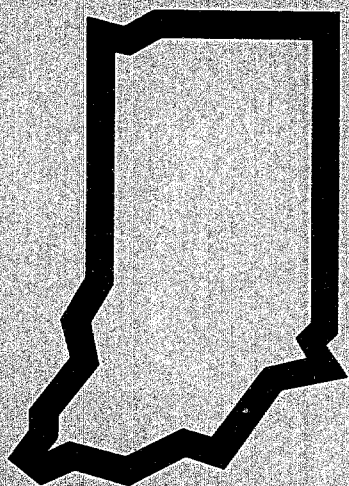


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Contents

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- | | | | |
|-----------|--|-----------|---|
| 1 | It's Getting Repetitive: A Strong Economy for Another Year
Bruce L. Jaffee | 14 | Columbus
Patrick Michael Rooney and Ammar Askari |
| 1 | The National Real Outlook
Willard E. Witte | 15 | Fort Wayne
Thomas L. Guthrie |
| 3 | International Trade
Larry Davidson | 16 | Richmond-Connersville-New Castle
Ashton I. Veramallay |
| 4 | Federal Reserve Policy and Interest Rates
Lloyd B. Thomas | 17 | South Bend/Mishawaka and Elkhart/Goshen
David Vollrath and Paul Joray |
| 6 | The Financial Markets
Michael Simkowitz | 19 | Lafayette
A. Charlene Sullivan |
| 9 | Continued Expansion Anticipated for Indiana
Morton J. Marcus | 20 | Louisville-Jeffersonville-New Albany
Fay E. Greckel |
| 11 | Indianapolis
Robert Kirk | 22 | Kokomo
Dilip Pendse |

Look out! Not all of Indiana's metropolitan areas are represented in this edition of our annual Outlook. The vagaries of work and time have conspired against some of our favorite authors to keep them from submitting their forecasts of local economies. We regret this, but also believe it is important to publish the Outlook edition as close to December as possible and help readers throughout Indiana get a jump on 1998 and its economic tidings. The ubiquitous World Wide Web will provide some aid to those looking for information regarding all metropolitan areas in Indiana, with pages detailing the economic and population trends in each of the 11 metropolitan areas in Indiana and each of the 92 counties. We encourage you to visit www.iupui.edu/it/ibrc in seeking further knowledge and statistical understanding (no crystal ball prognostications, I'm afraid!) of Indiana's counties and cities. — Ed.

It's Getting Repetitive: A Strong Economy for Another Year

Bruce L. Jaffee

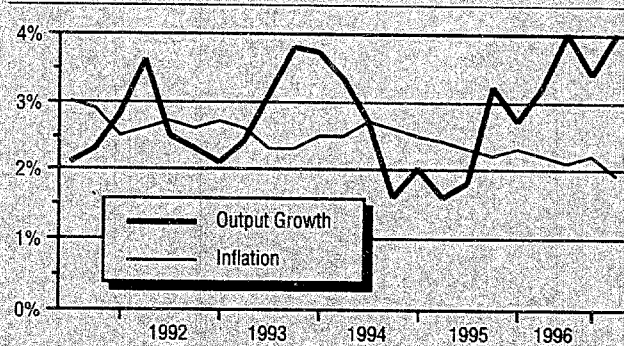
Associate Dean of Academics and Professor of Business Economics and Public Policy, Kelley School of Business, Indiana University, Bloomington

Since the end of the last recession in March 1991, the U.S. economy has experienced solid economic growth. During this period, annual real GDP increases have fluctuated narrowly in a band of 2 to 4% growth; approximately two million jobs have been created each year; unemployment has fallen below the 5% level; and both the level and volatility of inflation have declined. This remarkable confluence of solid growth in employment and output coupled with low and stable inflation is in sharp contrast to the economic conditions of the 1970s and 1980s.

We see no reason for this situation to change in 1998. The key "drivers" for this economic expansion—consumption spending by households, business investment spending, and exports to foreign markets—should all continue to propel the economy forward in 1998. To be specific, we expect real GDP to rise at a 2.5 to 3% rate during 1998, with inflation climbing to 3% as the economy continues to press on to capacity. Employment growth by historic levels will still be strong, but at a 1.5 million rate it will be down considerably from the more than 2 million new jobs created in the last few years.

Financial markets are always difficult to predict. However, our best forecast for interest rates is a modest rise for the year, with short-term rates averaging approximately 6% in 1998. Long-term interest rates, in contrast, are likely to be stable or rise slightly if inflation picks up. Equity markets will be challenged by turmoil in foreign financial markets, as they were in the last quarter of 1997. However, fundamentals in terms of corporate profits and interest rate movements remain positive. The Dow could rise modestly in 1998 but is unlikely to peak at more than 8500 for the year.

Figure 1
U.S. Output Growth and Inflation, 1991-1997



On the international scene, we are encouraged by improvements in the economies of Canada, Mexico, and many European countries. However, we must recognize that unemployment rates in much of the rest of the world, especially in Europe, are considerably higher than those in the United States. Any weaknesses in foreign economies or further increases in the value of the dollar will retard U.S. export growth and worsen the trade and current account deficits.

Within the Hoosier state, the outlook is positive, but not as good as it was earlier in the decade. Personal income is expected to increase at about a 2.4% real rate in 1998, and more than 30,000 new jobs will be added.

Overall, we are confident that 1998 will be a good year, though possibly with not as strong a performance as the one we experienced in 1997. Things to look for to cloud this otherwise optimistic forecast are a continuation of the financial crises in Asia, weaknesses in the economies of the European countries, and oil price shocks resulting from continued tension in the Middle East.

The National Real Outlook

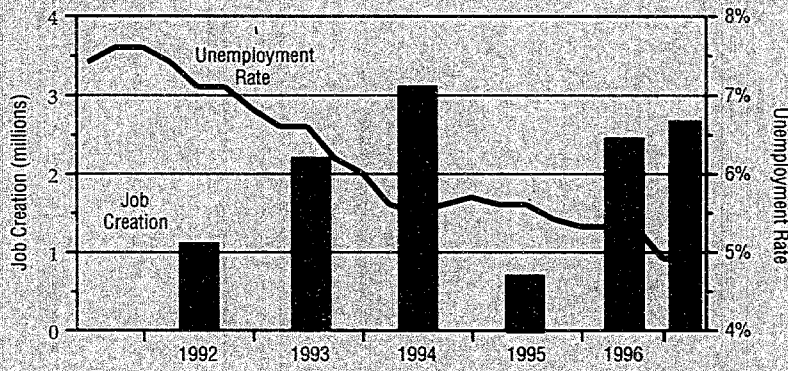
Willard E. Witte

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There is an ancient Chinese curse that says, "May you live in interesting times." The behavior of the U.S. economy of late seems to bear this out: Boring can be beautiful. A year ago, when the IU School of Business Outlook Panel toured the state, we said that we expected the expansion, then in its sixth year, to continue over the next 12 months. A year later, the expansion has indeed extended. And we think it is likely that 12 months from now, the expansion will be into its eighth year.

Figure 1 shows the heart of the situation. The heavy line depicts the year-over-year growth rate of real GDP on a quarterly basis; the lighter line is the year-over-year change in the GDP deflator. Despite a few minor fluctuations, for the most part the U.S. economy has grown at a rate in excess of 2.5% for the past six years. Since the end of the last recession in 1991 (now 80 months ago), output growth has

Figure 2
U.S. Labor Market, 1991-1997



averaged 2.9% per year. Through third quarter 1997, we've seen more of the same—real GDP has risen 4%. At the same time, inflation has been steadily declining, and 1997 continued that trend: prices of all goods and services rose only 1.9% through September.

The labor market situation has been similarly repetitious, as shown in **Figure 2**. The bars depict the increase in civilian employment from fourth quarter to fourth quarter (except the 1997 bar, which is third quarter to third quarter). Since its low point in 1991, the economy has added an average of more than 2 million jobs a year, even with the slow start in 1992 and a lull in 1995. Over the past four quarters, 2.7 million jobs have been created—a remarkable performance for a recovery more than six years old. The rising employment has been above labor force growth by more than 300,000 per year, producing the steady drop in unemployment shown by the solid line. From its cycle high of 7.8% in June 1992, the jobless rate has declined more than 3 points and has been below 5% for the past few months.

This combination of rising output, low inflation, and low unemployment represents the best economic performance in the past three decades. Indeed, in some ways it is too good to continue. By any standard measure, the economy is now at or very close to "full" employment. Over the past three decades, growth has averaged about 2.3%, but we have been above that long-run benchmark for much of the past six years, including the past two. Consistently in the past, unemployment below the mid 5% range has caused pressure on wages that has ultimately pushed prices up. In addition, capacity use (as measured by the Federal Reserve) is now at almost 85%—a traditional danger level.

Even so, we are sanguine about the outlook for the next year. The expansion has rested on three strong supports: consumption spending by house-

holds, business investment spending, and exports to foreign markets. Each of these should continue to propel the economy forward into 1998. The rapid increases in employment have been producing solid increases in household real income, as well as high levels of consumer confidence. After a brief lull during the past spring and early summer, consumer purchases, especially of the durable goods so important for the Indiana economy, have recovered their momentum.

On the investment front, business purchases of new equipment were up 12.7% in the past year—better than the average increase of 11% over the last five years, with no sign of slowing. Indeed, it seems to be broadening, shifting from dominance by electronics and telecommunications equipment to include healthy growth of transportation and industrial equipment. Moreover, outlays for new buildings are also gaining momentum, with investment in structures up 4.5% in the past year. Finally, exports have been averaging double-digit increases in the last three years, with a rise of 13.6% the past year. This has, however, been more than matched by rising imports, producing an increase in the trade deficit. Although continued growth at this rate seems unlikely, demand abroad for our goods and services, especially from our trade partners in this hemisphere, should remain healthy.

We expect another good year in 1998. Economic growth will probably decelerate a bit, but given capacity constraints, some slowdown is desirable. We also expect inflation to worsen a little from its current low level. To be more specific, we expect real GDP to rise by 2.5 to 3% during 1998, with inflation heading back toward 3%. If this is the case, employment will rise about 1.5 million—considerably below the rate of recent years, but enough to hold the unemployment rate below 5%. In part, this scenario is premised on our expectation that the Fed will tighten its monetary policy over the next several months, perhaps beginning before year's end. This action, which will push short-term interest rates toward 6% by the middle of next year, will be motivated by concern that unrestrained growth will reignite inflation.

The possibility that the tight labor market will produce a surge in wages is a definite risk to our outlook. Labor cost increases have crept up during the past six months, but they have been offset in part by productivity improvement. Productivity advance, which has been dismal for most of the past 25 years, is a key to continued economic progress. If it does not materialize, higher wages will translate into either higher prices, ensuring monetary reaction by the Fed or into lower profits, endangering the investment boom that has been central to this expansion. On the other hand, if the investment of the past several years produces a significant rise in productivity, as some

prognosticators expect, it would allow faster growth with inflation remaining low. Our expectation is between these two extremes.

There are other risks to the forecast. October was the tenth anniversary of the largest one-day drop in stock market history, and the market marked the date (though slightly late) with a 554-point plunge in the Dow Jones Index. Though most of the drop was made up within a week, further instability in financial markets is certainly a possibility. However, in many regards the situation now is different from 1987. Interest rates are substantially lower, as is inflation. The government budget, which then had a large deficit, is now essentially in balance. And it should be remembered that the 1987 crash had virtually no effect on the real economy.

Problems could also arise internationally. Indeed, the stock market decline was triggered by turmoil in financial and currency markets in the Far East. There was also a hint of a trade war with Japan in mid-October, and the upcoming transition in Europe

"The more moderate advance we foresee is sustainable on a continuing basis. Boring is beautiful."

to a common currency (scheduled to debut at the end of 1998) could have unforeseen effects.

But even these potential problems have a bright side. Alan Greenspan, chairman of the Federal Reserve Board, suggested that some decline in the stock market could have the salutary effect of slowing the economic advance to a more sustainable level. The depreciation of Far Eastern currencies could have a similar effect, and will also directly serve as a restraint on increases in inflation.

