

"Many of these problems can be controlled with a comprehensive management plan for Lake Monroe," says William Jones, director of the School of Public and Environmental Affairs' Environmental Systems Applications Center. Jones is conducting a diagnostic/feasibility study funded by federal, state, and local governments. "Our study will provide a yearlong record of water quality and quantity changes in the lake and inlet streams—information that is necessary to understand the dynamics of the lake system," says Jones. "The resulting management plan will provide guidance for both in-lake and watershed management for Lake Monroe."

Finding New Markets

"Southern Indiana furniture manufacturers are beginning to ship furniture to Japan as a result of our recent trade mission to Tokyo," says Brenda Kimmey Swartz of IU Southeast.

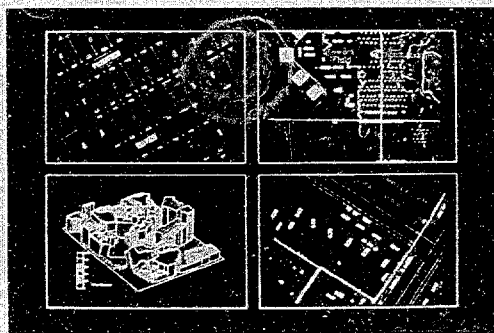
As director of the Regional Economic Development Resource Center at the Southeast campus, Swartz is working with the Indiana Department of Commerce and the Japanese External Trade Organization to help Indiana furniture manufacturers break into the Japanese market.

"We have learned a great deal about the Japanese consumer's preferences in furniture," says Swartz. "For example,

we discovered that Japanese business people use paper that is larger than the standard used in this country, and they need larger desk drawers to accommodate it."

Swartz also arranges seminars for business people, administers a grant to improve minority and indigent health care in a three-county area of southern Indiana, and assists in writing grant proposals for small businesses.

"I try to match interested people with the opportunities I identify," says Swartz. "Our ultimate goal is to use the resources of the University to contribute to the economic development of southern Indiana."



IMAGIS

Planning snow removal routes, getting an ambulance to an accident victim, and designing utilities services for a new skyscraper will all become more efficient with a computerized mapping system that stores 100 levels of information about Indianapolis.

Housed on the IUPUI campus, IMAGIS (Indianapolis Mapping and Geographic Infrastructure System) has become a national model of state-of-the-art technology for automated mapping and facilities management. The project is a joint effort of the city of Indianapolis, Marion County, local utility companies, and IUPUI.

"Through IMAGIS participating agencies can share information and develop applications such as work-order scheduling, routing, modeling, network analysis, and customer service," says IUPUI's Dee Revnyak, who is director of the project.

IMAGIS combines the data from more than eight million land documents, aerial photographs, and computer records. The University uses the database for both education and research. For example, IMAGIS data is being used to correlate radon test results with soil types in order to create a model to predict the prevalence of radon in Marion County.



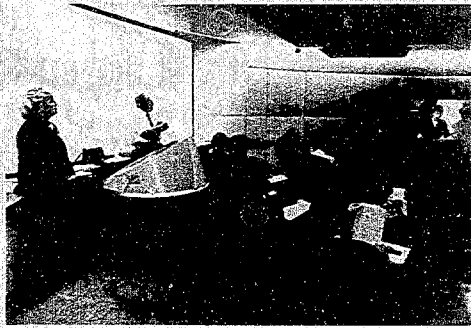
Project Overlap

Forty students from Gary, Merrillville, and East Chicago are getting a head start on careers in nursing and earning college credit while still in high school through Project Overlap at IU Northwest.

Sponsored jointly by IUN's Division of Nursing and Methodist Hospitals of Gary and Merrillville, the project provides selected juniors and seniors an opportunity to complete up to a year of college credit toward their nursing degrees while simultaneously earning their high school diplomas.

"The students have to be in the top 20% of their class," says Hazel Malone, associate professor of nursing at IUN. "One of our goals is to train and retain highly qualified nurses for this region of Indiana."

Launched in 1989, IUN's Project Overlap was one of seven in the nation selected from more than 400 applications to share in a \$2.8 million pool of funds distributed by the Robert Wood Johnson Foundation.



Training More Family Doctors

Nationally, an estimated seven out of ten new doctors choose subspecialties rather than going into primary care fields such as family medicine, pediatrics, and internal medicine. The result is a shortage of family doctors, which is critical in many rural communities.

"We are trying to reverse that trend in Indiana by attracting young physicians to family medicine," says Deborah Allen, M.D., chairperson of the Department of Family Medicine at the IU Medical Center. In 1991 the medical school initiated a new requirement that all third-year medical students spend one month in training with individual family practitioners located all over the State.

"Our students work one-on-one with a family doctor, and they generally come away impressed with the variety and the challenge of family practice," says Dr. Allen. "Studies show that more medical students will choose family medicine if they have a chance to experience it firsthand."

Choosing Tomorrow's Technology for Schools

When school administrators in Lebanon, Indiana, were thinking about how to incorporate computer technology into the renovation of an elementary school, they contacted the Center for Excellence in Education on the Bloomington campus to arrange a visit. There they had a chance to see what modern education will look like in the future.

"Technology has to be used as a catalyst and a tool for restructuring education," says Superintendent David Hutton of the Lebanon school system. "I see the Center for Excellence as a resource to help schools in that restructuring."

IU's new education building is a national demonstration site for the latest in educational technology. "We're trying to help schools to think ahead, rather than just for today," says B. J. Eib, director of the National Demonstration Program. "We want to stretch their vision so that a couple of years from now they will be prepared for new developments in technology."

The visitor program offers tailored presentations with features such as computer demonstrations; visits to classrooms, the library, and laboratories to see various technologies in use; electronic visits to other schools; and teleconference chats with experts around the nation.

Education in the Workplace

When companies talk to Jane Robinson, director of Continuing Education at IU South Bend, she tells them that the bottom-line definition of quality is satisfying their customers' needs all the time. Then she proceeds to take her own advice.

"We always focus on what our clients want to accomplish through training and consulting, and then we design services to help them reach their goals," says Robinson. In the past five years nearly 80 companies ranging from small, family-owned operations with 20 employees to Fortune 500 companies have contracted with IU South Bend for training and consulting to fit their special needs.

"We've reached more than 5,000 employees with a range of topics including total quality management, geometric tolerancing, team building, supervision, statistical process control, and business and technical writing, among many others," says Robinson. Most training classes are conducted in the workplace.

"Successful companies are working toward continuous improvement in total quality management, and we believe ongoing training for employees is essential to that process," says Robinson.

Controlling Hazardous Waste

"Disposing of hazardous waste in a socially acceptable and environmentally sound way is one of the most difficult issues facing industrialized societies," says Associate Professor Jane Grant in public and environmental affairs at the Fort Wayne campus. Grant has studied the decision-making process used in siting and granting permits for a hazardous waste facility in northern Indiana.

The result of her research is a set of recommendations that can be used in future decision making. "We need to develop a new process for siting and licensing hazardous waste landfills," says Grant. "I found that the language residents use to express risks differs from that of government or industry representatives, and residents have differing concepts of what is risky. Currently there aren't adequate forums in which these issues can be addressed."

"We need a process that allows early public input and cooperative negotiations among landfill operators, regulatory agencies, and property owners regarding landfill development," Grant says. She is currently expanding her study to look at how other states and European countries handle the disposal of hazardous waste.



Assisting Displaced Workers

More than 80% of the 150 participants in the Displaced Workers Program (DWP) in Richmond have either found new jobs or returned to school for further training, according to a recent report by IU East Continuing Studies director Henry Merrill and Paula Marksbury of IVY Tech.

A joint project of IU East, IVY Tech, and Earlham College, DWP was created in response to layoffs and plant closings in eastern Indiana. Wayne County, which includes Richmond, has the highest unemployment rate in Indiana.

Inspired by the success of DWP, coordinators of the program have secured a grant through United Way of Whitewater Valley to establish a workforce development center to help workers and employers adapt to today's rapidly changing technology and economy.

"The new Alliance for Workforce Development will offer workers a chance to develop their skills and prepare themselves for employment in a dynamic work environment," says Henry Merrill. "At the same time it will offer custom-designed training and professional development programs to meet the needs of business and industry."

Educating MBAs for the 21st Century

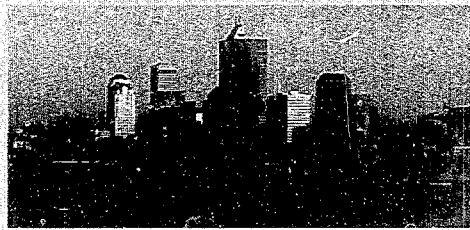
"Our newly designed MBA programs at Bloomington and Indianapolis are a radical departure from the traditional MBA curriculum," says IU School of Business Dean Jack Wentworth. The innovative curriculum breaks down walls between departments and courses and integrates subject areas.

Implemented in fall 1992, the new programs will prepare students for the business world of the future by stressing a team approach to management with an emphasis on competing in a global marketplace. In each program, groups of students work together with faculty to

solve real-world business problems that span traditional disciplines.

"Business executives have to call on expertise from many areas — accounting, finance, marketing, operations, information systems, organizational behavior, and others — to find the best solutions," says Wentworth. "We are basing our teaching on the way business actually does business."

More than 140 American business leaders were consulted in the design of the new curriculum, which has attracted widespread national attention.



Working for Healthier Cities

"Most cities, large and small, face many of the same challenges," says Gary, Indiana, Mayor Thomas V. Barnes. "Our involvement with Healthy Cities helps us develop a healthy framework from which to work toward substantive changes."

Gary is one of six Indiana cities, including Fort Wayne, Indianapolis, Jeffersonville, New Castle, and Seymour, that have

joined with the IU School of Nursing's Department of Community Health Nursing and the Indiana Public Health Association in a project called Healthy Cities Indiana. The project is designed to help cities improve community health through public policy and programs that deal with issues from access to adequate health care to promoting a healthy environment and reducing solid waste.

Healthy Cities Indiana was started in 1988 and is funded in part by the W. K. Kellogg Foundation.

Last fall the School of Nursing's Institute of Action Research for Community Health was named a World Health Organization Collaborating Center in Healthy Cities.



"Destination: Education IUK" and WINGS

IU Kokomo and the Kokomo community have formed a partnership to offer 18 area school children a chance for a better life. These youngsters, incoming eighth-graders at Kokomo High School's downtown campus, are participating in the first year of "Destination: Education IUK."

"This is a program of early intervention recognizing scholastic achievement and academic potential," says Steve Daily, vice chancellor of external relations at IUK, who spearheaded development of the program in cooperation with Kokomo-Center Schools. "Students are given a five-year commitment of social, academic, and cultural enrichment and, at high school graduation, a \$2,000

scholarship from IUK for tuition at the Kokomo campus." Scholarships are funded through contributions from IUK alumni and the Kokomo community.

In a related initiative, 24 sixth-graders recently became the first participants in the WINGS program, designed to help low-income and minority students to realize the importance of education in their lives and to recognize that a college education is a possibility for them.

"Both WINGS and 'Destination: Education IUK' represent the type of cooperation among the schools, the University, and the community needed to secure the future of our young people," says IUK Chancellor Emita Hill.

Fort Wayne

Thomas L. Cuthrie

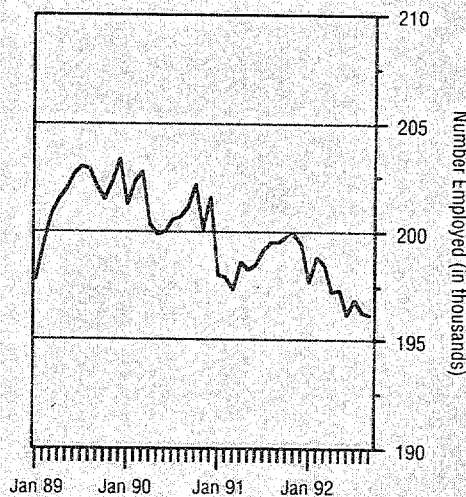
Director, Community Research Institute, and Associate Professor of Business and Economics, Indiana University-Purdue University at Fort Wayne

Last year I noted that the national recession had been essentially a non-event in the Fort Wayne metro area (which consists of Allen, DeKalb, and Whitley counties). I was wrong—or more precisely, the government was wrong. The annual March revision to employment data erased with the stroke of a pen 5,000 jobs from our roughly 200,000-job economy. This gave the Fort Wayne area a percentage decline in employment roughly equal to that of the decline at the national level (Figure 1 shows the decline in the Fort Wayne metro area employment).

The problem currently is that Fort Wayne employment did not stop falling when national employment did in May 1991. Specifically, the area employment picture shows gradual erosion over the last 30 months. *Supposedly* we have lost 6,600 jobs. I say *supposedly* because there is a high probability that the most recent employment data are wrong again. Other data series *not* subject to revision—use of electricity by industry, help-wanted ads, and building permits for new single-family housing—suggest expanding economic activity.

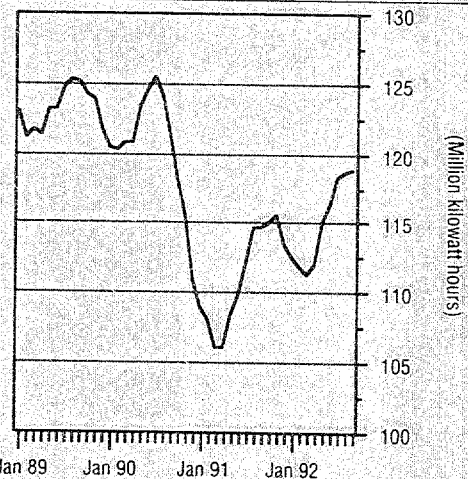
Industrial use of electricity bottomed out in February 1991 and has increased 10% in the last 19 months (see Figure 2). Help-wanted advertising (shown in Figure 3) and building permits (not shown) both bottomed at the beginning of this year and are now trending upward. For the first nine months of this year, building permits were up 10% from the same period last year to a total of 1,100. Decreasing em-

Figure 1
Fort Wayne Area Employment



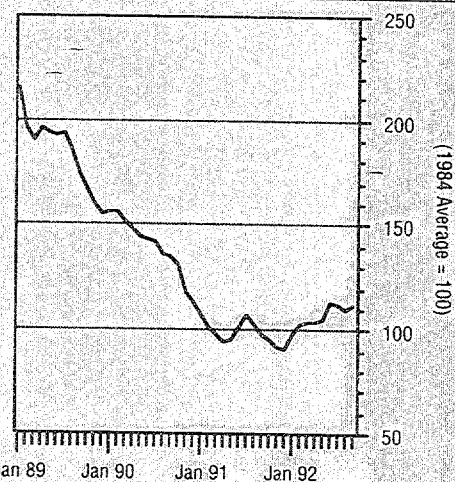
Source: Indiana Employment and Training Services

Figure 2
Fort Wayne Area: Industrial Use of Electricity



Industrial Use of Electricity is a five-month moving average.
Source: Indiana Michigan Power

Figure 3
Fort Wayne Area: Help Wanted Advertising Index



Help Wanted Advertising is a two-month moving average.
Source: Fort Wayne newspapers

ployment is not impossible, but it is not consistent with the other proxies of economic activity.

Regardless of how the final picture turns out, one conclusion is inescapable: Fort Wayne dodged the typically big downturn in manufacturing employment that has accompanied previous national recessions. For example, in the 1973-75 recession, the Fort Wayne area lost 11,900 manufacturing jobs; between 1980-82, it lost 9,400. Currently, the data show that it shed only 3,200 manufacturing jobs during the last recession, which officially began in July 1990 and unofficially ended in May 1991. Obviously the latest recession was less severe than the previous two, but that's far from the whole explanation.

U.S. exports grew 35% in the last four years—10.7% in the last two. Exports were manufacturing's salvation during the last recession, and one of every three jobs in northeast Indiana is in manufacturing. What caused this export explosion, and will it continue? Since 1985, the value of the dollar has fallen 50% against the currencies of our major trading partners. Our products are now fire-sale priced compared to pre-1985. Although the bulk of the dollar's decline occurred between 1985 and 1988, newly reported lows occurred almost daily last summer.

The weak dollar combined with relatively low interest rates and a lot of difficult restructuring have made this region's manufacturers competitive worldwide. So, despite the relatively mixed short-term economic outlook for our major trading partners, the type of exportable products manufactured in northeast Indiana can grow 6% next year.¹

It now appears that 1992 domestic auto/truck sales will be up about 700,000 units over 1991 to 10.4 million. Sales in 1993 could easily be up another 700,000 units given (1) the forecasted increase in personal consumption expenditures and (2) our current friend, the weak dollar.

The weak dollar, the rising cost of capital in Japan, and Japan's increasing concern about U.S. protectionist legislation have combined to raise the price of Japanese imports markedly. One think tank, the Economic Strategy Institute, estimates that when running at full capacity, the Big Three auto makers can produce, on average, a small car at lower cost than the Japanese. Thus, Ford and Chrysler have a clear advantage over Japanese imports. (GM has been operating well below capacity.) The same three factors noted above are causing Japanese transplants to "buy American." It is now cheaper to buy from domestic original equipment manufacturers (OEMs) than to ship from the Far East—and northeast Indiana speaks the OEM language. From wheels in Huntington to axles, tires, and pistons in Fort Wayne to windshields in Auburn to doors in Kendallville and back to wheels in Angola, northeast Indiana knows OEM.

In summary, I expect the northeast Indiana economy to outperform the state economy in 1993 because of the differential recovery in manufacturing. Employment is forecast to increase between 2,000-4,000. The forecasted employment increase would be greater except for the massive restructuring of businesses that continues unabated.

At least two caveats are in order here. In renegotiating the national auto labor contract that expires next September, I assume labor or management will not do anything irrational. Second, I am concerned about the financial sector of the area economy. With three of the four major banks in Fort Wayne having recently succumbed to buyouts, the probability of employment contraction in the sector in 1993 is high.

Even more important is whether standards for loan qualification have changed, especially with respect to small business. I have no information that qualifications have changed, or that if they have changed, it hasn't been in the direction of relaxation. Obviously my concern is with the opposite direction.

Notes

1. The exchange value of the dollar is predicted to rise in 1993. However, its impact upon trade typically occurs with a lag, especially for durable goods manufacturing, which dominates in northeast Indiana. Therefore, the area economy in 1993 should benefit from the weakness in the dollar that occurred in 1992.

Bloomington

Richard L. Pfister

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

A year ago, we thought the monthly employment data for Bloomington indicated that 1991 was showing moderate growth in contrast to declines in 1990. In fact, we thought the recession in Bloomington occurred in 1990. Revisions of the employment data changed the pattern, so 1990 actually showed moderate growth but 1991 was a recession year with declining or stagnant employment in most months as compared to the same months of 1990. In the midyear review (*JBR*, Summer 1992), which was based on the revised employment data, we stated that the local economy seemed to be off to a reasonably good start following the recession of 1991.