In sum, the past year has been a very good one for the U.S. economy. Output has grown strongly, leading to rapid job creation and falling unemployment. Inflation, already low, has come down even more. Interest rates have held at relatively low levels, while the stock market has had an advance of historic proportions. We think the next year will also be good, but probably not quite so perfect. Growth may decelerate a little, employment is likely to rise more slowly, inflation and interest rates may edge up a little, and the market is unlikely to come close to matching the past year. This is not bad, though. At some point a continuation of growth like that of this past year will lead to excess, requiring a potentially painful correction. The more moderate advance we foresee is sustainable on a continuing basis. Boring is beautiful.

International Trade

Larry Davidson

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As of July 1997, the accumulated 12-month U.S. merchandise trade deficit was \$197 billion. Although merchandise trade has been in a deficit continuously since 1975, this one has been steadily growing ever since it bottomed in 1991 at \$74 billion. Between 1991 and 1996, merchandise exports to the world increased by \$195 billion, or 47%. Merchandise imports grew by \$312 billion, or 64%.

A broader measure of trade is the current account, which, at \$159 billion, is somewhat smaller than the merchandise deficit because of a growing U.S. service trade surplus and a positive balance on investment income (Americans earned more on foreign assets than foreigners earned on U.S. assets). The current account deficit has also been increasing steadily since 1991. Given that nominal GDP is nearly \$8 trillion, this \$159 billion deficit amounts to no more than 2% of GDP.

By most measures, the trade-weighted value of the dollar increased over the past year by approximately 10%. Between 1991 and 1996, the value of the dollar oscillated, first peaking in 1993 only to bottom in 1995. Overall the dollar generally has been falling since the mid-1980s, and despite its recent strength, it remains considerably weaker than it was in 1986.

Conventional wisdom suggests that a growing trade deficit should lead to a weaker currency value. The behavior of the current account and the value of the dollar between 1991 and 1996 are not inconsistent with that view. Since 1996, however, the values of the dollar and the current account deficit have risen in tandem. Why? The answer is that the United States has been an attractive global destination for both direct and portfolio investment. This kind of trade activity has increased the demand for the U.S. dollar and strengthened its value.

Some of this could change, but 1998 does not look like the year for it. U.S. imports again will likely grow faster than exports. Thus, the merchandise and current account deficits will continue to grow, though modestly. The best forecast for the value of the dollar is one of no change. A pickup in European growth will modestly increase U.S. exports and put upward pressure on the dollar. But a stronger U.S. economy will sustain a high growth rate for imports. Much depends on how these growth scenarios affect interest rates at

home and abroad. My bet is that world interest rates will go up slightly more than those in the United States. This would put some downward pressure on the dollar.

The main risks to this forecast come from both the industrial and developing worlds. In May 1998, we will know if the single European currency, the *euro*, will become a reality. At that time, the first round of countries will be known, and their exchange rates will become rigidly fixed. When this information becomes a widespread certainty, the world will make an initial judgment about the future strength or weakness of the euro versus the U.S. dollar, thereby influencing exchange rates. I'm betting there will be few surprises, but this is clearly a risk factor to consider in the forecast.

The second wild card concerns the stability of the countries in the developing world. Although Mexico, much of Latin America, and parts of Africa show relative strength, large sums of money have been moved out of Asia. The very nature of the economic growth and transformation process suggests that any developing country has a reasonable probability of taking a nose dive in 1998. Uneven economic development, pegging exchange rates too rigidly to the dollar, corruption, inequalities of income, growing imports and trade deficits, privatization of inefficient state-owned enterprises, and too much dependence on foreign capital are just some of the factors that produce high risk in these countries. Should currency crises occur in 1998, one result would be massive capital inflows to the U.S. and a higher value of the dollar.

Let's take a moment to consider how this outlook might affect Indiana. Hoosier merchandise exports grew by 19% per year between 1988 and 1996. **Table 1** shows where Indiana sold its goods globally in 1996. Canada was the largest purchaser of Indiana merchandise, buying 47% of all the state's exports in 1996. Canada's strong economic growth, which is predicted to remain strong in the next year, bodes well for Indiana exports. The U.S. dollar, however, has been appreciating against the Canadian dollar since

Table 1
Indiana Exports in 1996: Major Export Destinations
(in millions of US\$)

World	\$11,947
Canada	5,629
Europe	2,790
Japan	853
Southeast Asia	386
South America	383
Mexico	341

1991. Nevertheless, Indiana exports have more than doubled between 1991 and 1996, which means they have remained strong despite the currency appreciation. Why? One reason is that much of the trade between Indiana and Canada consists of intrafirm transfers among companies that produce transportation equipment (half of Indiana's exports to Canada are from the transportation equipment industry).

Table 1 also shows the importance of both Europe and Japan for Indiana exports. Without major changes in the value of the dollar against the euro and the yen, stronger economic growth in Europe ought to increase the demand for Indiana products enough to offset any problems arising from a slowdown in Japan.

In summary, despite the possibility of financial crises in developing nations and a modestly rising dollar, Indiana is well positioned for strong export growth in 1998. This derives from the likely possibility that many of its major trading partners will experience stronger economic growth in 1998. In particular, rising incomes in Canada, Mexico, and several countries in Europe should increase the global demand for Hoosier products by at least 10% in 1998.

Federal Reserve Policy and Interest Rates

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One of the most crucial variables in economic life is the interest rate. Interest rates influence business decisions to invest in plant, equipment, and inventories, as well as consumers' decisions to purchase homes, autos, and other durable goods. Moreover, interest rate levels affect the returns Americans earn on such financial assets as savings accounts, CDs, government bonds, and other instruments. Finally, interest rates greatly influence the value of the U.S. dollar in the foreign exchange market, thereby influencing U.S. export and import activity in turn.

In forecasting interest rate behavior, it is important to recognize that interest rates are heavily influenced by the state of the economy. Rates normally tend to rise when economic activity strengthens and

fall when the economy weakens. This is largely because of fluctuations in private credit demands over the course of the business cycle. In addition, Federal Reserve policy actions designed to stabilize economic activity often reinforce the natural tendency for interest rates to fluctuate procyclically. When economic activity strengthens to the point at which inflationary pressures begin to emerge, the Fed can be expected to take actions that put upward pressure on short-term interest rates throughout the nation. This is done by slowing the growth of reserves in the banking system, forcing banks to curtail the supply of funds relative to loan demand. By influencing the supply of funds available through financial institutions, the Fed is able to influence short-term interest rates.

The future behavior of interest rates is difficult to forecast largely because it is difficult to forecast aggregate expenditures and macroeconomic activity. Forecasters are commonly divided on the outlook for interest rates, and today is no exception. Some prognosticators believe the rates will fall in 1998 as global disinflationary trends continue. We will argue, however, that the odds favor somewhat higher interest rates in the U.S. in 1998. This view is conditioned on our belief that economic activity will remain strong, that inflationary pressures will increase somewhat in 1998, and that the Fed will take actions to counter those pressures. We do not look for a *dramatic* increase in rates, however.

Economists speak of a "natural unemployment rate," defined as the lowest rate the nation can sustain over a significant period of time without triggering an increase in the existing rate of inflation. As the nation's unemployment rate declines beyond some level, shortages of qualified workers in certain sectors of the economy appear. The shortages lead to wage hikes in those sectors, and such phenomena become increasingly prevalent as the overall unemployment rate in the nation declines. Average nationwide wage hikes increase more rapidly as the unemployment rate falls further below the natural rate. Because a major portion of the cost of production involves wage costs, this suggests that the nation's inflation rate is likely to become more severe as the unemployment rate declines below the natural rate.

The consensus among professional economists throughout the 1980s and the first half of the 1990s was that this natural rate of unemployment was in the range of 5.5 to 6%. But the U.S. unemployment rate has been below 5.5% consistently since early 1996, and it moved below 5% in the spring, summer, and fall of 1997. Remarkably, the nation's inflation rate trended *downward* in 1997, despite the fact that unemployment reached the lowest levels in more than 20 years. As a result, the nation's "discomfort index"—the sum of the unemployment and inflation

rates—is now around 7%. This is the lowest level in 30 years (in contrast, the index exceeded 20% for a period in 1980 and 1981). Such a wonderful turn of events has sent stock prices dramatically higher in the past three years, and has sent economists back to the drawing board.

There are two alternative interpretations capable of explaining these favorable economic phenomena. The optimistic view, espoused by those who believe in the "New Paradigm," argues that a sea change has occurred in the U.S. economy. Owing to the forces of increasing global competition and the efficiencies gained by the increasing use of computers and other technologies and the downsizing of work forces, the long-term trend of U.S. productivity growth has in-

There are two alternative interpretations capable of explaining these favorable economic developments. The optimistic view, espoused by those who believe in the "New Paradigm," argues that a sea change has occurred in the U.S. economy."

creased appreciably. In other words, the nation's aggregate supply curve has been shifting outward at a more rapid pace, permitting strongly increasing aggregate expenditures to be accommodated without inducing inflationary pressures.

In this view, because of the favorable economic developments, the U.S. can now experience significantly faster growth of output than in the past without inducing inflation. Hence, the outlook for inflation is benign, and there is no reason to expect an increase in interest rates in the next year. Because inflation is alleged to be nowhere in sight, there is no reason for the Fed to launch a preemptive strike against it. The most optimistic proponents of this view envision a continued decline in inflation and a return to conditions of the 1950s and early 1960s, with government bond yields around 4%.

The other view paints a less rosy, though no less credible scenario. While not denying that the growth trend of productivity may have increased somewhat, proponents of this view believe that the implications of the favorable developments have been exaggerated by the proponents of the "New Paradigm." In this more traditional view, neither the business cycle nor

inflation can be proclaimed dead. Instead, the current unemployment rate is viewed as being below the natural rate, but the inflationary pressures have been temporarily negated by a series of fortuitous events, known to economists as "favorable supply shocks." In this view, barring a slowdown in the growth of expenditures, the inflationary forces will soon emerge and the Fed will be forced to implement restrictive monetary actions that boost interest rates.

The favorable and allegedly temporary supply shocks of the past two years include lower oil prices, an above-trend rate of decline in computer prices, a one-time sharp reduction in the rate of inflation of medical costs owing to the movement toward HMOs and other health care arrangements, favorable agricultural production conditions, and a strong appreciation of the U.S. dollar. The latter phenomenon, by reducing the prices of goods imported into the United States, has placed increasing pressure on American firms to hold the line on costs and prices in order to remain competitive in world markets.

In this view of the world, once these fortuitous but temporary forces exhaust themselves (and indeed, are possibly reversed), the inflationary forces will manifest themselves. Interest rates will rise significantly as the Fed moves to counteract inflationary pressures. Fed chairman Alan Greenspan, in public statements made in 1997, has warned that such a scenario is not unrealistic.

The U.S. economy is well into its seventh year of expansion following the trough of the cycle in March 1991. In the previous cyclical expansion that followed the severe 1981-1982 recession, inflationary pressures began to emerge in 1988 when the unemployment rate fell below 5.5% and the nation's capacity utilization rate (currently around 84%) moved above 82%. The Federal Reserve countered with a series of interest rate hikes. The federal funds rate increased from 7% in spring 1988 to nearly 10% one year later.

The economic environment today is quite a bit different from that in the late 1980s. Investment expenditures, productivity growth, and the dollar are stronger. The inflation rate and the budget deficit are lower. Nevertheless, we look for somewhat higher interest rates in the next year as economic activity continues to be robust and the Fed implements monetary restraint in order to prevent an increase in inflation. However, we do not look for interest rates to increase as much as they did in the late 1980s. Moreover, in the event of a major economic surprise, such as global developments that drive the dollar sharply higher or an event that deals a severe blow to consumer or business confidence, such as a stock market meltdown of the type experienced in October 1987, all bets are off.

The Financial Markets

Michael Simkowitz

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As I take pen in hand, it is a clear and warm October day. In the days before political correctness we used to have a name for such weather. As pleasant as these conditions are, I know this is just a brief respite from the gloomy winter ahead. Wistfully, I remember the balmy days of this past summer and know that, sooner or later, those days will return.