We can now be reasonably confident that 1992 will be regarded as a good though not robust recovery year. Monthly employment is up over the same months of 1991, residential construction shows good increases over 1991, and initial claims for unemployment compensation are down sharply. The evidence in support of moderate growth thus seems to be stronger now than it has been for a couple of years at least. We can also be more comfortable with the evidence because it puts Bloomington in sync with the state's economy, which was not the case last year.

Bloomington's monthly employment growth in 1992 over the same months of 1991 has been stronger than that for the state. The state, in turn, has had stronger employment growth than the U.S. average for 1992. For several years prior to 1991, Bloomington also had more rapid employment growth than did the state as a whole. There appears to be some momentum developing in the local economy that should carry over into 1993. If the state economy grows as expected, Bloomington should maintain its growth rate at or above the state rate.

As mentioned above, the first nine months of 1992 have shown moderate growth for the Bloomington economy. Total establishment employment increased in every month over year-ago levels; the average monthly increase from February to September was 2.7%. The average for the state over the same period was 1.4%. The strongest growth occurred in selected services, which had an average increase of 10.4% in the first nine months of 1992 over the same months of 1991. Employment in retail trade has grown more slowly, averaging 2.0% over the corresponding months of 1991. Manufacturing employment, which had been declining since the last quarter of 1989, seems to have stabilized and perhaps started to recover. The third quarter of 1992 showed a small increase over the same period of a year ago, the first such reversal since the decline began. The other sectors of the local economy reported stable employment levels when compared with year-ago levels.

The value of building permits for residential construction rose 45% over the 1991 level for the first nine months of 1992. Permits for apartments (five or more units) have been weak for many months, but the value of such permits rose sharply in August and September over the depressed levels of the same months of 1991. The F.W. Dodge data on contracts also showed good growth for residential construction although at a lower rate (12%) than that of the permit data (45%). The value of permits for nonresidential construction started out strongly in early 1992 but slacked off sharply, so the nine-months total has declined by 21%. Contract data from F.W. Dodge showed a smaller decline (only 7%) for nonresidential construction.

Initial claims for unemployment compensation dropped by 46% over the first nine months of 1992 compared with the same period of 1991. Despite this favorable trend and the growth of employment, the unemployment rate was higher in the first nine months of 1992 than it was in 1991 (a monthly average of 4.0% versus 3.6%). This unemployment rate is still one of the lowest in the state; it is much lower than the state and national rates.

All things considered, the Bloomington economy appears to be in good shape and poised for continued growth in 1993.

Columbus

Patrick Michael Rooney

*Assistant Professor, Department of Economics,
IUPUI Columbus*

Local employment in Columbus has done substantially better than in the national economy. The number of employed workers in the county has grown 2.5% from a year ago and 2.2% from the second quarter. Although the number of unemployed workers increased 1.7% from the second quarter, it has fallen 3.5% in the last year. As a result, the unemployment rate has held steady from the second quarter and fallen from 5.3% a year ago to 5% in the third quarter.

Unemployment insurance claims also indicate an improved local economy. Continued unemployment insurance claims have fallen by 39.3% from a year ago and 25% since the second quarter. Our Help Wanted Advertising Index has improved dramatically—up more than 12% from the second quarter and almost 20% from a year ago.

Both the estimated value of residential building permits and the number of permits have increased dramatically (more than 50%) from a year ago but are off 20% from the second quarter. The net effect is that the average value per permit has increased more than 10% from last year but is virtually unchanged from the second quarter. Housing starts so far this year have been the greatest since 1978.

The local real estate market also shows strong signs of recovery. The average number of days a house is on the market before it sells has fallen more than 10% since the second quarter, and the average market price of listings sold increased almost 10% during that time.

Table
Columbus Area Data

	3Q 1992	2Q 1992	% Change 2Q-3Q	3Q 1991	% Change 3Q91-92
<i>Labor Market</i>					
Number Employed	31,330	30,647	2.2%	30,567	2.5%
Number Unemployed	1,650	1,623	1.7%	1,710	-3.5%
Unemployment Rate	5.0	5.0	-0.6%	5.3	-5.7%
Cont'd Unemployment Ins. Claims	2,814	3,754	-25.0%	4,635	-39.3%
Initial Unemployment Ins. Claims	404	401	0.7%	438	-7.8%
Help Wanted Advertising (1987=100)	195	174	12.1%	163	19.6%
<i>Residential Construction</i>					
Estimated Value of Permits Issued (\$ million)	3,081	3,849	-20.0%	1,847	66.8%
Number of Permits Issued	29.7	37.3	-20.4%	19.7	50.8%
Average Value per Permit (\$000)	103.73	103.20	0.5%	93.76	10.6%
<i>Real Estate</i>					
Number of Homes Sold	294	313	-6.1%	N/A	N/A
Average Number of Days Listed	126	141	-10.6%	N/A	N/A
Average Market Price (sold)	\$81,590	\$74,255	9.9%	N/A	N/A

Sources: Indiana Business Research Center, Indiana University; The Republic; Multiple Listing Service; Indiana Bureau of Motor Vehicles

Falling interest rates and a decline in the value of the median-priced home have combined to generate a fairly dramatic increase in the Housing Affordability Index (HAI). In second quarter 1991, with the median-priced home at \$65,000, the HAI stood at 157. A year later, the HAI had risen to 181, and the median-priced home had fallen to \$63,900. It should be noted that the median-priced home in Columbus fell almost 4% from first quarter to second quarter 1992. Housing in Columbus remains substantially more affordable than in Indianapolis, the rest of Indiana, and especially the rest of the United States. The HAI for the U.S. in the second quarter stood at 122, with the median-priced home selling at \$102,500.

Both Arvin and Cummins experienced record sales in the second quarter. Arvin's sales of \$500 million also produced record earnings of \$15.4 million, or \$.70 per share, which more than doubled the \$.30 per share of the previous year. Arvin continued to have strong performance in the third quarter with net income of \$12.3 million on \$476 million in sales, generating \$.52 of income per share. Cummins sales grew from \$877.6 million in second quarter 1991 to \$948.1 million in second quarter 1992. The net income of \$22.4 million yielded \$1.22 per share, which compared very favorably to the net loss of \$17.2 million, or \$1.29 per share, of one year ago. Cummins experienced its third consecutive quarter of profitability in the third quarter this year. Although sales only grew from \$850.9 million in third quarter 1991 to \$903.6 million this year, net income displayed a dramatic turn-around, going from a loss of \$11.8 million in third quarter 1991 to a profit of \$17.6 million this year.

The Columbus Economic Development Office reports almost 300 new jobs created through local expansions, as well as the addition of one small new company. Furthermore, employment at the top five local manufacturing firms increased from 11,091 in October 1991 to 11,369 this October. During this period, salaried and exempt employment at these firms grew by more than 13%, but this was offset somewhat by a 3.4% decline in factory employment.

Local Forecast

The most likely scenario (I estimate it to be a 70% probability) for the national economy is slow growth in the 1-2% per year range for the next 6-12 months. Under these conditions, we can expect the national inflation rate to continue to remain low—plus or minus 3%—and the unemployment rate to stay flat, in the 7-7.5% range. If these expectations hold, Columbus will continue to do better than the national average. Given the pro-cyclical nature of durable goods manufacturing, local employment will grow at a faster rate than the national average, with a concomitant faster fall in the local unemployment rate. For example, while the national unemployment rate averaged 6.4% in first quarter 1991 and has continued to increase to 7.6% in third quarter 1992, the local unemployment rate fell from 6.5% in first quarter 1991 to 5% in the third quarter of this year.

Modest national growth and continued local growth imply that local workers will have more disposable income to spend on retail sales, ranging from dining out to durable goods such as auto purchases. The building boom augurs well for sales of such durable goods as furniture and major appliances. Of

course, whether or not county residents do their shopping here or elsewhere depends largely on the price competitiveness of local suppliers and the perceived availability of sufficient choices and quality.

There is a 20% chance that the national economy will experience modest growth in the 2-4% range. This would drive down the unemployment rate slowly to the 6-6.5% range, with inflation remaining in the 3-3.5% range. The local effects would include the unemployment rate falling to the 4% range. This scenario would augur well for our manufacturing firms with respect to both employment and profitability.

There remains a 10% chance that the Federal Reserve Board will continue its deflationary approach to the money supply growth. If M2 continues to grow at under 2%, as it has for the last four quarters, it is likely that the economy will experience a re-recession. Likewise, if the Fed overreacts to any news of incipient inflationary pressures if the economy begins to grow more robustly, the national unemployment rate would increase by one or two percentage points and the local unemployment rate would increase even more rapidly.

Lafayette

A. Charlene Sullivan

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The local economy in Lafayette and Tippecanoe County is one that continues to show strength in the face of considerable weakness in the rest of the country. Many manufacturing companies in the area that had laid off workers during the last 12 months have begun to bring those employees back and, to a considerable extent, new workers are being added. A recent employment survey indicated that local employers were more likely to say they were going to add new workers in fourth quarter 1992 than was the case in the fourth quarter last year. Employment gains were expected in durable goods manufacturing while cutbacks were expected in construction, non-durable goods manufacturing, education, and public administration. The prospects for new business in the area are positive and several new retailers are coming into the area.

In the housing sector, new construction activity seems high with several very visible projects. Mort-

gage demand is stable with some slowing in the rate of mortgage refinancing. In addition to the high level of activity in mortgage refinancing so far this year, the number of new mortgages closed is up about 6% over the same level last year.

The banking sector in the Midwest is very strong relative to that in other parts of the country. Throughout this downturn period, return on assets for financial institutions in the Midwest has exceeded that for banks in the rest of the country. Financial institutions in Indiana did not reach for some of the high-risk real estate activity that got so many financial institutions in the rest of the country into trouble. Their relatively healthy balance sheets would indicate that financial institutions in the area have had the ability to make new loans throughout this period of slow economic growth. And the level of competition in this area to satisfy household demand for new debt has been very active throughout the year. Reductions in credit card interest rates offered by many local lenders have provided consumers with opportunities to reduce their interest burden.

The farm sector in Central and Northern Indiana is enjoying a bumper crop of corn and soybeans in 1992. In spite of the fact that market prices for soybeans and corn are at very low levels, most of the corn and soybeans are in government support programs. Therefore, farm income will not be adversely affected by the low prices. Total farm income in Indiana is expected to recover to the level of \$700-800 million this year, up from about \$500 million in the recent drought year. However, livestock operations are still at or below the break-even point. Whereas many farmers see their balance sheets strengthened by the large size of their grain crops this year, those farmers who have significant livestock operations will continue to see weak results, even through 1993.

In spite of large crops and recovering income levels, the economic conditions of smaller farm communities that surround Lafayette are pretty weak and prospects for growth are very limited. Farmers are increasingly reducing the amount of inputs used in their operations, with a smaller investment in equipment required. Margins available on farm products continue to decline. In some local farm communities, there have been no new houses built in five years. The pressure on margins in farm operations suggest that the long-run viability of the family farm in Indiana—a very important segment of the Hoosier economy—is under increasing stress. There is real concern about attracting bright young people into farming these days.

Even though employment conditions in this part of Indiana are stable relative to the rest of the country, there are signs of intense financial pressure in the household sector. It appears that although most

people in our community are employed, more and more households have two incomes, the sum of which is inadequate to support a small family. This stress on the working poor in our communities is captured in the number of households filing for bankruptcy each year in Indiana. In the 12-month period ending June 1992, there was a 5% increase in the number of petitions for personal bankruptcy filed in Indiana over the number filed in the previous 12-month period. That was lower than the national rate of increase of 11% for the same period. However, Indiana has the distinction of being one of the eight states with the highest number of bankruptcies per 1,000 households. Studies of people filing for bankruptcy generally show that they are poor single parents with low income, and that any kind of interruption in income throws household finances into turmoil.

In the short term, the economy of Indiana and especially the Lafayette area has demonstrated some immunity to the current economic downturn. Lafayette has been fortunate to miss the swings in economic activity associated with the reduction in defense spending. Furthermore, although it does not always seem like an advantage, stable real estate markets in the Midwest have allowed Indiana communities to avoid the agony that is being experienced in some of our largest cities and on the coasts. However, there is plenty of reason to be concerned in the long term about the resiliency of the Indiana economy when the next downturn comes. In addition to the problems in the farm sector, our major manufacturers are under stress to reduce their operational costs. In an international marketplace, those employers will look for ways to squeeze more cost out of production by moving to regions with lower wage structures or

using automated methods. State and local governments are facing significant financial stress, trying to balance investment in education and infrastructure at the same time mandated medical programs grow out of control. These trends represent very significant long-term threats to the standard of living of the state of Indiana that should be actively addressed by state policymakers today.

Anderson

Barry C. Ritchey

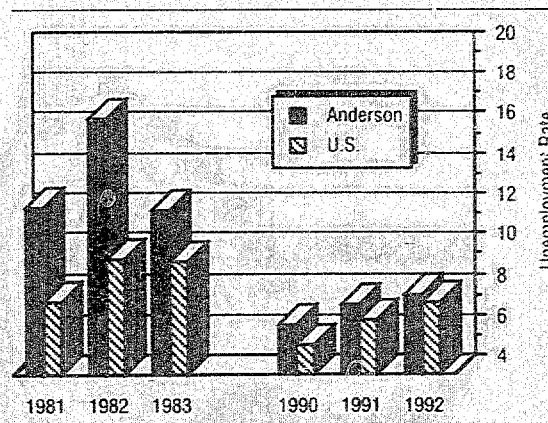
Associate Professor of Economics, Anderson University

The local economic trends that were evidenced in the 1980s continue into the 1990s. Manufacturing employment continues to decline in terms of absolute numbers and in terms of its share of total local employment. The losses in manufacturing employment have been offset by gains in the service sector and the public sector. Personal income remains fairly stable, but transfer payments continue to become a much larger share.

In the past, the Anderson economy has been tied very tightly to the transportation industry. During national recessions, when the industry encountered slack periods, Anderson has tended to suffer extremely high rates of unemployment, relative to national levels. Although Anderson remains dependent upon the two GM facilities in town (Delco Remy and Inland Fisher Guide), the transition away from our traditional manufacturing base has actually created a much more stable environment. The **Figure** gives us some idea of the change in the effects of national declines upon the local economy. In the first recession of 1981-82, the unemployment rate in Anderson averaged 4.7% higher than the corresponding national rate. In the most recent recession, the unemployment rate in Anderson averaged only 0.7% higher than the corresponding national rate (the figures for 1992 are preliminary and are only valid through July 1992). Still, it seems fair to say that we are becoming less prone to strong cyclical swings in economic performance.

Typically, when the manufacturing base of a local community is eroding, that area tends to experience some severe economic decline magnified by the additional loss of the ancillary activity connected to the manufacturing base. This has not been the case in

Figure
Anderson and U.S. Unemployment



Anderson. Perhaps a primary reason is that some of the lost activity has been replaced by the growth of the local retailing and service connected industries. The development of the Applewood shopping center in the mid-1980s was followed by the arrival of Wal-Mart in 1991. Construction has begun on a Loew's Building Supply and Hardware store as part of that Southtown shopping center. Western Auto has also begun plans to expand into Anderson. There are two Meiers superstores projected in the near future, along with a proposed \$7-million, 40-store outlet mall on the former River Center site. The attractiveness of Anderson as a retailing center seems to be improving; this works to offset some of the losses in manufacturing activity.

A second reason why Anderson has not suffered as much from the loss of its manufacturing base is the increase in local construction. There is a unique character to the trend in local building activity. While the absolute value of building permits issued has generally been rising since the mid-1980s (there were gains in six of the last eight years), the mix of the building boom has consistently been changing. In the early 1980s, nonresidential building comprised the lion's share of activity. A change began in 1987. The dollar value of residential housing permits has exceeded nonresidential housing for each year since 1987. The gap between the two reached \$12 million in 1991. Already by September 1992, there have been 160 building permits issued for residential houses in Madison County. This number exceeds the total housing permits issued for all of 1991 and any other individual year.

What conclusion can we draw from these observations? Anderson is attracting a different mix of economic activity. There is more shopping, service-oriented, and residential activity moving into the Anderson area than in the past. This attraction has worked to offset the short-term effects of losses in manufacturing activity.

On balance, Anderson still maintains a large investment in employment and manufacturing that is tied to the success of the national transportation industry. We are still prone to the cyclical movements at the national level, but to a lesser degree. If the attrition in automobile manufacturing employment continues at the same pace, the transition of the local economy should be able to continue to absorb the losses. Clearly, any drastic cuts by GM (such as the loss of an entire Anderson facility) would present a substantial obstacle to our present pace of economic development.

Given recent trends and an optimistic forecast for domestic auto sales in the coming year, I would expect the local economy to prosper. Local investment seems to be strong, with major projects pro-

posed and some already started. The Flagship Industrial Park southwest of the city has recruited one firm (First Benefit) and may represent an expansion of activity toward the direction of Indianapolis. By third quarter 1993 we should begin to see the unemployment rate falling to somewhere around 6-6.5%. One complicating factor is the movement of interest rates. Local economic activity that is being fueled in large part through housing construction could be hindered by any increase in the level of national lending rates.

Terre Haute

Marvin Fischbaum

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In regard to national elections, Vigo County is considered a bellwether county; its voting patterns closely mirror those of the nation. If business conditions nationwide were similar to those enjoyed locally, President Bush—or more likely, President Dukakis—might be looking forward to four more years in office. Locally, 1986 and 1987 brought a real recession, and 1988 a modest recovery. In contrast, a minimal slowdown in 1990 and 1991 was followed by a strong recovery in 1992. For the first time since 1978, in trying to characterize local conditions, a strange and exotic word comes tantalizingly to mind: prosperity.

Signs of recovery should have been apparent last spring, but this observer misread them. The problem was myopia. Indiana State University is cutting back, but September employment data showed state government, including university employment, along with transportation and utilities as the only industry groups with year-to-year declines in MSA employment. Further, too much reliance was placed on estimated unemployment rates. Throughout 1992 the unemployment rate for both Vigo County and the Vigo-Clay County MSA has been running .5 to .75% higher than for the corresponding month in 1991. The September rate, at 5.9% for the MSA, rose a full point over 12 months and was two points higher than in September 1990.

The unemployment estimate, though, is a fickle and unreliable number even at the national level, based as it is on a residual of two much larger numbers—labor force and employment level. In addition, local area estimates encounter sizable sampling errors, as well as situations that may present a misleading picture. Suppose, for instance, that the local office

of the gas company closes. Workers transferred to Bloomington would be employed and living in Terre Haute as long as they commuted to work. Until they surrendered either their job or their residence they would have no effect on the unemployment rate. Thus, household survey data on employment based on location of residence, and especially establishment employment data based on location of work, provide a more accurate picture of local economic activity.