Pretty fancy prose for an article that is supposed to discuss the financial markets! It is an allegory, however, for what is transpiring here at the end of October 1997. The market has gone through a week of extreme gyrations. We do look back wistfully at the balmy days of this past summer. Although we are confident that we will once again see an unbelievably strong bull market, it now appears that we may first have some stormy times.

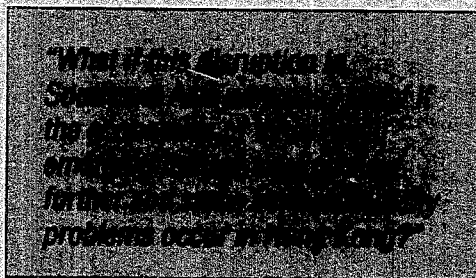
This bull market over the last two and a half to three years has been fueled by a number of factors. One—and probably the most important—has been a massive readjustment of the portfolios that are in direct control of individuals and households. These decision makers have substantially increased the percentage of their assets they want to hold in equities, either directly or through mutual funds, which has provided a tremendous surge in the demand for equities. Fortunately these equities are claims against companies that have done very well in real terms.

The second factor is that we have had a period from the early 1980s of very significant and nearly continuously effective cost control by American companies. In many sectors of our economy, we are now the low-cost producers in the world. This reduction in the real cost per unit output has allowed profits to soar even though the top-line sales growth over the past three years has been relatively modest.

A third major factor is that Alan Greenspan has proven to be a better chairman of the Federal Reserve than he was a jazz musician or Wall Street consultant. If he were paid a free market wage, his deserved wealth would be substantially greater than that of Mr. Gates. He has managed to walk that very thin line between deflation and inflation recession and boom and has provided a long period of relatively stable prices. This has allowed interest rates to trend downward as the inflation premium, which was imbedded in interest rates due to the inflation of previous years, is slowly but surely being squeezed out of them.

Fourth, we have had a relatively benign political climate. President Clinton and his administration have developed a unique skill; whenever it looks as if some minute element of our society needs help, Clinton et al. will look as if they are helping. This timidity of purpose, combined with a Republican majority in Congress that cannot decide what its program will be, has allowed the country to escape any significant increase in regulation.

It is worth discussing the occurrences of the last few months that have culminated in the worldwide market disruption in the last week of October. Over the past two years, the emerging "free" economies of Southeast Asia continued to party long after there was any reason for revelry. They had experienced some extremely rapid real growth in the early 1990s but continued to expand capacity way beyond any reasonable hope of near-term economic viability. This is a chronic problem for economies that are politicized to the extent of the Southeast Asian economies. It is very difficult for private bankers in these countries to deny loans to applicants who are well connected, or come with letters of reference from well-connected



people. As long as the central monetary authorities in those countries continued to supply liquidity to the banks, the banks continued to make loans, even though they may have known the loans were not sound. Such a policy, combined with fixed exchange rates, allowed their currencies to become grossly overvalued, which began to attract speculators who knew that unless the government was willing to exact some pain and severely tighten the money, there would have to be devaluations.

One after another, then, the Southeast Asian currencies devalued until finally the Hong Kong currency stood alone. The Hong Kong currency is controlled by a monetary authority board that has the ability to defend the currency but does not have the full powers of a central bank. Since 1982, the board has done an excellent job of maintaining a fixed exchange rate between the Hong Kong dollar and the U.S. dollar. Speculators began to wonder whether the Hong Kong dollar was also overvalued and whether

contractions in Southeast Asia would spread to Hong Kong, increasing the overvaluation. This, combined with the question of whether mainland China would support or subvert the currency board in its mission to defend the currency, gave rise to the raid on the Hong Kong dollar. To defend the dollar, the currency board drove short-term overnight rates between Hong Kong's banks as high as 300 to 400% per annum. The sharp rise in interest rates forced a realistic reduction in value of the Hong Kong financial and real estate sectors, which comprised close to half of the Hang Seng's market value. The sharp drop in the Hang Seng index caused nervous tremors throughout the financial markets, particularly in New York.

Let's stop for a moment and assume nothing further happens in Southeast Asia. What, then, are the consequences in the U.S. financial markets? In the intermediate term, the impact would be minimal. Although we do considerable business in Southeast Asia, when compared to the size of the U.S. economy, any diminution of profits resulting from reduced demand for U.S. products in Southeast Asia will not be significant for the earnings of most U.S. corporations. As long as there are no big bank failures in Hong Kong, the financial market should recover, making all this look like a short momentary panic over a moderately significant regional problem.

What if this disruption in Southeast Asia worsens? What if the economies of these small emerging nations decline even further and some serious liquidity problems occur in Hong Kong? The threat is that this will spread to Japan via two mechanisms. First, Southeast Asia is a key export market for the Japanese economy, which currently is suffering from reduced domestic demand. If this is now coupled with a radical reduction in demand for Japanese products in Southeast Asia, then the Japanese recession, already severe, will worsen and could even approach the "D" word.

The second mechanism for transmitting this problem to Japan would be through the financial sector. The Japanese banks have very little margin of error; nearly all their equity has been erased by bad real estate loans in Japan during the 1980s and early 1990s. If their large loans to Southeast Asian companies begin to go into default, this could be the straw that breaks the back of the financial camel in Tokyo. Real international economic and financial problems would result and severely disrupt the world financial markets.

Continuing on to our *most* pessimistic scenario, it is possible that at that point we would see an extreme flight to quality all over the world, with massive demand for U.S. government securities and dollars resulting in a severe reduction in interest rates here coupled with collapsing values of most of the world's

currencies. In such an event, it would be incumbent on the United States to inflate our currency, driving interest rates even lower in an attempt to stem the collapse of foreign currencies relative to the dollar. This in turn would ignite domestic inflation, which sooner or later would result in a reversal of monetary policy and severe tightening. The worldwide recession would then come washing over our shores as well. This extremely pessimistic scenario is not likely, but it is a possibility, and the early warning signs will be increasing trouble in Japan.

Let us return to the happy days of yore and discuss what we think will happen in the next 12 months to the major factors that have caused this bull market. First, there will probably be a slight slowing of the movement of capital managed by individuals into equities. I doubt we will see a reversal that will cause great withdrawals of money from the equity market, but I do believe that the flows into the equity over the next 12 months will be significantly less than what they have been in the last two years.

Second, there is a limit to how much cost cutting can be done in an economy. We have no doubt harvested all the low-hanging fruit and any cost reduction from now on will be considerably smaller than what we have had in the past. This factor will still remain positive, but much less so than what we have seen over the last decade.

The third factor has been the performance of the Fed under Mr. Greenspan. The question is: Has the Fed been lucky? If so, then we have no assurance that its policy will be as helpful in the future as it has been in the past. On the other hand, if the Fed really has developed the skill to make the appropriate moves at the appropriate time to keep the economy moving at a steady keel and still avoid inflation, then its policy will continue to be a key positive factor for our financial market. I personally feel it has been both lucky and good, so odds are its policy will be a positive for our economy. I don't mean the Fed will cause boom times, but that it will tighten money when demand exceeds supply and loosen it when demand falls short of supply. Although it will not be perfect in this, it will be right more than 50% of the time.

In the short run, we shouldn't see any political action that specifically hurts the financial markets. One serious problem that looms on the horizon is the question of "fast track" for tariff treaties. If Representative "Smoot" Gephart and Representative "Hawley" Bonior continue to fight "fast track" and President "Hoover" Clinton fails to discipline his own party to enable the passage of "fast track," then we will have

taken a major step in exacerbating the international financial and economic problems.

There have been increasing questions as to the slow growth in the top line of many companies. This slow growth has not been a problem because of the cost cutting that has resulted in rapidly rising profits. If our ability to cut costs is coming to an end, any growth in profits will have to come from an increase in the top line. That top line can grow through expanded sales either domestically or overseas. I don't believe we should count on any significant increase in exports to Southeast Asia and Japan due to the turmoil discussed earlier. If this turmoil does not spread to the developing nations of Latin America, then we may very well see some increase in exports to Mexico and farther south. Europe has been trying to execute a slow recovery. If the problems in Southeast Asia do not spread, then we should be able to see some modest increase in demand in Europe. The relatively weak increase in demand domestically has been caused to some extent by an increase in the savings function, which is the result of two factors. The first is demographic: the Baby Boomers are reaching the savings portion of their life. The other is investment momentum: as people have seen these huge returns in the stock market, they have chosen to reduce their consumption relatively in order to earn these high profits in the markets.

This second factor may not be sustained in the wake of the recent sharp break in the market. The bottom line will be that profits for American companies will continue to grow. My expectation is that this growth over the next 12 months will be slower than what we have had in the past 12 months and below expectations.

The return required and expected by investors in the stock market is a function of interest rates and the perceived risk. The higher the risk, the higher the return investors require. It appears they will increase this risk premium and thus require higher rates of return, which means they will be less apt to purchase equities at ever higher prices. In sum, we may have seen the high for the markets for 1997, and it would not surprise me if the highs in 1998 are under 8700 on the Dow Jones average. The bond markets will show very little change in yields, with a possibility of a slight rise in short rates and optimistically a slight decline in long rates as we continue to squeeze the inflation expectation out of those rates.

Well, I just looked out the window and the leaves are still falling, so I guess it's time to go. After every parade, someone has to follow the elephants.

Continued Expansion Anticipated for Indiana

Indiana's economy is in strong condition. Our unemployment rate is hovering just above 3%, we are building more than 33,000 housing units a year, and our earnings have grown, after adjustment for inflation, by 2.75% in the past year.

Where Are We Going?

For the year ahead, we anticipate a slight slowdown in economic growth—no recession, but a less robust period of expansion. For example, housing starts may fall to 30,000 units and earnings advances may be closer to 2.5%, whereas the unemployment rate shows no further decline.

This forecast is in line with the national picture. As usual, Indiana's prospects depend heavily on unforeseeable factors. Bad weather could have an adverse impact on farm earnings. A sustained disruption in the uneasy peace of the Middle East could raise petroleum prices and reduce auto sales. But absent these events, the outlook for 1998 is most promising.

In the best of times, it is appropriate to step back and consider the long-term aspects of our state's economy.

Where Have We Been?

Except for a minor interruption in 1990-91, Indiana has enjoyed sustained growth in personal income (see **Figure 1**). Since 1969, total personal income for the Hoosier state, after adjustment for inflation, has grown by 84%. The nation, however, has seen an advance of 124% during the same period. As a result, our share of total personal income has declined from nearly 2.5% in 1969 to just over 2% in 1997 (see **Figure 2**).

Currently, Indiana is extending a long streak of quarters during which real personal income has been

rising. As **Figure 3** shows, we have an unbroken string of 23 quarters with positive growth rates that runs from the fourth quarter of 1991 to the present. (Our latest data on personal income and its components are for the second quarter of 1997.) It is not unreasonable to think that this current economic expansion could equal or exceed the seven-year stretch from third quarter 1983 to fourth quarter 1990. (Growth rates here are computed from the same quarter a year earlier. This gives somewhat different results from those obtained when the quarterly rates themselves are used. Basically, recessions and recoveries appear delayed in the year-earlier comparisons as compared with the current quarter calculations.)

Morton J. Marcus

Director, Indiana Business Research Center, and Co-director, Indiana Center for Econometric Model Research, Kelley School of Business, Indiana University

Figure 1
Indiana's Real Total Personal Income

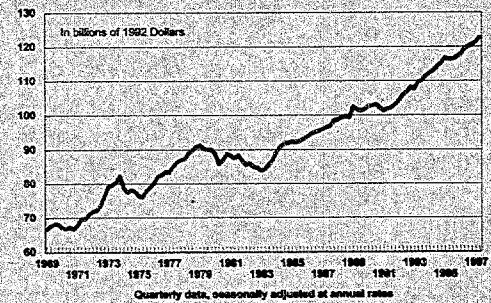


Figure 2
Indiana's Share of U.S. Total Personal Income

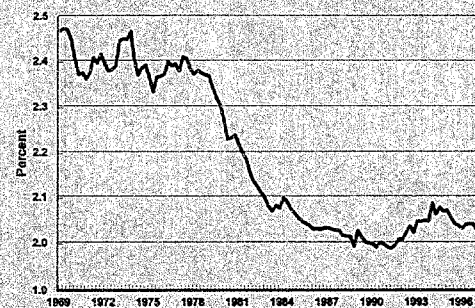
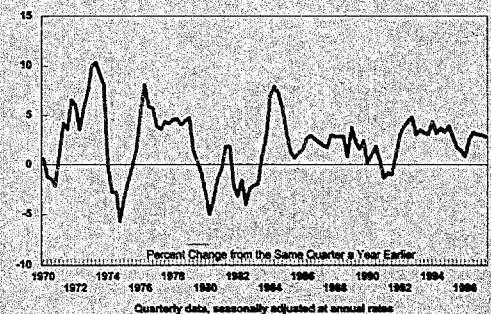


Figure 3
Personal Income Growth Rate for Indiana



A decomposition of the personal income data in Figures 4 and 5 shows that our slippage in share of the nation's income has come primarily from earnings—that is, payments received by individuals in the form of wages, salaries, or proprietors' income. This includes health insurance and other benefits, and is not to be confused with the earnings of corporations.