These two estimates have diverged, sometimes sharply, from month to month, but over the past year—and for that matter, over the past four years—they have both clearly trended significantly higher. Employment in households in the MSA plus Sullivan

and Vermillion counties is illustrated in **Figures 1 and 2**. The household survey put employment gains at 5.7% for the year ending in September, and 8.2% since September 1988, whereas establishment employment in the two-county MSA grew 4.5% in the year ending September 1992, and 9.8% since September 1988. New jobs, both for the year and four-year term, were concentrated in construction, manufacturing, and retail trade.

Both residential and nonresidential construction continue to pick up steam. The value of residential permits recorded in Vigo County over the 12 months ending in September rose 45% from that of the previous year. Activity shifted from apartments and luxury housing to modest to mid-range homes. The resale market also strengthened to a level not seen in a decade. Compared to the previous year, third quarter unit sales were up 21%, while dollar volume increased 31%. Time on market declined 9.5%.

The value of nonresidential permits rose 90% for the year ending in September. The share of nonresidential construction of Vigo County relative to the state is about twice its share of state population, and it runs about five times the level recorded in the county in the early to mid-1980s.

The list of construction projects begun during the second and third quarters is long and varied. Work began on the home for Copper and Brass, Inc. Expanding industries included Bemis, Weston Paper, and Specialty Blanks, along with Pfizer, where capacity to produce Litesse polydextrose doubled. Ampacet and Jadcore expanded warehouse capacity. In that period, construction also commenced on Terre Haute Regional Rehabilitation Hospital, a regional state office building, law offices, medical offices, a supermarket, a building supply enterprise, assorted smaller stores, and perhaps a half dozen restaurants. Construction on the PSI-Destec demonstration coal gasification plant, which is slated to begin this spring, presages a continued healthy level of building activity this year and next.

In the last half of 1992, Sony completed its latest expansion of compact disc capacity. The principal new product is the mini disc, a two-inch recordable CD designed to reproduce sound accurately even in a moving environment. This product, which is not compatible with existing compact discs, will compete with a digital tape format from Philips. Employment at Sony Digital Audio Disc, now about 1,000, may rise to 1,300. The new state prison opened in Sullivan County, giving that area of surplus unemployment a welcome boost.

Looking toward 1993, the Terre Haute area has at least two pluses: local momentum, and a national economy still in the early phases of recovery. For a change, optimism comes easy.

Figure 1
Employment Level, Terre Haute Four-County Area

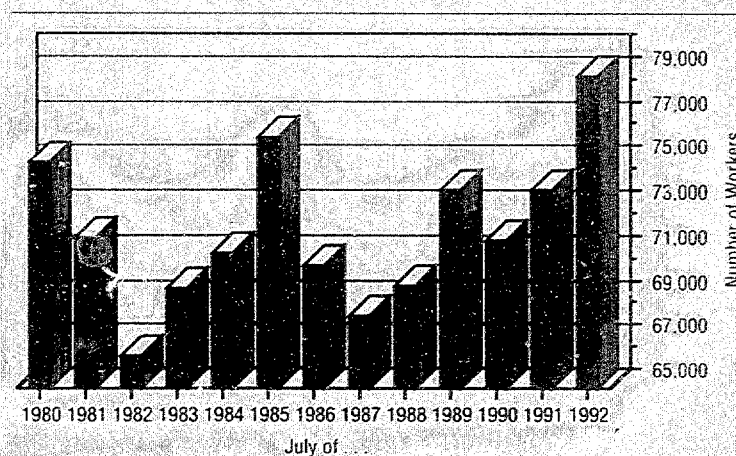
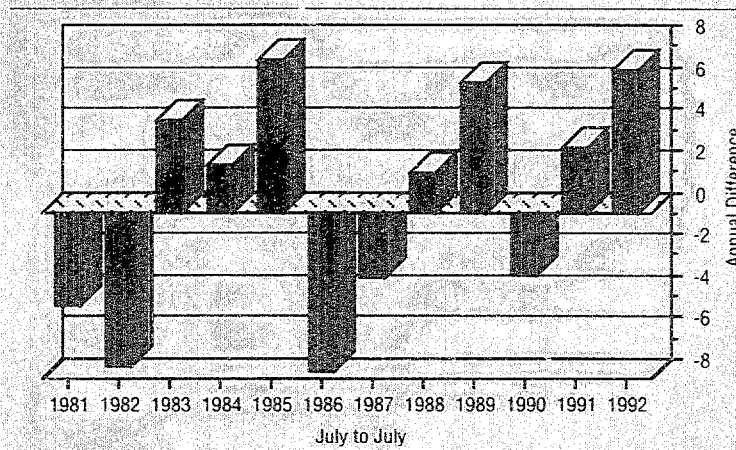


Figure 2
Percentage Change in Employment, Terre Haute Four-County Area



South Bend/Mishawaka-Elkhart/Goshen

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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 at South Bend's Bureau of Business and Economic Research (BBER). A look at the indicators, particularly those relating to local employ-

ment, suggests that through late summer the area economies had performed about as expected in the midyear area forecast (*JBR*, Summer 1992). There were definite signs, particularly when looking at the job picture, that recovery from the recession—recovery that began in mid-1991—was continuing slowly through August 1992. On the other hand, it was equally clear that conditions were mixed and that progress has been agonizingly slow.

The accompanying **Table** summarizes the various indicators of local economic activity compiled by the BBER. These figures are seasonally adjusted and, with the exception of the unemployment rates and real estate data, are index numbers expressed as a percentage of base year 1986 values. It is noted that comparative indicators along with percent changes are given for July and August 1992. To highlight longer-term trends, the same figures are also given for August 1991.

Table
Economic Indicators: South Bend/Mishawaka and Elkhart/Goshen

	SOUTH BEND/MISHAWAKA					ELKHART/GOSHEN				
	August 1992	July 1992	August 1991	% Change From:		August 1992	July 1992	August 1991	% Change From:	
				July 1992	August 1991				July 1992	August 1991
<i>Employment Indicators</i>										
Nonagricultural Employment ¹	115.3	115.3	110.9	0.0%	4.0%	110.2	109.9	108.4	0.3%	1.7%
Manufacturing	86.7	87.9	85.4	-1.4%	1.5%	101.5	102.0	99.3	-0.5%	2.2%
Nonmanufacturing	123.7	123.5	118.4	0.2%	4.5%	120.4	119.3	119.0	0.9%	1.2%
Unemployment Rate	5.8%	6.0%	5.2%			5.5%	5.9%	5.5%		
Help Wanted Advertising ²	64.5	69.0	59.8	-6.5%	7.9%	92.2	75.2	70.8	22.6%	30.2%
<i>Utilities³</i>										
Industrial Electricity Sales	98.5	101.0	97.7	-2.5%	0.8%	106.7	108.5	107.4	-1.7%	-0.7%
Commercial Gas Sales	104.3	100.0	102.9	4.3%	1.4%	118.2	106.7	102.5	10.8%	15.3%
Industrial Gas Sales	72.1	67.4	77.5	7.0%	-7.0%	47.1	52.7	44.9	-10.6%	4.9%
<i>Car and Truck Registrations⁴</i>										
New Passenger Cars	54.3	63.4	52.8	-14.4%	2.8%	50.4	44.2	43.6	14.0%	15.6%
New Trucks	96.5	65.6	59.4	47.1%	62.5%	82.3	48.8	63.5	68.6%	29.6%
<i>Bankruptcies—South Bend Division⁵</i>										
Business	55.8	74.2	40.0	-24.8%	39.5%	(Included in South Bend Division)				
Non-Business	173.4	186.3	100.0	-6.9%	73.4%					
<i>Housing Construction Data⁶</i>										
Estimated Value of Permits	109.4	146.4	103.1	-25.3%	6.1%	167.7	124.7	94.3	34.5%	77.8%
Number of Permits Issued	101.6	112.3	87.0	-9.5%	16.8%	85.1	87.7	66.7	-3.0%	27.6%
Average Value per Permit	108.6	122.3	119.0	-11.2%	-8.7%	194.5	138.8	139.5	40.1%	39.4%
<i>Residential Real Estate Data</i>										
Number of Active Listings	1,607	1,674	1,590	-4.0%	1.1%	1,785	1,859	1,978	-4.0%	-9.8%
Average Days Listed	95	99	51	-4.0%	86.3%	109	109	111	0.0%	-1.8%
Average Market Price	\$74,608	\$72,239	\$71,338	3.3%	4.6%	\$76,670	\$74,754	\$74,423	2.6%	3.0%
% of Sales to List Price	95.0	94.4	93.4	0.6%	1.7%	94.0	94.0	99.0	0.0%	-5.1%

All figures except for Unemployment Rate and Residential Real Estate Data are seasonally adjusted index numbers with base year 1986 = 100.

¹St. Joseph and Elkhart counties.

²South Bend Tribune and Elkhart Truth.

³Electricity sales are South Bend and Elkhart. Gas sales are St. Joseph and Elkhart counties.

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

⁵St. Joseph County, excluding cities of South Bend, Mishawaka, Osceola, Walkerton, and New Carlisle. Elkhart County, excluding cities of Elkhart, Goshen, Nappanee, and Millersburg.

South Bend/Mishawaka

August employment indicators for the South Bend/Mishawaka area reflect the sluggish condition that has characterized the current recovery, although in some respects the local economy is doing better than the nation as a whole. Overall nonagricultural employment was unchanged from July, but 4% better than August 1991. In fact, the 115.3 index is nearly 3% percent higher than 112.2, the previous peak of the business cycle reached in September 1990.