Where we enjoyed 2.6% of the nation's earnings in 1969, that figure has slipped to 2.1% in 1997. By contrast, our share of dividends, interest, and rent has declined only from 2% to 1.8%. Although there has been volatility in our share of unemployment insurance transfers, we stand today about where we were 28 years ago. As Figure 5 shows, our share of other transfers (primarily social security) has been remarkably steady.

Figure 4
Indiana's Share of U.S. Personal Income:
Earnings, Dividends, Interest, and Rent

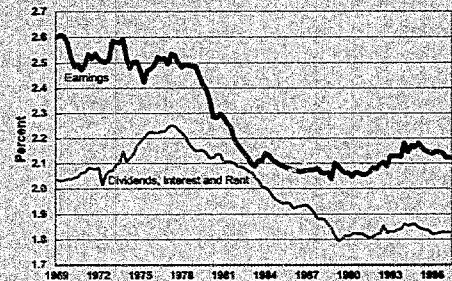


Figure 5
Indiana's Share of U.S. Personal Income:
UI Benefits and Other Transfers

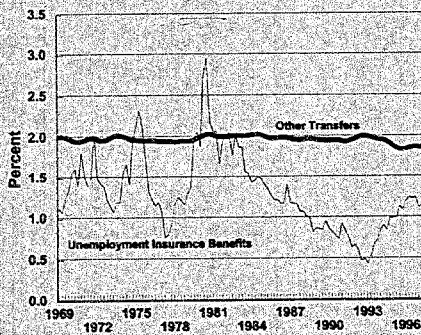


Figure 6
Indiana's Share of U.S. Earnings: 1959-1996

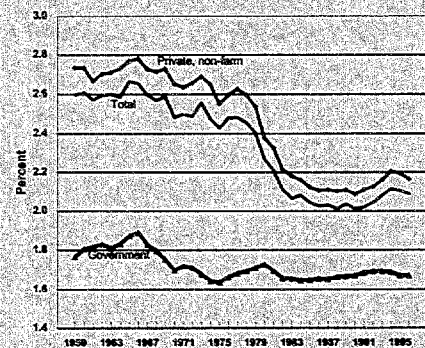


Figure 7
Indiana's Share of U.S. Earnings: 1969-1997

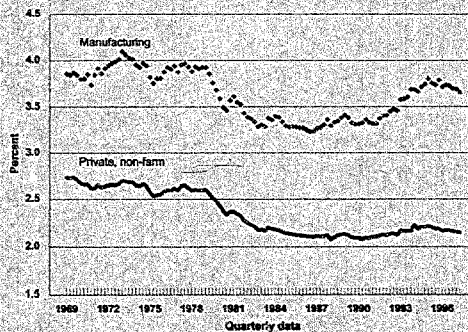
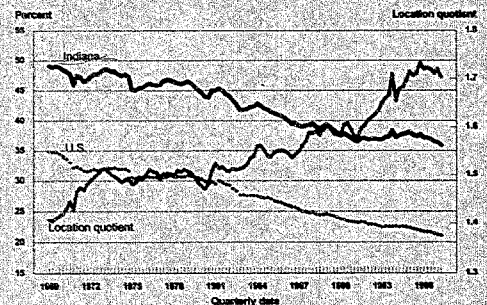


Figure 8
Manufacturing's Share of Private, Nonfarm Earnings
and Location Quotient for Manufacturing, 1969-1997



To understand these trends, consider **Figure 6**, which uses annual data rather than the quarterly numbers of the previous discussion. (The U.S. Bureau of Economic Analysis offers these data back to 1959, so we have an extra decade of data to consider.) As we saw earlier, Indiana's share of total earnings declined from the late 1960s until the mid-80s. It then hovered above 2% until 1991, after which a slight improvement began but has not been sustained. **Figure 6** makes it clear that the decline characterizing the '70s was primarily the result of changes in the private nonfarm sector of the state's economy. Neither agriculture nor government contributed significantly to the trend we observe.

Figure 7 demonstrates that the decline Indiana experienced was strongly associated with the manufacturing sector. However, manufacturing has shown a stronger recovery than has the private nonfarm sector in general. As seen in **Figure 8**, manufacturing's share of private nonfarm earnings has been declining in both Indiana and the nation. But that decline has been less severe in Indiana than in the nation as a whole. This is reflected in the manufacturing location quotient for Indiana, which has been rising since 1980 and is computed by the following formula:

$$\frac{\text{Manufacturing earnings, IN} / \text{Total earnings, IN}}{\text{Manufacturing earnings, US} / \text{Total earnings, US}}$$

In effect, Indiana has become more specialized in manufacturing in the past two decades. The market place seems to be telling us that Indiana is either a good place for manufacturing in the U.S. or slower than other states to shift toward other industries.

Table 1
Employment Percent Change for Selected Metropolitan Areas
by Industrial Sector, 1992 to 1996

	TOTAL	Const.	Mfg.	TCPU	Trade	FIRE	Services	Govt
Columbus, OH	12%	22	0	17	18	14	17	2
INDIANAPOLIS	11	17	2	15	16	8	18	0
Detroit	11	32	9	11	9	3	19	-2
Louisville	10	17	3	18	11	4	15	3
Chicago	9	13	4	10	5	2	16	6
Cincinnati	9	13	-3	7	11	17	15	3
St. Louis	8	22	-3	4	8	6	16	6

KEY: TCPU = transportation, communications, and public utilities; Trade = wholesale and retail; FIRE = finance, insurance, and real estate; Govt = federal, state and local

Source: U.S. Department of Labor, Employment and Earnings, various years, establishment data

The dynamics of the state, however, are no more than the collective experiences of its many and diverse communities. Our future, both next year and in the decades ahead, depends on how those communities adjust to change. Therefore, let us consider the reports of our regional writers.

Indianapolis

Robert Kirk

Professor of Economics, Indiana University-Purdue University at Indianapolis

Employment for the nine-county Indianapolis metropolitan area is forecasted to increase in 1998 at an annual rate of 1.3 to 1.8%. Employment growth for the most recent four-quarter period (third quarter 1996 to third quarter 1997) was 1.7%, or approximately 14,000 jobs.

Locally, highly visible construction projects will be the \$175 million Indiana Fieldhouse, the new home of the Indiana Pacers, and the new headquarters for the NCAA. Decisions made outside Indianapolis that may have significant local employment impact include those made in Paris concerning Thomson Consumer Electronics, by Swiss drugmaker Roche concerning Boehringer Mannheim, and by Johnson and Son in Racine, Wisconsin concerning DowBrands.

This report is organized around four Ps: performance, people, prices, and portfolio.

Performance

Table 1 shows how Indianapolis has performed during the 1992-1996 expansion (following the 1990-91 recession) compared to other large metropolitan areas in the region. In total employment, Indianapolis was tied for second with Detroit behind the leader, Columbus, Ohio. Although the range in total employment growth was small (four percentage points), the range of the various industries' performances was much wider. This indicates that although these metropolitan areas are in the same region, each has a particular portfolio of industries that perform differently.

Care must be taken in interpreting **Table 1** because of the way employees are classified by industry. For example, one way manufacturing firms have restructured is to "contract out" to specialized service firms and to use temporary employees. As a result, employees formerly classified as manufacturing now

are counted in services, though the end product is still manufacturing. In fact, it may be the same employees on the plant floor or in the office now as before, but they are not on the manufacturer's payroll and may be making less in wages and benefits.

How has Indianapolis performed relative to the state of Indiana? Considering the most recent four-quarter period (third quarter 1996 to third quarter 1997), the Indianapolis metropolitan area contributed more to the state's employment growth than might have been expected based on its proportion at the beginning of the period. Indianapolis's share of the state's total employment in third quarter 1996 was 29%, but over the following four quarters the city contributed 47% of the state's employment growth, or 1.5 times its expected contribution.

The major industries contributing to this growth were: services; public education (K-12 and higher); finance, insurance, real estate; and retail trade. Decreases were in durable and nondurable manufacturing. As mentioned above, some of the increase in services was due to manufacturing companies contracting out to specialized service firms. Thus, the manufacturing decline is partly a reclassification.

People

In the labor force, consisting of the employed and the unemployed, Indianapolis's unemployment rate was 2.7% in August 1997—the fourth lowest among the 50 largest metropolitan areas (Raleigh-Durham was the lowest, followed by Minneapolis and Columbus). On one hand, it is good that unemployment is so low; on the other, it means employers are having difficulty attracting employees, so firms considering locating in Indianapolis might decide to look elsewhere.

One consequence of low unemployment rates is upward wage pressure. It may be more difficult to increase wage rates when product prices are determined through global markets than through local markets. Global competition limits firms' ability to

raise product prices in response to higher labor costs. Apparel is an example because apparel imports can lead to lower prices. Some firms respond to higher labor costs by increasing labor productivity, thus avoiding the need to raise prices to maintain profitability. If firms cannot either increase prices or labor productivity, they will suffer reduced profits. In the service sector, the ability to improve productivity (at least in ways that can be measured) in response to higher labor costs is more limited. Examples include personal and education services.

In Indianapolis, there is some evidence of upward wage pressure in the service sector, such as from computer programmers and hotel workers. Efforts have been made to deal with spatial mismatches between the demand and supply of workers within the metropolitan area by attempting to increase moderately priced housing near strong employment growth areas and to provide free bus passes to help workers get to employment locations.

In the longer run, upward wage pressure can be reduced by increases in labor supply. These increases can arise from population growth and changes in the age distribution of the population. During the 1990–1996 period, U.S. Census population estimates indicate that Indianapolis had strong population growth (8.1%) compared to the U.S. (6.7%) and Indiana (5.3%). The employment performance has attracted people to Indianapolis and increased demand for housing. The strong housing market has, in turn, attracted housing developers to the area. Moreover, as the larger cohort of children of the Baby Boomers graduate from high school during the next few years, the rate of new labor force entrants will increase.

A city grows by producing new products and making products differently. This occurs through entrepreneurship and the generation of technical knowledge. By maintaining a database of companies founded by its graduates, MIT discovered that when company officials make a conscious choice about location or expansion, the most important factors are quality of life, proximity to markets, and access to skilled professionals—ahead of low taxes and regulatory environment. Firms locate where skilled professionals like to live. Personal taxes are part of the quality of life for these professionals. If the taxes are out of line with other states, business expansion is difficult. On the other hand, if taxes are cut at the expense of quality education, cultural facilities, open space, and good transportation, the quality of life is also lowered, making it harder to recruit skilled people.

How does Indiana compare in terms of training scientists and engineers? **Table 2** compares Indiana with selected states in terms of a science and engineering profile. Although California has more in absolute numbers, Indiana does relatively well given the

Table 2
Science and Engineering Profile for Indiana and Selected States: Absolute Number and Number Per 1,000 in the Labor Force

	DOCTORATES (awarded 1995)		POSTDOCTORATES (awarded 1994)		GRADUATE STUDENTS (awarded 1994)	
	Number	Per 1,000	Number	Per 1,000	Number	Per 1,000
Indiana	690	.22	599	.19	10,348	3.3
Illinois	1,412	.23	1,176	.19	21,737	3.6
Ohio	1,065	.19	968	.17	22,084	4.0
Michigan	998	.21	1,148	.24	17,350	3.7
Kentucky	198	.11	230	.12	3,487	1.9
California	3,653	.24	6,248	.40	44,778	2.9

Source: National Science Foundation/Division of Science Resources Studies

size of its labor force. MIT graduates and founders characterized MIT as a "hands on" place. According to *MIT: The Impact of Innovation* (BankBoston, March 1997), "If there is a problem, students are encouraged to go down to the basement, build the appropriate equipment, and develop a solution." Is the same thing happening in Indiana?