One can conclude that more people were employed in St. Joseph County in August 1992 than ever before in its history. The overall number, however, conceals the problem the local economy continues to experience with manufacturing. While the manufacturing employment index was 1.5% better than last August's reading, it dropped 1.4% from July and rests some 13.3% below the base line employment in 1986. Both the recession and an underlying change in the structure of the economy are responsible for that condition.

At this point, it is not possible to quantify the extent to which each of the two factors accounts for the loss of manufacturing jobs locally. It seems likely, however, that recovery from recession in the manufacturing sector is progressing much more slowly than in nonmanufacturing. The net effect, however, is positive, which is further reflected in a local unemployment rate that has consistently been lower than the national rate.

Other South Bend/Mishawaka indicators continue to give mixed signals, which is seen here as another indication of particularly weak performance of the overall economy in the recovery phase of the business cycle. New housing activity remains strong with an index that was greater than 100 in 12 of the last 16 months. On the negative side, car and truck registrations remain in the doldrums, and both business and personal bankruptcies in August exceeded levels experienced in the region one year ago.

Elkhart/Goshen

If one contrasts the August 1992 employment picture in Elkhart/Goshen with that in neighboring South Bend/Mishawaka, the importance of the fundamental differences between the two economies becomes obvious. Given the dominance of manufacturing in Elkhart County and the connection, for the most part, of that manufacturing to consumer spending (RVs, pharmaceuticals, musical instruments), it is not unexpected that the recovery would be more difficult there than in St. Joseph County. Consumer goods manufacturing was hit the hardest in the recession and the slowest growing in the recovery; this is because, unlike previous recent cycles, the consumer does not have the wherewithal to spark a robust recovery.

Manufacturing employment in August was 14% below the pre-recession peak, whereas nonmanufacturing employment was nearly 2% above.

The remaining Elkhart/Goshen indices provide a picture much like that in South Bend/Mishawaka—a mixed picture of pluses and minuses. The economy is advancing, but very slowly.

Outlook

The biggest question mark at the time of this writing concerns the effect, if any, of the election results upon the economy. The impact of the vote upon both policy and consumer and business sentiment has the potential of introducing change. If one ignores the political factors and looks only at economic variables, the prospects are for further sluggishness. As observed by the *Wall Street Journal* in reporting that the index of leading indicators fell three months out of the last four, "the economy's future looks as slow and uneven as its present." This seems equally true for the two area economies.

Richmond-Connersville- New Castle

Ashton I. Veramallay

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The Richmond-Connersville-New Castle (RCNC) area economy will experience moderate growth in 1993. As the national economic recovery continues with an expected real gross domestic product of 3% and inflation rate of 2.5%, it will affect the local region.

The manufacturing sector, for example, can expect an improved performance over last year's sluggishness. The expected increase in automobile sales of 9.8 million units in 1993 versus 8.7 million in 1992, together with President Clinton's stimulus package, will translate into more jobs. Some of RCNC's large manufacturing firms, supplying valuable inputs to the transportation industry, will undoubtedly benefit from an increase in orders. Consequently, the employment picture will gradually brighten in the coming quarters, a welcome relief to the protracted double-digit unemployment rate in 1992. Further, despite the current anemic recovery, 66% of the firms responding to my survey are optimistic about busi-

ness conditions in 1993. Area firms, operating in the global economy, will continue to restructure and make improvements in plants and equipment to enhance productivity and competitiveness. However, there will be some tradeoffs on regional competitiveness and job creation with the implementation of the North American Free Trade Agreement (NAFTA). In the long run, NAFTA will increase efficiency, employment, and growth in the United States, Canada, and Mexico. It will create the world's largest economic community, with a population of more than 370 million people and a GDP of nearly \$7 trillion.

Moreover, construction activity can expect a rebound. Total investment in new homes, businesses, and expansions is likely to exceed \$32 million in RCNC. This is fueled by favorable rates of interest and low inflation along with optimism on the economy. Low mortgage rates have made housing more affordable to the average citizen than it has been in 20 years. Creative financing strategies have been effective in easing buyer concerns in a relatively active regional housing market. Also, the Clinton infusion of additional government spending and transfer payments to state and local governments will have a positive effect in RCNC, particularly on human resources and infrastructural facilities.

Furthermore, retail trade will recover from last year's doldrums. It will be much better due to a surge in consumer confidence and high expectation of an improving economy à la Clinton. For local merchants, this means a significant increase in retail performance during the holiday season. Merchants should strike the first note in the fourth quarter to ensure a jolly

ringing of the cash registers by having early sales, discounts, and promotions. Keeping inventory low and offering a wider assortment of consumer goods will not only reduce overhead but will also lure shoppers to do most of their spending in RCNC with concomitant multiplier effects. Retail trade, it must be noted, is responsible for 22% of the region's employment and is vital to a dynamic economy. Overall, the prospect for an improving regional economy is extremely favorable once the fundamentals are in place.

Evansville

Maurice Tsai

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The Evansville economy rebounded from the 1991 recession by growing in 1992 at 2.6% in terms of the Evansville Area Business Index (see the **Table**). The recovery was led by manufacturing and construction sectors while employment showed a moderate improvement. Trade and services, normally a strong sector, posted lukewarm growth.

The manufacturing sector grew by 2.3% to recoup its loss in 1991. This sector was not hit by the massive layoffs seen in automotive and other heavy industries. The Whirlpool plant was in the process of

Table
Evansville Area Business Index (1977=100)

	Industrial Production	Trade and Services	Construction	Transportation	Finance	Employment	Composite Index
<i>Annual Index</i>							
1988	123.76	119.71	115.54	110.82	121.39	112.67	119.34
1989	123.57	121.78	118.76	113.86	122.86	116.55	121.11
1990	124.00	128.82	112.62	112.25	121.64	118.35	122.35
1991	121.32	129.08	98.19	106.86	127.54	118.85	121.18
1992*	125.50	130.63	112.90	107.22	127.85	121.10	124.35
1993**	129.30	132.60	118.00	109.90	131.00	123.50	127.65
<i>Annual Growth Rate (%)</i>							
1988	2.6	3.9	-12.1	2.6	-3.2	2.9	1.6
1989	0.4	1.7	2.8	2.7	1.2	3.4	1.5
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*	2.3	1.2	15.0	0.3	0.2	1.9	2.6
1993**	3.0	1.5	4.5	2.5	2.4	2.0	2.7

*Estimate; **Forecast
Source: School of Business Administration, University of Evansville.

installing a new production process during the last half of 1992, which means higher production and employment in 1993.

The declining trend of construction activities in 1990 and 1991 was reversed in 1992. Residential construction was spurred by low interest rates, as shown by an increase in permit values of about 20% over the previous year. Business construction permit values rose by more than 10%.

The slow growth in trade and services was attributed to softening of retail sales in the middle of 1992, especially in the second quarter. The service sector maintained its rate of growth slightly below the rates in the past. The financial and transportation sectors remained stagnant for most of 1992.

Employment rose by 1.5% in 1992 over a year ago. The labor force, however, also grew by the same rate. The regional unemployment rate rose from 5.8% in 1991 to 6.2% in 1992. These rates were below the national level and below the state level in the second and third quarters of 1992.

In 1993, the national economy is projected to grow by 3% in real terms. The inflation rate will still be under control—probably below 4%. The Evansville economy should be able to match this performance in the coming year. The estimated growth rate for the regional economy is 2.7% or better. All sectors are expected to grow. The leading sector will be manufacturing, growing at 3%. New production lines at Whirlpool will contribute to more production and employment. Steady growth at Alcoa and GE is a reasonable expectation. The announcement of a 5% reduction in the work force at the Bristol-Meyers Squibb Company is a disturbing factor, but the impacts on the regional economy are probably minor.

The trade sector will see some recovery in 1993, at a level lower than in 1988-90. With a steady growth in the service sector, the trade and services index should rise by at least 1.5%. The construction index will rise by 5% as interest rates remain low and business investment becomes stronger. Increased manufacturing activities should lead to a more active transportation sector in 1993, which is expected to rise 2.5%. The financial sector regained its momentum of growth in 1992 and should continue to do so at the rate of 2%. The employment index in 1993 will be 2% over 1992 as the regional economy stays on its recovery course.

In summary, 1993 should be a solid recovery year. The growth rate will be 2.7% or better, and all sectors are expected to grow. The regional unemployment rate will decrease to below 6%.

Jeffersonville/New Albany (Louisville Area)

Fay Ross Greckel

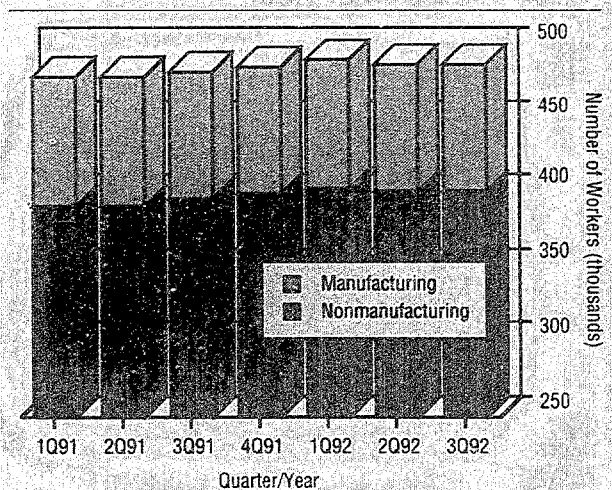
Professor of Economics, Indiana University Southeast

The Louisville metropolitan area economy continues to fare reasonably well, outpacing the national recovery. Although many families, businesses, and sectors were hurt by the recession, the overall impact on the seven-county area (Clark, Floyd, and Harrison counties in Indiana, and Jefferson, Oldham, Bullitt, and Shelby counties in Kentucky) was not that severe.

The downturn in employment, which occurred in early 1991, lasted only two quarters, with a net job loss of less than 1%. Given the widespread efforts to consolidate job responsibilities and thereby to increase productivity, it is quite possible that regional output never really declined. This shallow decline, if there was one at all, led into a rather weak recovery.

After adjusting for normal seasonal fluctuations, metropolitan area employment grew steadily from mid-1991 through early 1992, and then declined again slightly in the second quarter of this year (see **Figure 1**). (Actually, the raw employment data show employment at a record high during the second quarter, but because the gain was less than normally occurs during the middle months of the year, the seasonally adjusted statistics register a decline.) Never-

Figure 1
Louisville Metropolitan Area Employment



Seven-county area establishment data.

theless, the most recent employment reports show an increase of about 5,000 jobs over the comparable period a year ago. The job gains occurred mainly in services, transportation, and government employment. Manufacturing employment declined very slightly, with new jobs in some areas nearly offsetting the layoffs in others. (All employment figures are subject to revision by state agencies in 1993.)

Employment in the Indiana portion of the metropolitan area also reached record levels in mid-1992 (see Figure 2). Despite layoffs at the ICI Americas

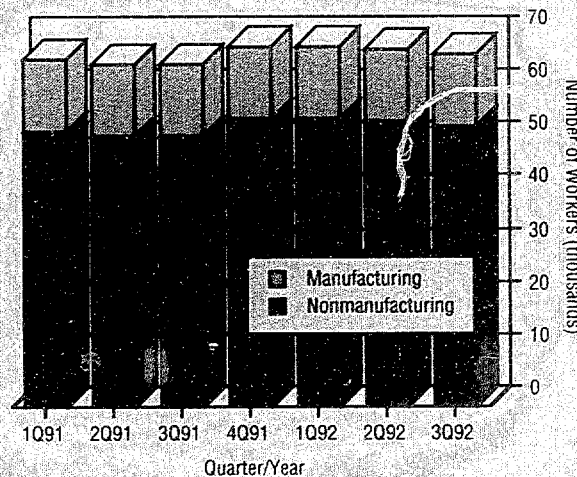
munitions plant and elsewhere, total employment is running about 2,000 jobs ahead of 1991. Increased employment in services, transportation, and construction offset decreases in other sectors.

The employment outlook remains a bit uncertain. As in the past year or more, announcements of impending layoffs continue to appear, as one firm after another downsizes, consolidates, or cuts costs. But at the same time other firms add employees, open new stores or factories (such as the recent startup of the Apollo America oil-blending plant in Jeffersonville), or begin construction on new facilities.

While some of the layoffs, such as those at GE, are attributable to the recession, other non-cyclical forces are also at work. Among these are defense department budget cuts, a more competitive world economy, and the long-term restructuring and cost-cutting that is occurring in banking and other industries. While long-term developments may continue to curtail jobs in some firms, even after the national economy moves farther out of the recession and cyclical job expansion strengthens, the employment base of this area appears to be quite solid. Many firms have found healthy niche markets, export activity is increasing, new firms are starting up or moving here, and some firms are expanding their operations.

The underlying health of the local economy is evident in the increased spending this year on new homes and motor vehicles. As Figure 3 shows, residential construction rebounded this year, especially for single-family dwellings. Looking at the first nine months of the year, building permits for Jefferson County (which includes the city of Louisville) were up 37% over 1991. The Indiana counties (see Figure 4),

Figure 2
Southern Indiana Employment



Clark/Floyd/Harrison counties establishment data.

Figure 3
Jefferson County (KY) Residential Building Permits

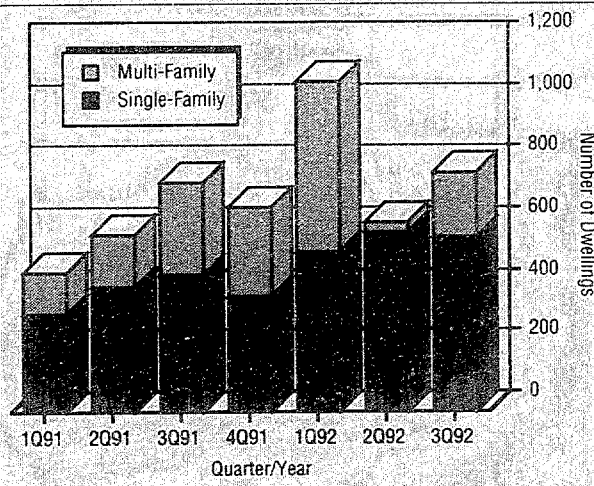
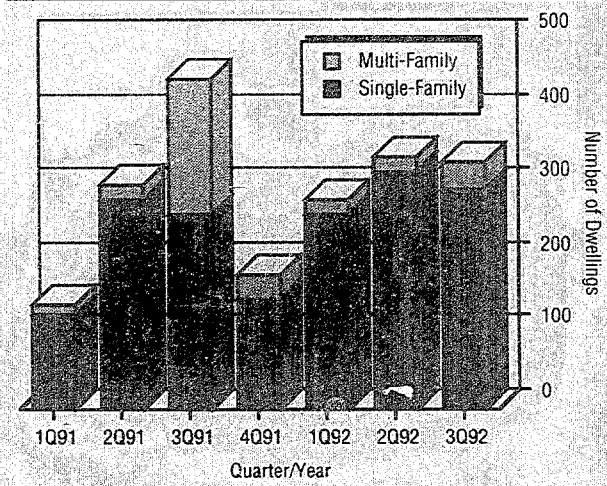


Figure 4
Clark/Floyd/Harrison Counties (IN) Residential Building Permits



which did not experience a residential construction decline in 1991, also recorded an increase for 1992. Single-family building permits for the first eight months of this year were 18% greater than for the first nine months of 1991.

Sales of existing homes have also been strong. Real estate sales in the Kentucky portion of the metropolitan area increased substantially both in number of sales (up 15%) and dollar volume (up 25%) for the first nine months of the year. By the time 1992 is over, realtors expect the dollar volume to set a record and the number of units sold to come close to the previous record, set in 1979. Southern Indiana realtors enjoyed an 11% increase in the number of sales and a 21% increase in dollar volume.

Sales of cars and light trucks were much better this year than in the first three quarters of 1991, although they did not quite reach the 1990 levels. Car sales rose by 12% in Jefferson County (KY) and 10% in Clark and Floyd counties (IN). Light truck sales increased even faster—29% in Jefferson County and 51% in Clark and Floyd counties. Retail sales seem to have gotten off to a good start for the holiday season.

Although nonresidential construction was not as strong as in some recent years, there has still been considerable activity. Several projects are under way or recently completed at the Clark Maritime Center, an office tower is nearing completion in downtown Louisville, and several shopping malls have been greatly expanded or remodeled, to cite just a few examples.

At least ten new firms chose to locate in Clark and Floyd counties in the past year, bringing capital investments of about \$50 million and some 450 projected new jobs, most of them in growing firms with up-to-date technology. This trend in attracting new, solid employers is likely to continue. Future construction in Jefferson County includes the airport expansion and the \$450 million expansion of the Ford truck plant, with 1,300 new jobs promised by mid-1995.

In summary, although employment has been rather sluggish this year, it has at least been growing. Sectors such as housing, often a leading indicator, have been healthy and pointing in a positive direction. The strong surge in new car and truck sales—though ultimately inevitable, given the pent-up replacement demand—suggests both income availability and some confidence in the future. And the outlook for industrial and commercial expansion is good.

Although the expected slow pace of the recovery nationally will continue to have repercussions here, there is reason to be optimistic about the area's economic prospects for 1993. Some belt-tightening and layoffs will continue, but moderate growth will be the norm, as in many recent years. That may not be as exhilarating as we might like, but recent experience suggests that it may be healthier in the long run.

Kokomo

Dilip Pandse

Associate Professor of Economics, Indiana University Kokomo

The Kokomo economy has gathered momentum, shaken off last year's recessionary phase, and is on its way back to sound health, in spite of some setbacks. In the midst of jobless downturn, investment uptick, longer factory work weeks, new businesses, robust building activity, mergers and acquisitions, strikes and picket lines, pink slips and farewells, Kokomo's economy has maintained upward momentum throughout the first nine months of 1992. Especially in the area of job count, the local economy is much stronger than it was a year ago.

The jobless rate ranged from a low of 5.9% in April and June to a high of 8.9% in September. The average unemployment rate stayed at 7.2%, which is 2.1% below the same period a year ago. The monthly average number of jobless people stood at 2,746, compared to 3,632 a year ago. Unlike in the past 2-3 years, the labor force grew by more than 1,000 since the beginning of 1992. The growth in the number of workers from 38,180 in January to 39,930 in September suggests a reappearance of discouraged workers. The fact that this summer 1,000 people lined up for 10-15 jobs at PPG, Inc. suggests how tough times have been for many in Kokomo.

Although the local economy is not as strong as Kokomoans would like, it looks remarkably healthy compared to neighboring counties. Through the first nine months of 1992, the unemployment rate was lower in Howard County than in Miami, Grant, and Tipton counties, and slightly higher than in Cass County.