Prices

The U.S. resource endowment has been characterized by labor scarcity relative to land and capital. As a consequence, labor has been relatively high-priced, and capital has been substituted for labor to economize. Thus, our production methods are characterized by labor-saving, capital-using, or intensive methods.

In an urban area, highly accessible land is a relatively scarce resource. Its relatively high price induces the substitution of capital for land to economize on land and results in capital-intensive structures—multistory buildings and multilevel transportation systems (like Chicago, with its subways and

elevated trains). To find lower-priced land, economic activities and people have moved outward.

Table 3 provides prices for commodity and service groups from the Consumer Price Index for All Urban Consumers (CPI-U). Services have increased more than all items, whereas gasoline has hardly changed since 1982-1984. By being relatively cheap, the price of gasoline has not been a constraint on outward movement. The result is a comparatively low population density for Indianapolis, which has implications for transportation planning.

One price that does not show up in the CPI-U is the cost of highway space during peak load periods. Given the absence of a money price to allocate the scarce space, a time price in terms of each user's opportunity cost of time becomes important as we move slowly in the traffic. Another price that does not show up in the CPI-U is the price for the waste assimilative capacity of urban airsheds—a scarce resource without a money price. When the waste assimilative capacity of the resource is exceeded, environmental deterioration occurs. Today, in the case of sulfur dioxide emissions, a market-determined price based on the demand and supply of tradable rights to pollute is being used to internalize this market externality more efficiently than the former command and control approach.

Another price that will become increasingly important is the price of electricity. **Table 4** compares Indiana with other states in the region and with other regions. Deregulation should benefit the low-cost producers—an important advantage for Indiana. Higher-cost producers in the East may be attempting to reduce our advantage by calling for higher emission control standards in the Midwest.

Table 3
Prices for Selected Commodity and Service Groups,
CPI-U, Annual Average, 1996 (1982-1984 = 100)

Expenditure Category	1996
ALL ITEMS	156.9
New vehicles	143.7
Gasoline	105.9
Public transportation	181.9
Apparel	131.7
Medical care	228.2
Personal and educational services	247.5

Source: U.S. Department of Labor, CPI Detailed Reports

Table 4
Average Revenue per Kilowatt Hour for U.S. Electric Utilities by Sector
for Selected States and Regions, 1996 (in cents)

State/Region	All Sectors	Residential	Commercial	Industrial
Indiana	5.3	6.9	6.0	3.9
Illinois	7.8	10.4	8.0	5.3
Michigan	7.2	8.5	8.0	5.2
Ohio	6.3	8.6	7.7	4.2
New England	10.4	11.9	10.2	8.0
Middle Atlantic	9.8	11.9	10.5	6.1
South Atlantic	6.6	7.9	6.6	4.4
East South Central	5.0	6.2	6.2	3.7
West South Central	6.0	7.6	6.6	4.1
Mountain	6.0	7.6	6.5	4.2
Pacific	7.5	8.9	8.3	5.3

Source: U.S. Department of Energy

Portfolio

The Indianapolis economy can be viewed as consisting of a portfolio of industries. Our performance in 1998 depends on the performance of these industries. Observations on a few follow:

- **Auto industry**—holding the line on prices of 1998 vehicles due to consumer resistance and a fall in the value of the yen. The use of incentives could eat into profits.

- **Housing**—Indianapolis's strong population growth has stimulated residential construction. Our state has a high homeownership rate (74.2% versus 65.4% for the U.S.), suggesting that growth will come primarily from increases in household formation rather than from further increases in this rate.

- **Banking**—slower pace of earnings growth due to more moderate growth in 1998. Competition may squeeze spreads in commercial loans. A lot of cost-reducing opportunities have already been taken by banks.

- *Grocery stores*—stiff competition makes it hard to pass on costs. Emphasis is on customer service to attract customers. Location is important.

- *Department stores*—shifting away from the growing clout of category killers (electronics and home improvement) to apparel, upscale home furnishings, and jewelry.

- *Computer software*—the challenge is to deal with the YEAR 2000 problem. How much will it cost? To what extent will firms have to shift resources from other projects to solve this problem?

Columbus

Patrick Michael Rooney* and Ammar Askari**

*Associate Professor of Economics and Assistant Dean, IUPU Columbus, as well as Special Assistant to the IU Vice President for Long-Range Planning

**Lecturer in Economics, IUPU Columbus

Generally speaking, the local economy outperformed both the nation and the state in 1997. Bartholomew County's unemployment rate for the third quarter is estimated to be around 2%, compared to the state's 3.3% and the nation's 4.8%. Of the 92 Indiana counties, only Boone, Brown, Hamilton, and Hendricks posted a better unemployment rate in August (Hamilton had the lowest, with 1.3%). Moreover, when compared to the same quarters in 1996, continued unemployment insurance claims posted lower numbers in both the first and second quarters (10% and 8.8%, respectively) but increased in the third quarter (11%). Initial unemployment insurance claims were down

Table 1
Columbus Area Economic Data

Period	Unemployment Rate (%)	Number Employed	Annual Employment Growth Rate (%)*
1980-1989	8.2	27,700	1.2
1990-1995	4.9	31,890	4.4
1996	2.8	38,407	2.1
3Q1997	2.0	39,847	2.6

*The annual employment growth rate is the percentage change for each quarter in a year compared to the same quarter in the previous year.

considerably in the first quarter (22.5%) compared to the year before. Second and third quarters posted figures similar to those in 1996 (3.2% and -2%, respectively).

Based on a sample of local firms that hire fewer than 500 employees, the average wage for all workers has increased by 6.5%, from \$8.46 to \$9.01. This increase for this specific class of workers and employers should not be confused with the wage for all workers in the area. Still, we can say with some confidence that local nominal wages have risen faster than inflation, which means that real local wages must have increased.

Table 1 shows the unemployment rates, the number employed, and the annualized employment growth rates through the 1980s and 1990s for Bartholomew County. Note that from 1990 to third quarter 1997 (the most recent period available), the number of employed grew by 25% (from 31,890 to 39,847) and the unemployment rate fell from 4.8% to the current 2%.

Cummins Engine reported that its profits more than doubled during the third quarter. The company earned \$54 million (compared to \$26 million the year before), or \$1.40 per share (compared to \$.67). Its sales rose 9%, led by industrial sales (21%), heavy duty trucks (14%), and mid-range truck engines (12%), although power generation sales fell 8% because of lower international demand. During the first three quarters of 1997, profits rose to \$148 million (24%), or \$3.85 per share, as sales grew to \$4.1 billion (5%), compared to the same period in 1996.

Arvin Industries indicated its third quarter earnings increased 57% to \$58 per share, or \$13.6 million from third quarter 1996. In the first nine months of this year, earnings increased to \$49.3 million (74%), or \$2.13 per share, over the same period in 1996.

Two new companies moved to the area this year, bringing a combined investment of \$2.5 million: Toyota Industrial Equipment, which is the sales arm of Toyota Industrial Manufacturing, and Uniplast Midwest, Inc. Moreover, expansion within existing companies generated a total of \$55.2 million in investment and 338 new employees through September.

When comparing third quarter figures from 1996 to 1997, the local housing market sends mixed signals. On the one hand, the number of sold properties is up 6% (246 to 260), selling at a 4% higher average price of \$124,543, compared to \$119,669. On the other hand, these properties have been on the market longer (121 vs. 112 days), and the sale-to-list price ratio has decreased from 97.1% to 95.5%. In the first three quarters, 642 units were sold at an average price of \$123,776, with an average of 130 days on the market. Compare this to 652 units at an average price

of \$119,637 and an average of 116 days on the market for the same period in 1996. Continued construction of new homes is expected to keep competitive pressure on the sale price of existing homes and the sale price-to-list ratio.

The number of residential building permits in third quarter 1997 for Bartholomew County was down to 93 from 105 the year before. However, the year-to-date number of permits is 296 in 1997, compared to 287 for the same period last year. In contrast, the estimated value of residential housing construction permits increased by 57% from the second to the third quarter this year. This shows both the cyclicity and volatility of the local housing market.

Forecast

The Columbus economy will continue to thrive in the year ahead, with about a 2% unemployment rate and about 3% growth. There is good reason to believe that Cummins's market share will improve significantly once its new Signature 600 engine is fully marketed. If this prediction proves correct, then the local labor market may face additional pressure from the demand side, causing wages to increase. In the short run, this situation may be partially resolved by outsourcing to neighboring counties and tapping into labor resources available nearby. However, in the long run, the local employment picture will remain dependent on the ability of local firms to recruit skilled workers at competitive wages. Given the current demographics, we expect the composition of the labor markets in the future to be altered significantly when the Baby

Boomers begin to retire in larger numbers. Until then, however, we see nothing in the long term (five to ten years) to alter the current combination of solid growth, low unemployment, and low inflation.

Fort Wayne

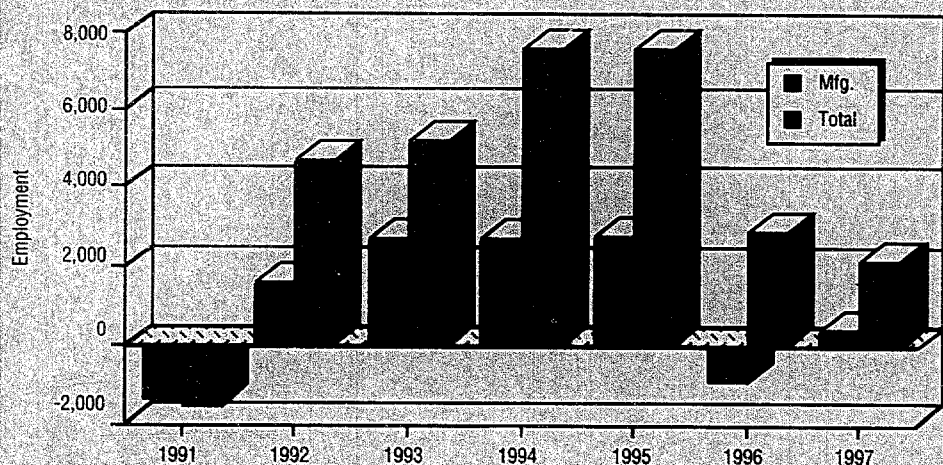
Thomas L. Guthrie

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

The last recession officially ended in March 1991. From 1992 through 1995, the average annual increase in manufacturing employment and total employment in the Fort Wayne metro area (Adams, Allen, De Kalb, Huntington, Wells, and Whitley counties) was 2,900 and 6,300, respectively (see Figure 1). During the last two years, however, the area economy has slowed markedly. The comparable annual averages for 1996 through 1997 are a decrease in manufacturing of 250 and an increase in total employment of 2,300.

An argument can be put forth that the area economy is even weaker than currently perceived. The continued growth in nonmanufacturing employment in 1996 and 1997 may be just a lagged response to

Figure 1
Yearly Change in Manufacturing and Total Employment in the Fort Wayne Metro Area, 1991-1997



Source: Indiana Department of Workforce Development; data are yearly averages except 1997 data, which are for July

the growth in manufacturing between 1992 and 1995. If this is true, then the negative growth in manufacturing employment over the last two years does not bode well for future growth in total employment. (I realize that not all nonmanufacturing jobs are "non-basic" jobs, Lincoln Life being the prototypical example in Fort Wayne. However, many do exist only because of the manufacturing sector of the area economy. Also, note that the emphasis is on the change in nonmanufacturing jobs, not the level of jobs.)

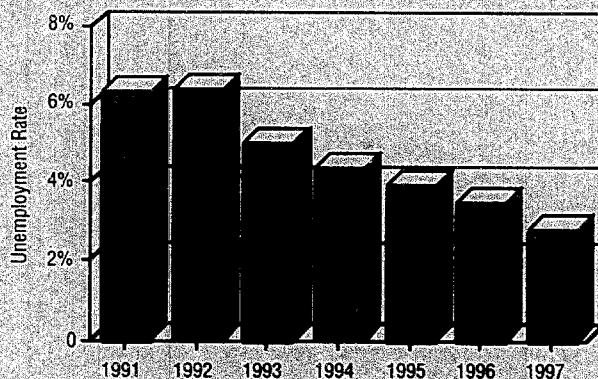
As noted in last year's economic outlook, "The increase in area employment has 'soaked up' the unemployed labor created during the early part of the 1980s... Supply side constraints are now an important consideration in forecasting the Fort Wayne area's economic performance." The metro area's unemployment rate has decreased from 6.4% in 1992 to 2.8% in 1997 (see **Figure 2**).

The outlook for the national economy in 1997 appears favorable to the area economy. Continued strong growth in business investment spending and exports are especially important to the industrial machinery and metal sectors.

It appears that auto/light truck domestic production and total U.S. sales will be stuck for the second consecutive year at 13.7 and 15.1 million, respectively. However, with the re-concentration of auto manufacturing in the Midwest, auto suppliers in northeast Indiana should continue to enjoy at least modest growth.

But with population in the Fort Wayne metro area growing at approximately half a percent a year—half the rate of population growth nationally—area economic growth is destined to be less than economic growth nationally. Employment growth in the range of 1%—approximately 3,600 jobs—is about the best possible in 1998.

Figure 2
Yearly Unemployment in the Fort Wayne Metro Area, 1991-1997



Source: Indiana Department of Workforce Development, average through September

Richmond-Connerville-New Castle

Ashton I. Veramallay

Professor of Economics and Director, Center for Economic Education, Indiana University East, Richmond

The Richmond-Connerville-New Castle (RCNC) area economy had a good year in 1997. It experienced moderate growth, though not all sectors grew equally. The current expansion, now in its seventh year, is likely to continue in 1998. The expected 2.7% growth in real GDP, a 3% inflation rate, a 5% unemployment rate, and a 2.8% increase in real disposable income will have a positive impact on the local economy, given its interconnectedness with the national one.

RCNC's unemployment rate fell below 5.5%, with Wayne County having the lowest rate of 3.6% in August 1997. According to **Table 1**, there was a significant increase in employment in Wayne, Fayette, and Henry counties. Most of the employment growth was in the nonmanufacturing sector, particularly the service industry.

The service industry, which includes health care, education, finance, professional, retailing, entertainment, and government, continues to be the largest employment sector in RCNC because of the increasing demand for various services. For example, as the local population gets older, the demand for health care services will increase. The recent influx of health care professionals, especially in Richmond, reflects this phenomenon. Comprehensive care is accessible in Richmond and is moderately priced when compared to larger cities.

In a recent survey by the Center for Economic Education, 73% of the firms hired new employees in 1997, 53% plan to expand, and 90% are optimistic about business conditions in 1998. Most of the firms (97% of them) rate RCNC favorably for doing business but express concern with the shortage of skilled workers. Consequently, firms tap into the labor pool of contiguous counties that have high unemployment rates.

The labor shortage underscores the need for a concerted effort by the business and education community to address this problem. An educated, well-trained labor force ensures increased productivity, lower business costs, and higher wages. An overwhelmingly majority of firms give President Clinton's economic program a favorable rating. Part of his program focuses on increasing human capital and

Table 1
RCNC Area Labor Force Estimates

	Labor Force		Employment		Unemployment		Unemployment Rate	
	Aug-97	Aug-96	Aug-97	Aug-96	Aug-97	Aug-96	Aug-97	Aug-96
Fayette	11,770	11,650	11,180	10,980	5,690	670	5.0%	5.7%
Henry	26,020	25,630	24,890	24,280	1,130	1,350	4.3%	5.3%
Wayne	40,560	39,650	39,080	37,980	1,480	1,580	3.6%	4.0%

Table 2
Building Permits Issued January 1 to September 30, 1997, City of Richmond

Month	NR	NC	Value	SVC	SVC Project Value	Total Permits	Total Value
January	1	0	85,000	137	2,788,233	138	2,873,233
February	5	1	568,000	171	1,292,137	177	1,860,137
March	1	6	3,839,500	220	3,889,700	227	7,729,200
April	6	1	2,119,458	292	2,255,299	299	4,374,757
May	4	2	903,000	265	5,197,579	271	6,100,579
June	7	2	1,178,200	281	2,519,961	290	3,698,161
July	1	3	3,483,000	282	2,635,892	286	6,118,892
August	2	2	530,745	321	1,935,425	325	2,466,170
September	4	4	1,311,900	294	2,296,892	302	3,608,792
TOTAL	31	21	\$14,018,803	2,263	\$24,811,118	2,315	\$38,829,921

Key: NR = new residential; NC = new commercial; SVC = service

preparing America for the twenty-first century through various incentives for both individuals and businesses.

Related to employment is gross fixed capital formation. Investment in plant, equipment, and commercial and residential structures is expected to increase. In Richmond, the number of building permits issued through the first nine months of 1997 was 2,315, of which 31 and 21 were residential and commercial, respectively, as shown in **Table 2**. Their total investment value is \$38.8 million, which is considerably higher than last year's.

Another component of the real estate market is housing. There has been a pick-up in the sale of new and existing homes in the \$95,000 to \$135,000 and \$50,000 to \$120,000 price ranges, respectively. However, sales are sluggish for homes priced above \$150,000. The new subdivisions in the Richmond area, especially the upper-end doubles for retirees, will have a positive effect. Mortgage interest rates are still attractive. Ironically, the recent stock market decline helped convince buyers that real estate is a good investment.

In summary, RCNC can expect another year of solid economic activity with minor adjustments. Business and consumer confidence is still high.

South Bend/Mishawaka and Elkhart/Goshen

David Vollrath* and Paul Joray**

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**Professor of Economics, IUSB

This review and outlook for the economies of the South Bend/Mishawaka and Elkhart/Goshen communities includes analysis of the latest available economic indicators for the area, tracked by IUSB's Bureau of Business and Economic Research (BBER).

Table 1 reports several indicators of local economic activity. These figures, with the exception of unemployment rates and real estate data, are seasonally adjusted index numbers, expressed as a percentage of base year 1986 values. The latest month for which all indicators were available at the time of writing was July 1997. Note that the table includes comparable figures for June 1997 and July 1996, along with percentage changes, to indicate possible trends.

South Bend/Mishawaka

The most remarkable indicator of the labor market in St. Joseph County has been the monthly unemployment rate, which dipped below 3% in May and June—the first time in 30 years! So far in 1997, total employment and nonmanufacturing jobs have risen slightly above 1996 levels, while manufacturing employment has struggled to maintain itself. Taken together, these measures paint a picture of full employment, with some slow growth occurring primarily in nonmanufacturing. The slight increase in help wanted advertising to date suggests that a few more employers seek to expand, but the very low unemployment rate makes any large jump in employment unlikely.

Our seasonally adjusted measures of energy consumption, which are still quite volatile, have maintained the same general levels through 1996 and into 1997. Industrial electricity sales, which climbed slowly in the earlier years of this decade, have reached a plateau. So far in 1997, new vehicle registrations are mixed, with trucks ahead of 1996 and cars at about the same level. Business bankruptcies in this part of Indiana are up slightly from 1996, but still below the level of the last recession. By contrast, nonbusiness bankruptcies in 1997 are continuing their upward trend of recent years, rising well above levels during the last recession to more than three times the base year (1986) value. Indicators of housing construction

have maintained the same general levels through 1996 and into 1997. Over the past five years, the quantity of construction has slowed as the average value per permit has increased; upscale houses may have been overbuilt, whereas houses around \$100,000 seem to be in short supply. Among the unadjusted data regarding the residential real estate market, the number of listings in 1997 seems to be ahead of the past few years. The average days listed shows wide variability with no obvious trend, and 1997 prices seem to be about what they averaged in 1996.

Elkhart/Goshen

Elkhart County's labor market also looks tight. Monthly unemployment rates have dipped below 3% for the first time since 1973. So far in 1997, total, manufacturing, and nonmanufacturing employment seem to be running at about the same levels as in 1996. As in neighboring St. Joseph County, help wanted advertising seems to be picking up a bit over last year.

Seasonally adjusted utilities indicators, which tend to change quite dramatically, remained within their (wide) ranges of the recent past. New car and truck registrations in Elkhart County have maintained the same general levels through 1996 and into 1997. Among unadjusted residential real estate data for the Elkhart/Goshen area, the number of listings and average days listed have climbed during 1997. Average prices seem to be maintaining the same level as in 1996.

Outlook

During the past year, both the South Bend/Mishawaka and the Elkhart/Goshen economies have performed well. South Bend/Mishawaka experienced very low unemployment rates and rising employment in service producing, construction, and manufacturing industries. Manufacturing jobs increased by 800, or 3.5%, from August 1996 to August 1997. This increase in manufacturing jobs is especially welcome

Table 1
South Bend Area Economic Indicators

	SOUTH BEND/MISHAWAKA					ELKHART/GOSHEN				
	July 97	June 97	July 96	% Change from		July 97	June 97	July 96	% Change from	
				June 97	July 96				June 97	July 96
EMPLOYMENT INDICATORS										
Nonagricultural Employment ¹	128.8	128.4	124.8	0.3%	3.2%	128.1	127.3	127.1	0.6%	0.8%
Manufacturing Employment	91.3	92.1	92.9	-0.8%	-1.7%	119.1	117.9	120.0	1.0%	-0.7%
Nonmanufacturing Employment	140.0	138.8	134.3	0.8%	4.2%	139.4	137.4	135.8	1.5%	2.7%
Unemployment Rate	2.9%	2.9%	4.6%	---	---	3.0%	2.8%	3.9%	---	---
Help Wanted Advertising Index ²	101.3	95.0	92.6	6.6%	9.4%	95.9	103.1	110.2	-7.0%	-13.0%
UTILITIES³										
Industrial Electricity Sales	122.0	101.3	112.6	20.4%	8.4%	134.0	106.0	124.5	26.4%	7.6%
Commercial Gas Sales	138.1	215.0	122.9	-35.8%	12.3%	n/a	0.0	101.5	n/a	n/a
Industrial Gas Sales	191.8	105.3	47.8	82.1%	301.2%	n/a	0.0	66.9	n/a	n/a
CAR & TRUCK REGISTRATION⁴										
New Passenger Cars	54.4	53.3	57.6	2.0%	-5.6%	58.0	47.4	58.8	22.4%	-1.3%
New Trucks	95.9	103.3	96.1	-7.1%	-0.2%	123.2	111.0	108.4	11.0%	13.7%
BANKRUPTCIES—SOUTH BEND DIVISION⁴										
Business	43.1	15.1	16.0	185.8%	169.7%	<i>(Included in South Bend Division)</i>				
Nonbusiness	322.1	297.4	263.8	8.3%	22.1%					
HOUSING CONSTRUCTION DATA⁵										
Estimated Value of Permits	204.2	169.6	175.4	20.4%	16.4%					
Number of Permits Issued	127.0	112.6	127.8	12.8%	-0.6%	<i>(Not available)</i>				
Average Value per Permit	160.0	158.9	137.3	0.7%	16.6%					
RESIDENTIAL REAL ESTATE DATA										
Number of Active Listings	1,381	1,328	1,099	4.0%	25.7%	1,256	1,238	1,145	1.5%	9.7%
Average Days Listed	86	68	88	26.5%	-2.3%	84	83	69	1.2%	21.7%
Average Market Price	\$92,343	\$87,942	\$98,225	5.0%	-6.0%	\$93,958	\$91,577	\$91,527	2.6%	2.7%
% of Sale to List Price	96.0	95.4	96.4	---	---	96.0	96.0	96.0	---	---

NOTE: All figures except 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 cities of South Bend and Elkhart. Gas Sales are St. Joseph and Elkhart Counties.