Kokomo is doing well among the state's manufacturing-based MSAs (see **Table 1**). In the 12 months ending July 1992, both the goods and service sectors posted gains, compared to losses in the previous 12 months. Five subsectors registered gains,

Table 1
Kokomo Employment Compared to Top Indiana MSAs

MSA	Mfg. Jobs as % of Total Employed	Mfg. Work Week	Average Unemp. Rate
	Jan-June 1992	Jan-July 1992	
Elkhart-Goshen	48.8%	40.1	5.7%
Kokomo	39.2%	40.1	7.0%
Anderson	30.7%	41.2	7.9%
INDIANA	24.6%	41.7	6.1%

ranging from 1.2% in retail trade to 9.1% in wholesale trade; four subsectors posted losses, from 1.6% in the government sector to 6.7% in finance, insurance, and real estate.

Kokomo's efforts to attract high-tech businesses received a boost in July when National Semiconductor, Inc. announced plans to move its regional sales office from Carmel, Indiana to Kokomo. In addition, Hewlett-Packard opened its office in Kokomo. Both are major suppliers to Delco Electronics, Kokomo's and the state's largest private single employer.

Kokomo's Urban Enterprise Zone (UEZ) received a boost in the form of a Lilly Endowment grant of \$150,000 and a contribution of \$215,000 in loan money from seven local banks. Residents will now be eligible for low-interest home improvement loans, which will help improve the quality of housing, make the area attractive for potential businesses, and create construction jobs. Participating banks will be able to claim their contribution as a commitment to reinvest funds in the economic well-being of the area.

In spite of some gains in net income in 1992, the finance, insurance, and real estate sector as a whole registered a loss of 100 jobs in the 12 months ended in July. Overall, the housing sector registered strong gains, snapping out of its lackluster performance of 1991. Spurred by low interest rates, the number of building permits issued through the first nine months of 1992 totaled 625, which was 8.3% higher than a year ago. The dollar value of permits issued totaled \$73.3 million, compared with \$24.3 million a year ago. Much of this increase was generated by four public works projects totaling \$33 million.

The number of residential building permits totaled 482 during the first three quarters, compared with 396 a year ago—a jump of 22%. Home improvement and single-family dwelling permits each jumped at least 30% over 1991 levels. The average value of a single-family building permit stood at \$105,000, compared with \$98,000 a year ago. Permits for multi-family units jumped by 10 from a year ago to 23. Whereas the home building activity remained strong, sales of existing homes remained stagnant during the first half of 1992. Not only that, the median home price dropped 4% in the second quarter to \$49,900 and remained 25% below the state's median home price of \$67,000. During January-June, 72% of houses sold in Kokomo remained priced below \$70,000.

In July, the Grissom Air Force Base Community Redevelopment Authority hired a consulting firm to provide a reuse plan for the deactivated base. In October, the U.S. Air Force released \$1.1 million for environmental cleanup; the overall cleanup is estimated to cost at least \$35 million. Other parts of the surrounding area registered both gains and losses:

- Peru lost B & C Industries, a maker of boats, because of poor sales volume;

- Construction of U.S. Reduction's new smelting facility was begun in Tipton; the plant will employ about 50 people;

- White Rodgers announced plans to move its manufacturing operation out of Logansport, a loss of 50 jobs; the facility will eventually become an assembly and distribution center;

- CMI-Wabash began expansion of its facility in Wabash, which will add 55 jobs to its current employment of 154 people.

The rate of income growth has been sluggish in Kokomo. While per capita income rose 5%—from \$16,938 in 1989 to \$17,803 in 1990—the average annual pay slid 0.1% to \$27,104 during the same period. The median household spendable income rose about 2%—from \$27,796 in 1989 to \$28,282 in 1990. Incomes have not increased rapidly because of small increases in wages and salaries, lack of big bonuses to about 17,000 employees at area auto plants, lack of overtime, and low-paying new jobs.

Various local governmental agencies received about \$2 million in grants and credits from the U.S. Department of Housing and Urban Development, the Indiana Department of Commerce, Farmers Home Administration, and Indiana Housing Finance Authority. The grants and loans were awarded to upgrade worker skills, help house farm workers, assist low-income families in buying homes, improve deteriorating neighborhoods, and let residents improve conditions of homes in the UEZ.

Both IU Kokomo and Ivy Tech's Kokomo campus registered higher student enrollment in both spring and fall semesters. Ivy Tech's enrollment, in fact, surged in double-digit percentages. And IU is embarking on an ambitious \$10 million library complex building project.

Farm land values in the Indiana section of the 7th Federal Reserve District, including all counties surrounding Howard County, registered the biggest gain—3%—in the 12-month period ended July 1, 1992. The increase in farm land values outpaced gains posted in Iowa, Illinois, Michigan, and Wisconsin.

Whereas economic news was inspiring on many fronts, not all was sunshine and roses. Among the organizations forced to reduce costs or make cutbacks in personnel were Haynes International, Kokomo's third largest employer; Howard Community Hospital; and Kokomo Center School Board. On the labor front, there were more strikes, pickets, and threats than in the past. In most cases conflicts arose on "turf" and health/benefit issues. Companies experiencing such labor problems included Transmission Builders Federal Credit Union; Howard County Jail and

Detention Center; construction companies working on the new shopping center; and Kokomo Ready Mixed Gravel Co. In addition, a nine-day strike in September at the GM parts plant in Ohio had a mild ripple effect at Delco. Unlike a year ago, when by September all workers in Delco's JOBS Bank program were called back to work, this year about 150 workers remained in the program through September.

While the Consumer Price Index (CPI), which tracks prices of 600 or more items at the national level, has increased about 3% this year, Kokomo's Nuisance Index, which tracks prices of ten routinely purchased items, shot up 11.9% during the year ending in October (see Table 2). Over the past five years, the Nuisance Index has increased at an annual 8% clip, while the CPI has held steady between the 3-4% range. The Nuisance Index is perhaps a better measure of inflation than the CPI. It certainly paints a different picture than overall inflation reflected in the CPI.

Forecast

Overall, for at least two reasons, the economic activity at the national level will show more vigor than a year ago. First, consumers will likely loosen their purse strings and spend cautiously, yet at a higher pace than last year. Second, a push will come from the government sector. The two forces taken together will generate much stronger demand for durable goods than a year ago. Detroit's auto makers will push production targets above 1992 levels. The housing sector, in general, will remain active because of relatively stable low mortgage rates. By spring or early summer of 1993, the national economy will have gained momentum.

At the local level, Kokomo's factories will keep humming somewhat louder than a year ago. The employment situation will continue to improve in

1993. The unemployment rate will hover around 6.6%, with a range of 5.2-8.5%. For the second year in a row, the jobless rate will stay in single digits. Employment will grow by 300-400 in the retail and service sectors. No gains are expected in the goods-producing sector. The manufacturing work week will creep upward, with the yearly average remaining slightly below 41 hours—still above the 1992 level.

In the housing sector, a technical correction will occur on the single-family building permit front. The number of such permits will plunge 25% from a projected 1992 level of 200. The value of the permits issued should be around \$16 million. Overall, the number of nonresidential permits should register an improvement over 1992, while residential permits should post a moderate decline. Housing will continue to remain affordable in 1993.

Beginning in January 1993, about 4,000 salaried employees at Delco will begin contributing toward their health insurance, which could sap about \$5 million per year from Kokomo's economy. If hourly workers eventually end up doing so also, the drain could increase to around \$10-11 million.

A departure of a significant number of active-duty personnel from Grissom Air Force Base will adversely affect total retail sales volume in the area. In general, total retail sales should register a small dip or a minuscule gain from the projected 1992 sales volume of \$795 million. Sales per household will creep up to \$21,400 in 1993.

Despite all kinds of mixed signals GM has sent in recent months, it is highly unlikely that the corporation will let go of Delco Electronics, one of the most modernized, profitable, and cost-efficient operations in the GM family. Delco has a bright future because it is making significant strides in implementing cost-cutting measures, improving worker productivity, and introducing new efficient, high-quality electronic auto components.

Cost control is the new corporate religion in the nation as well as in Kokomo, and downsizing and *perestroika* is the new game strategy pursued by all. Consequently, in its cost-cutting measures, GM is likely to pare many of the JOBS Bank enrollees at its nationwide operations, including Delco, and entice many hourly workers in Kokomo with attractive early retirement deals. It should surprise no one if about 250-300 frequent enrollees in the Delco program are cut loose in 1993.

The silver lining to developments in recent months is that Kokomo will still continue to be among the top three manufacturing-based economies in the Hoosier land. White-collar jobs are on the rise. A change is in the air. And it is for better times than in the past two years.

Table 2
The Nuisance Index: Kokomo

	Average Price in October			% Change	
	1987	1991	1992	1991-92	1987-92
Fresh milk, 1/2 gal. ctn.	\$ 1.34	\$ 1.45	\$ 1.59	9.7	18.7
Coffee, 1 lb. can, regular	3.28	3.03	2.54	-16.2	-22.6
Beer, six 12-oz. cans	2.72	3.53	3.76	6.5	38.2
Woman's dress shoes	23.37	36.13	37.87	4.8	62.0
Boy's sneakers	27.07	31.57	36.50	15.6	34.8
Man's haircut, regular	7.80	8.14	8.80	8.1	12.8
Permanent wave	30.25	36.07	43.60	20.9	44.1
Movie admission, adult eve. show	4.50	4.96	5.00	1.0	11.1
Dry cleaning, man's 2-piece suit	5.64	6.36	7.35	15.6	30.3
Toothpaste, 6-3/4 oz.	1.49	1.90	1.93	1.6	29.5
TOTAL	\$187.46	\$133.14	\$148.94	11.9	38.6

Indiana Business Review

Indiana Business Research Center
Graduate School of Business
Indiana University
Bloomington, IN 47405

December 1992

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