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

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

because manufacturing has generally been our weakest sector. The Elkhart/Goshen area has also experienced very low unemployment rates during the last year, but employment has been flat with a slight growth in service producing industries balanced by a slight drop in manufacturing. Much of the loss in manufacturing jobs was accounted for by the transportation equipment industry. Towable recreational vehicles have seen slow growth during the first nine months of 1997, but motor home deliveries have declined slightly from 1996, and conversion vehicles have seen a significant decline in deliveries.

Given the forecast of moderate growth in the national economy, we expect to see moderate growth in the South Bend/Mishawaka economy and an increase in growth in the Elkhart/Goshen economy compared to last year. The durable goods sector is especially important for our area, and national forecasts for sales of cars, trucks, and recreational vehicles—important industries in our area—show little or no growth for 1998. This weakness in motor vehicles and recreational vehicles will have a bigger impact in the Elkhart/Goshen area because approxi-

mately 50% of the jobs are in manufacturing, compared to only 17% of the jobs in the South Bend/Mishawaka area. While we expect slow to moderate growth in employment, economic activity should continue at a high level, and unemployment should remain relatively low. Both local economies have experienced good levels of economic activity and very low levels of unemployment during the last several years. We expect this trend to continue in 1998.

Lafayette

A. Charlene Sullivan

Associate Professor of Management, Purdue University

The general economy of the Lafayette MSA is a well-diversified base with a good mix of manufacturing, agricultural, educational, and service employers. The largest employer in the county, Purdue University, attracts more than 35,000 students each year from all corners of the earth, creating a force that attracts new business to the area as well as providing a sound base for existing businesses. Because of its economic diversity, the Lafayette MSA has enjoyed a stability in all measures of economic activity that appears to be substantially disconnected from economic indicators for the general economy of the United States. During 1997, the unemployment rate in Lafayette fell from 2.6% in January to 2.4% in September. During the same period, the unemployment rate in Indiana declined from 3.5 to 3.1%, while that for the U.S. in total fell from 5.9% to 4.7% (see Figure 1).

Population and Household Income

Although the stability of the general economy of Tippecanoe County creates an attractive environment for economic growth and development, the community actually experienced slow growth rates in population, the number of households, and median household income between 1993 and 1997. The population increased by 3.2% and nominal median household income increased by less than 3%. In real terms, median household income declined over the period.

In the last several years, the number of people employed in the manufacturing sector increased substantially, but employment in services and retail trades increased faster. In the last several years, a few established employers in the Lafayette area transferred operations out of state, whereas other estab-

Figure 1
Unemployment Rates: U.S., Indiana, and Lafayette MSA, 1990-1997

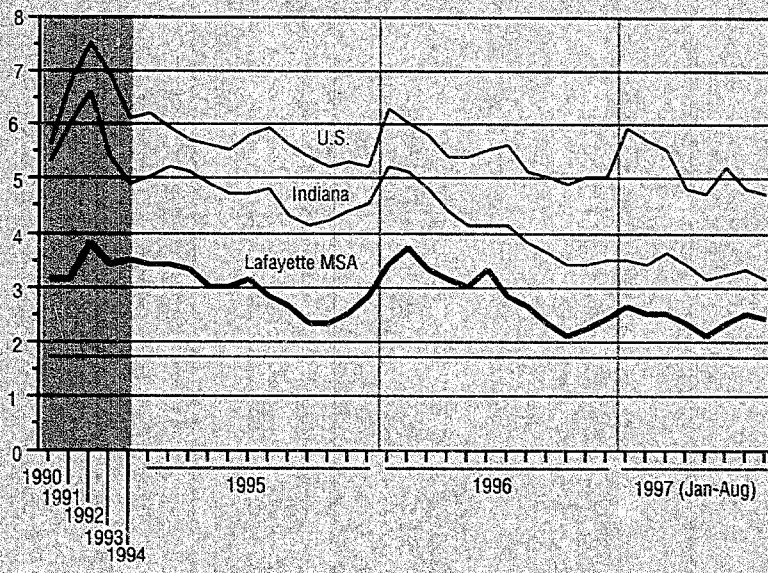


Table 1
Tiptecanoe County Economic Data

	1993	1997	% Change
Population	133,648	137,970	3.23
Households	48,966	50,639	3.42
Employment	83,810	85,800	2.37
Median HH Income	\$33,287	\$34,277	2.97

lished manufacturing firms greatly expanded capacity and employment. Moreover, many small locally owned retailers and restaurants went out of business as large national retail chains and restaurants flooded into the market. The turmoil in the retail sector continues.

The fluctuations in employment conditions in Lafayette and Indiana in general are masked by the low unemployment rate. But many households in the area suffer the consequences, with many filing personal bankruptcy in order to get household financial conditions back in order. Between 1993 and 1997, the number of petitions filed for personal bankruptcy in Indiana increased by 50%, whereas the number for the nation as a whole increased by 55% during the same period (see **Table 1**).

Agriculture Sector

Land values in Indiana at an average of \$2,000 per acre in June 1997 fell \$100 short of the all-time high reached in 1980. Since 1993, the average value of an acre of farmland in Indiana has increased by 53% and cash rent rates increased by 24% during the same period. The per acre cost of land in Indiana has increased steadily each year since 1987. As land values increase, so too do the economic prospects of agricultural producers in the Tiptecanoe County area. The outlook is that land costs will level out in 1998 for several reasons. Returns from the 1998 crop are expected to remain stable or decline, interest rates are likely to increase a bit, and changes in capital gains tax rates are likely to cause an increased supply of land on the market.

Local Economic Challenges

Although local economic trends have been very positive for the last several years, the area does face some major economic challenges. An extremely tight labor market, especially for skilled labor, limit the ability of established businesses to expand. This is especially true for employers in the manufacturing sector, who face growing demand from international markets for products. The cost of housing, pushed up by rising land values, serves as a potential barrier to young families and workers who might otherwise be interested in relocating to the Lafayette area. A tight supply of multifamily housing has been alleviated some-

what by a large increase in the number of units available in the last several years. However, rental rates remain high relative to starting salaries. On the positive side, the area is characterized by high rates paid for savings by local financial institutions. Intense competition for commercial and household credit keeps loan interest rates low with ready availability of credit.

The Outlook

The outlook for the local economy is very positive. The many manufacturing firms in Lafayette enjoy strong demand for their products, as do agricultural product suppliers. The retail sector has increased significantly in the last several years, creating a strong regional retail center that competes well with others in the state. Inflation rates for goods and services are well controlled by the level of local competition. Strong activity in residential construction in the last several years has increased the supply of new homes on the market. The close proximity to the strong economy of Indianapolis, recently very highly rated in terms of attractiveness for economic development, provides continuing growth opportunities for the Lafayette MSA and Tiptecanoe County.

Louisville-Jeffersonville-New Albany

Fay E. Greckel

Professor of Economics and Dean of the Division of Business and Economics, Indiana University Southeast, New Albany

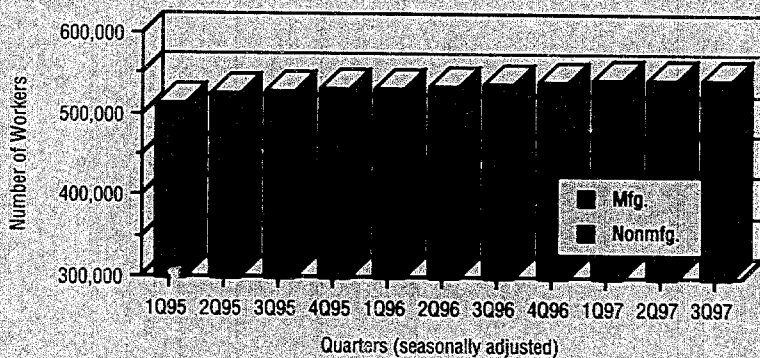
For the past several years, the Louisville metropolitan area has enjoyed steady growth, and 1997 saw a continuation of this trend. Gains in some areas outpaced 1996, but plateaus and even some declines occurred as well.

Total employment in the first nine months of 1997 increased substantially compared with the same period of 1996, but most of these gains occurred early in the year. This is the picture presented in **Figure 1**, which shows employment in establishments located within the seven counties of the Louisville metropolitan area—Clark, Floyd, Harrison, and Scott counties in Indiana and Jefferson, Bullitt, and Oldham

counties in Kentucky. For Figures 1 and 2, the official employment data have been statistically adjusted to eliminate normal seasonal fluctuations and reveal the underlying trends. These adjusted figures show employment growing very little after the first quarter of this year.

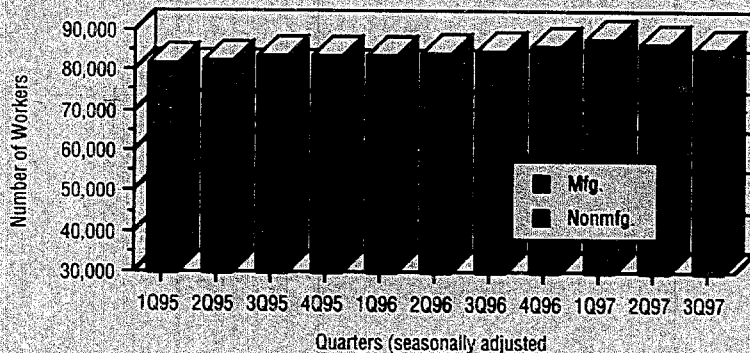
However, the January to September average of about 545,000 jobs is nearly 11,000 above the average for the first nine months of 1996—a very strong increase, especially in our tight labor market. Furthermore, the third quarter employment level would have been perhaps 3,000 jobs higher if there had not been a strike at UPS, which has its major U.S. air hub at Standiford International Airport in Louisville. Employment in the transportation sector fell by about 8,000 jobs during August, the month of the strike, and some ripple effects occurred elsewhere as well.

Figure 1
Employment in Louisville Metropolitan Area



Source: Kentucky Cabinet for Human Resources

Figure 2
Employment in Southern Indiana



Source: Indiana Workforce Development

Comparing the 1997 labor market with that of the previous year, virtually all of the net growth occurred in nonmanufacturing sectors. Service employment grew by nearly 5,000 jobs, about half of those developing in the area of business services. Trade employment rose by nearly 4,000 jobs, with most gains occurring in the retail sector.

If we look only at the four Indiana counties, as shown in **Figure 2**, we see a rather different picture. The chart shows a declining trend during 1997, based on the official state reports. However, this picture is probably misleading. These statistics are based on preliminary estimates, which will be revised next year. For the past two years we saw the same initial downward trend pattern, but later revisions turned that into a gently rising trend. I expect next year's revisions to show a far less negative picture.

Even with the apparent downtrend between January and September of this year, third quarter 1997 is nearly 1,000 jobs ahead of third quarter 1996, and average employment for the first nine months of this year was running a healthy 2,400 jobs ahead of the same period last year. This job growth was spread across both manufacturing and nonmanufacturing sectors.

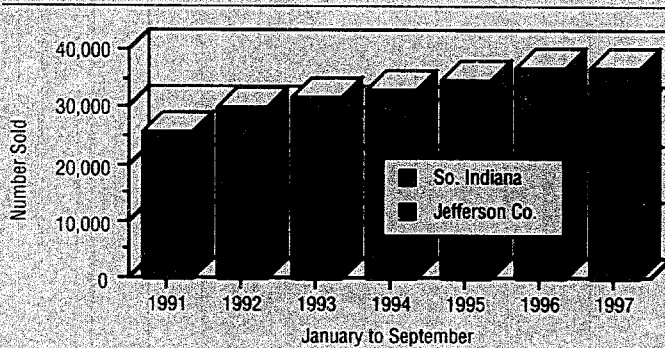
One of the more visible signs of economic activity is residential construction, which continues at a strong pace. In Jefferson County, Kentucky, which includes the city of Louisville, the first three quarters of 1996 saw a record number of building permits issued for new single-family dwellings—just under 1,800 homes in all. That was a 9% increase over the preceding year. The first three quarters of 1997 were virtually a carbon copy of the high 1996 level—beating the January to September 1996 building permit total by one house.

The building of apartments and condominiums continues to stagnate. In Jefferson County, permits for multifamily units rose by about 30% during the first three quarters of this year. But even with that increase, permits were issued for only 200 individual apartment or duplex units during the whole nine months.

Building activity was more robust on the Indiana side of the Ohio River. The four metro counties in Indiana issued permits for about 5% more houses in the first nine months of this year than in 1996. The total for the nine months was close to 1,300 homes.

The 1,300 permits issued through September of this year represent an increase of about 50% over the same period two years ago—underscoring the growing interest in developing some of the rural areas of these counties. There is a growing realization that these locations are often more accessible to job sites in Louisville than are many parts of Jefferson, Oldham, and Bullitt counties.

Figure 3
Louisville Area New Car and Light Truck Sales



Source: Greater Louisville Automobile Dealers Assoc.

The strong residential building market in southern Indiana is also evident in record sales of existing homes. Through September of this year, just under 1,800 homes were sold through multiple listing services in Clark, Floyd, Scott, and Crawford counties—an increase of 7% over the same period last year.

On the Kentucky side of the river, sales of existing homes also increased over last year's January to September sales, but by less than 2%. And despite this increase, the total of 6,330 homes sold was below the level of sales for the same period in 1994.

Figure 3 shows one important indicator of consumer spending: purchases of new cars and light trucks within the largest metropolitan area counties during the first nine months of the year. Sales increased in Floyd and Clark counties by about 230 vehicles, but for the first time in the last seven years, sales fell in Jefferson County (by more than 500 vehicles). So total sales were down about 300 vehicles for a decline of about 1%.

For the first time this decade, light truck sales (including minivans and sport utility vehicles) fell—part of a national trend. Whereas car sales rose by more than 2%, light truck sales dropped 6.5%. This pattern has occurred rather consistently throughout the year, probably indicating a shift to other consumer expenditures, rather than a drop in total purchasing.

All in all, the local economy still appears quite sound. Although there have been layoffs—such as at Providian and the M. Fine shirt company—there has been even more hiring. And much activity is expected in the months ahead:

- the new Tricon national corporate headquarters, including an 83,000 sq. ft. building and 250 new jobs;
- the big expansion of the Ford heavy truck plant;
- construction and opening of Caesar's multimillion-dollar riverboat casino complex in Harrison County (assuming no last-minute delays in final approval);

- Vencor's new headquarters tower in downtown Louisville;
- a \$50 million upgrade of the Kosmos Cement plant;
- the \$56 million expansion of Louisville's downtown convention center;
- Genpak's \$10 million investment in its new Scottsburg plant; and
- the new Community Bank building in Floyd County and the move of Vogt Valve to the Clark Maritime Center in Clark County.

These are just a few of the many projects planned or underway that will increase capital investment and employment in the region.

All of this points to continued growth in the year ahead. However, a significant hurdle looms in the form of the very tight local labor market. Entry-level jobs have been particularly hard to fill, partly because of the smaller population cohort in the post-high-school years. And in many fields, the challenge to find and keep qualified workers goes well beyond entry-level positions. In light of the labor market conditions, it was rather surprising to see how large an employment increase occurred this year. Data are not presently available to indicate whether the additional employees were multiple job holders, new to the labor market, or newcomers to the area. This year's strong expansion gives reason for some guarded optimism about continued expansion in the months ahead.

Obviously, the local economy is also potentially vulnerable to negative developments in the national and international economies. But although there are more possible problems out there than in previous years, the consensus outlook is for continued moderate growth nationally. That is also the most likely scenario for this metropolitan area.

Kokomo

Dilip Pendse

Associate Professor of Economics and Director, MBA Program, Indiana University Kokomo

If Kokomoans are wondering where their \$3 billion economy is heading, they should relax. They still have a five-star economy. Kokomoans are living in the best of times. And more is yet to come.

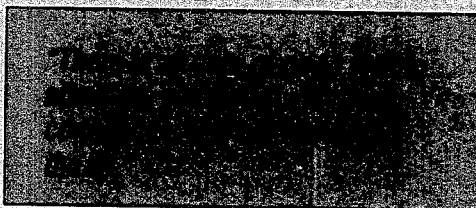
The local economy is neither too hot nor too cold. It is neither listless nor too perky. It is simply cruising along. It has mellowed a bit after growing

continuously for the past 78 consecutive months. And believe me, the state of the local economy is much better than the all-too-frequent roller coaster rides of thrills and chills.

The signs of economic vigor are everywhere. The labor market is strong. The housing market, overall, is healthy. Housing is one of the most affordable in the nation. The factories are humming with overtime. Incomes are high and the influx of people in the area is on the rise. And yes, the number of restaurants is growing too. There is an aura of good feeling about the economy, with hope, confidence, and bullishness in the air. This was recently reflected on the editorial page of the *Kokomo Tribune*, which declared the City of Firsts as a boomtown.

The Big Bang at the Start of the Year

The year began with a big burst of good news: Chrysler Corporation, Kokomo's second largest employer, announced plans to invest \$477 million in new machinery and equipment at the existing transmission



and casting plants, creating 100 new jobs. Then in June, Chrysler disclosed plans to hire nearly 800 people over a period of two years at its brand new transmission plant. Each new hiree will earn between \$15 and \$20 per hour. Altogether, Chrysler is expected to create 900 jobs in the near future, with a payroll of \$40 to \$50 million. With Chrysler expanding its work force and Delco Electronics downsizing its operation in Kokomo, there is a strong possibility that Chrysler Corporation could become the largest employer in Kokomo in the years ahead.

The Influx of People

The growing economy has lured many people to our city. In fact, in the past six years, Kokomo's population grew at a respectable 4.1% rate, compared with 5% at the state level. At this rate we are likely to regain what we lost in the 1980s. Similarly, Howard County's labor force increased slightly to 43,369.

New Lows in the Unemployment Rate

A strong growth in the job market helped ease the unemployment rate to 2.8% in May, the lowest monthly rate in the past 20 years. For the first nine months of the year, average monthly unemployment

stood at 3.1%, compared with 3.7% during the same period a year ago. Interestingly, throughout those months, Howard County's unemployment rate stayed below the state and national levels. Not only that, the Kokomo MSA unemployment rate remained below the rates in 200 of the nation's 272 MSAs.

Because of the tight labor market, small businesses are scrambling for good workers. The strength of the labor market remained primarily in the service sector, which gained 400 jobs in the first three quarters while manufacturing lost 900 jobs. Job growth remained strongest in construction, which gained 600 jobs—nearly 40% more than at the beginning of the year, thanks to industrial and business expansions, school additions, and apartment buildings. Construction gains were followed by the trade sector (500 jobs) and government (200 jobs).

Income-wise, Kokomo is Still #1 in Indiana

Kokomo's 20,400 factory workers earned plenty of overtime pay for the fourth year in a row. The weekly working hours in manufacturing averaged 48.1 during the first nine months of the year—5.5 hours less than a year ago, yet much higher than at other Indiana MSAs. Average weekly earnings in Howard County's manufacturing sector leaped to \$1,321 during the first quarter of 1997—the highest in the Hoosierland, and the best ever in Kokomo's quarterly history. If the first quarterly manufacturing wages continue for the rest of the year, an average factory worker could easily pocket \$69,000 before the end of the year, with some earning more than \$100,000.

The average salary in Kokomo—always number one in the state—has soared from \$24,047 in 1987 to \$33,967 in 1995, a gain of 41% in just eight years. At the current pace, the average salary could double to \$67,134 in 14 years. With the exception of 1982, Kokomo's average salary has remained among the top 30 MSAs in the nation. On at least eight occasions in the past 15 years, the average salary in Kokomo remained in the top 15 MSAs in the country. Based on 1985–1995 data, Howard County is among the 28 counties in Indiana registering higher growth in per capita personal income than at the state level. All counties surrounding Howard County posted gains smaller than the state average.

Healthy Housing Market

Normally, low interest rates, along with growth in job numbers and incomes, light up life in the housing sector. But Kokomo's housing sector, after registering strong gains in 1995 and 1996, opted for a "time out" this year. Overall, in the first nine months the number of building permits issued totaled 789, up 2% from the same period a year ago. Whereas the nonresidential building permits issued soared 14%, the residen-

tial permits issued eased 1.3%. Among the nonresidential building permits issued are those for five restaurants, seven school additions valued at \$29 million, three industrial additions (\$19 million), and 20 new businesses and additions (\$12 million).

In the residential sector, permits issued for single-family homes numbered 208, which was 19% below the level reached a year ago. The construction value registered on permits for single-family homes averaged \$117,300, down 9% from \$129,100 a year ago. The multifamily construction activity remained stronger than a year ago. Overall, I expect the number of residential and nonresidential permits issued for the year to total 974—around 2% above 1996, and the third best since 1978.

Similar to last year at this time, the existing home sale market took a big hit during the first six months of 1997. Kokomo realtors sold only 322 existing houses for a total of \$24.6 million, the smallest six-month sale volume in the past nine years. At the current pace, I expect the number of existing houses sold by the end of 1997 to total 700—again, the smallest number in the past nine years.

A year ago, Kokomo housing market's affordability received no mention in the quarterly surveys conducted by the National Home Builders Association (NHBA). This year, however, the NHBA rated Kokomo's housing market as the most affordable nationwide—not just once, but two quarters in a row.

Retail Sales Well Over \$1 Billion

The mixture of strong job growth, plentiful overtime, and a large influx of people prompted retail sales in 1996 to reach a new high of \$1.08 billion, according to *Marketing Management Magazine*. With sales of \$27,443 per household, Kokomo ranked third in Indiana, behind Terre Haute and South Bend. Last year, per-household automotive and drug store retail sales in Kokomo ranked second highest among the 11 MSAs in the state. The general merchandise retail store sales per household in Kokomo ranked third highest in the state in 1996.

GM's Gain, Kokomo's Loss

The only sour point in this year's otherwise good economic news is the beginning of a new era at Delco Electronics. In the very near future, Delco will integrate with GM's Delphi Automotive Systems, a \$28 billion company employing 178,000 worldwide. Together, the fully integrated entity will become a major producer of automotive and electronic components. Because the automotive components and systems

market has become so competitive worldwide, consolidation of overseas operations, elimination of duplication, cost reduction, and efficiency will receive the highest priority in the functioning of the newly integrated GM unit. Many steps have already been taken. Old strategies are being scrapped or kept on hold. Roughly 1,000 white-collar workers (mostly engineers and technicians) at Delco have voluntarily or involuntarily bid good-bye to Kokomo. I expect the accounting, finance, and clerical workers to bear the brunt of layoffs in 1998.

On a positive note, in March, Delco Electronics was recommended for registration to QS-9000 quality standards, a coveted certification. Delco will now join the ranks of fewer than 1,000 QS-9000 registered companies in the world. This good news was, however, overshadowed by the integration pains.

What's in Store for 1998?

How long will this economic nirvana last? What's in Kokomo's karma for 1998? I am bullish on the future of the Kokomo economy for two reasons:

1. Chrysler's plans to hire nearly 1,000 high-wage manufacturing workers in the immediate future mean that each job will create an additional two jobs in the nonmanufacturing sector over a period of time.

2. Major developments are under way in the Peru area. The Hoosier Heartland Corridor (U.S. 24) will open up for traffic. Construction work will begin on the state's medium-security correctional facility at the Grissom Aeroplex that, when completed, will create more than 500 jobs. And the Grissom Aeroplex Economic Development Committee has succeeded in attracting new businesses, such as Cost Plus's distribution center. These developments and more have the potential to create 2,000 jobs in the near future. Although some new job holders will prefer to stay in Peru, many will opt for living in the Kokomo area.

Overall, other than some additional cutbacks at Delco, no dark clouds are on the Kokomo economic horizon. The manufacturing sector will grow stronger than ever before. Kokomo's number one status in the state in household income will go unchallenged. More manufacturing, construction, health care, retail, and hospitality industry jobs will open up in 1998 and beyond. The unemployment rate will hover around a low 3% range and could very well drop to a 2.5% level. The housing and retail sectors will stay strong. In a nutshell, the Kokomo area economy will keep on chugging, with an added push from the reasonably good performance of the auto industry and the national economy in 1998.

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